

Health, United States, 2009

With Special Feature on Medical Technology



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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Preface

Health, United States, 2009 is the 33rd report on the health status of the Nation and is submitted by the Secretary of the Department of Health and Human Services to the President and the Congress of the United States in compliance with Section 308 of the Public Health Service Act. This report was compiled by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS). The National Committee on Vital and Health Statistics served in a review capacity.

The *Health, United States* series presents national trends in health statistics. Each report includes an executive summary, highlights, a chartbook, trend tables, extensive appendixes, and an index.

Chartbook

The 2009 Chartbook includes 36 charts, with 14 charts illustrating this year's special feature on medical technology. As advances in medical technologies continue to transform the provision of health care and improve the length and quality of life, questions are raised about their appropriate and equitable use and how to best control their contributions to rising health care expenditures. The Chartbook assesses the Nation's health by presenting trends and current information on selected determinants and measures of health status and the utilization of health care. Many measures are shown separately for persons of different ages because of the strong effect of age on health. Selected figures also highlight differences in determinants and measures of health status and utilization of health care based on such characteristics as sex, race, Hispanic origin, education, and poverty level.

Trend Tables

The Chartbook section is followed by 150 trend tables organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures. A major criterion used in selecting the trend tables is availability of comparable national data over a period of several years. The tables present data for selected years to highlight major trends in health statistics. Earlier editions of *Health, United States* may present data for additional years that are not included in the current printed report. Where possible, these additional years of data are available in Excel® spreadsheet files on the *Health, United States* website. Tables containing additional data years are listed in [Appendix III](#).

Racial and Ethnic Data

Many tables in *Health, United States* present data according to race and Hispanic origin, consistent with a department-wide emphasis on expanding racial and ethnic detail when presenting health data. Trend data on race and ethnicity are presented in the greatest detail possible after taking into account the quality of data, the amount of missing data, and the number of observations. These issues significantly impact the availability of reportable data for certain populations, such as the Native Hawaiian and Other Pacific Islander population and the American Indian and Alaska Native population. Standards for the classification of federal data on race and ethnicity are described in [Appendix II, Race](#).

Education and Income Data

Many tables in *Health, United States* present data according to socioeconomic status, using education and family income as proxy measures. Education and income data are generally obtained directly from survey respondents and are not generally available from records-based data collection systems. State vital statistics systems currently report mother's education on the birth certificate and, based on an informant, decedent's education on the death certificate. See [Appendix II, Education](#); [Family income](#); [Poverty](#).

Disability Data

Disability is a complex concept and can include the presence of physical or mental impairments that limit a person's ability to perform an important activity and affect the use of, or need for, supports, accommodations, or interventions required to improve functioning. Information on disability in the U.S. population is critical to health planning and policy. Several current initiatives are under way to coordinate and standardize measurement of disability across federal data systems. This year's report introduces the first detailed trend table ([Table 55](#)) using data from the NCHS National Health Interview Survey (NHIS) to create disability measures consistent with two of the conceptual components that have been identified in disability models and disability legislation: basic actions difficulty and complex activity limitation. Basic actions difficulty captures limitations or difficulties in movement and sensory, emotional, or mental functioning that are associated with some health problem. Complex activity limitation describes limitations or restrictions on a person's ability to participate fully in social role activities such as working or maintaining a household. Data on health insurance coverage from NHIS for persons with basic

actions difficulty or complex activity limitation have been added to [Tables 137–140](#). *Health, United States* also includes the following disability-related information for the civilian noninstitutionalized population: vision and hearing limitations for adults ([Table 56](#)), and disability-related information for Medicare enrollees ([Table 144](#)), Medicaid recipients ([Table 145](#)), and veterans with service-connected disabilities ([Figure 3](#) and [Table 147](#)). For more information on disability statistics, see: Altman B, Bernstein A. Disability and health in the United States, 2001–2005. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/misc/disability2001-2005.pdf>.

Statistical Significance

All differences between estimates noted in this report were determined to be significant by using two-sided significance tests at the 0.05 level. Terms such as “similar” and “no difference” indicate that the statistics being compared were not significantly different. Lack of comment regarding the difference between any two statistics does not necessarily suggest that the difference was tested and found to be not significant.

Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on small numbers and have relatively large sampling errors. Numbers of births and deaths from the Vital Statistics System represent complete counts (except for births in those states where data are based on a 50% sample for certain years). Therefore, they are not subject to sampling error. However, when the figures are used for analytical purposes, such as the comparison of rates over a period, the number of events that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances. When the number of events is small and the probability of such an event is small, considerable caution must be observed in interpreting the conditions described by the figures. Estimates that are unreliable because of large sampling errors or small numbers of events have been noted with asterisks in selected tables. The criteria used to designate unreliable estimates are indicated in an accompanying footnote.

Point estimates and estimates of corresponding variances of NCHS surveys that are based on a complex sampling design were calculated using the SUDAAN software package (Research Triangle Institute, Research Triangle Park, NC). Standard errors of other surveys or data sets were computed using methodology recommended by the programs providing the data or were provided directly by those programs.

Changes in This Edition

Each edition of *Health, United States* is prepared to maximize its usefulness as a standard reference source while maintaining its continuing relevance. Comparability is fostered by including similar trend tables in each edition. Timeliness is maintained by (a) adding new tables each year to reflect emerging topics in public health and (b) improving the content of ongoing tables. *Health, United States, 2009* includes three new trend tables on the following topics: supply of dentists by state ([Table 110](#)), based on data from the American Dental Association; National Health Expenditure Account data by age ([Table 128](#)), based on data from the National Health Expenditures Accounts produced by the Centers for Medicare & Medicaid Services; and a new disability table ([Table 55](#)) using data from NHIS to create disability measures on basic actions difficulty and complex activity limitation.

The *Health, United States, 2009* Chartbook section includes new charts on the number of living veterans and percentage with service-connected disability; prevalence of sleep problems; prevalence of respondent-reported heart disease, hypertension, or diabetes among persons 45–64 years of age by poverty level; occupational injuries and illnesses; prevalence of depression; and trends in personal health expenditures by payer. The Special Feature includes 14 charts on medical technology, including the increase in the number of clinical laboratories, utilization of imaging technologies, utilization of hospital and ambulatory surgical procedures using selected technologies, use of assisted reproductive technologies and mammography, trends in use of pharmaceuticals, and costs associated with hospitalizations for technologically complex procedures ([Figures 23–36](#)).

Appendixes

[Appendix I](#) (Data Sources) describes each data source used in the report and provides references for further information about the sources. Data sources are listed alphabetically within two broad categories: Government Sources and Private and Global Sources.

[Appendix II](#) (Definitions and Methods) is an alphabetical listing of terms used in the report. It also presents standard populations used for age-adjustment ([Tables I, II, and III](#)); *International Classification of Diseases* (ICD) codes for causes of death shown in *Health, United States*, from the sixth through tenth ICD revisions and the years when the revisions were in effect ([Tables IV and V](#)); final comparability ratios between ICD–9 and ICD–10 for selected causes

(Table VI); effects on health insurance rates of adding probe questions for Medicare and Medicaid coverage in NHIS (Table VII); industry codes according to the North American Industry Classification System (Table VIII); ICD-9-CM (Clinical Modification) codes for external cause-of-injury, diagnostic, and procedure categories (Tables IX, X, and XI); National Drug Code (NDC) Therapeutic Class recodes of generic analgesic drugs (Table XII); and sample tabulations of NHIS data comparing the 1977 and 1997 Standards for the classification of federal data on race and ethnicity (Tables XIII and XIV).

Appendix III (Additional Data Years Available) lists tables for which additional years of trend data are available electronically in Excel® spreadsheet files on the *Health, United States* website, described below under Electronic Access.

Index

The Index to Trend Tables and Chartbook Figures is a useful tool for locating data by topic. Tables and figures are cross-referenced by such topics as child and adolescent health; older population 65 years of age and over; women's health; men's health; state data; American Indian and Alaska Native, Asian, Black, and Hispanic-origin populations; education; injury; disability; and metropolitan and non-metropolitan data.

Electronic Access

Health, United States may be accessed in its entirety at: <http://www.cdc.gov/nchs/hus.htm>. From the *Health, United States* website, one may also register for the *Health, United States* electronic mailing list to receive announcements about release dates and notices of updates to tables.

Chartbook figures are available as downloadable PowerPoint® slides. Trend tables and Chartbook data tables are available as downloadable Excel® spreadsheet files. Trend tables listed in Appendix III include additional years of data not shown in the printed report or PDF files. Spreadsheet files for selected tables will be updated on the website if more current data become available near the time when the printed report is released. Users who register with the electronic mailing list will be notified of these table updates. Previous editions of *Health, United States* and chartbooks, starting with the 1993 edition, also may be accessed from the *Health, United States* website.

Copies of the Report

Copies of *Health, United States, 2009* can be purchased from the Government Printing Office (GPO), U.S. Government Bookstore at: <http://bookstore.gpo.gov>.

Questions?

For answers to questions about this report, please contact:

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Contents

Contents

Preface	iii
Acknowledgments	vi
List of Chartbook Figures	xiii
List of Trend Tables	xv

Executive Summary and Highlights

Executive Summary	3
Highlights	6
Population	6
Fertility and Natality	6
Life Expectancy and Mortality	6
Health Risk Factors	7
Measures of Health and Disability	7
Health Care Utilization	8
Health Care Resources	10
Health Care Expenditures and Payors	10
Special Feature: Medical Technology	11

Chartbook With Special Feature on Medical Technology

Population	14
Age	14
Race and Ethnicity	16
Living Veterans	18
Poverty	20
Health Risk Factors and Disease Prevention	24
Tobacco Use	24
Overweight and Obesity	26
Sleep	28
Influenza and Pneumococcal Vaccination Among Middle-age and Older Adults	30
Morbidity and Limitation of Activity	32
Poverty and Chronic Conditions	32
Occupational Health	34
Depression	36
Limitation of Activity Caused by Chronic Conditions: Children	38
Limitation of Activity Caused by Chronic Conditions: Working-age and Older Adults	40
Mortality	44
Life Expectancy	44
Infant Mortality	46
Leading Causes of Death for All Ages	48

Health Insurance and Expenditures	50
Health Insurance at the Time of Interview	50
Length of Time Without Health Insurance	52
Personal Health Care Expenditures	54
Personal Health Care Expenditures by Source of Funds	56
Special Feature: Medical Technology	59
Introduction and Timeline	59
Federally Regulated (CLIA) Laboratories	66
Selected Imaging Technologies	68
Mammography	72
Joint Replacement Procedures	76
Angioplasty and Coronary Stenting Procedures	78
Cholecystectomy Procedures	80
Upper Endoscopy and Colonoscopy	82
Geographic Variation in Use of Intensive Care Units in the Last 6 Months of Life	84
Solid Organ Transplantation	88
Assisted Reproductive Technology (ART)	92
Prescription Drugs	94
Highly Active Antiretroviral Therapy (HAART)	98
Costs for Hospitalizations With Procedures	102
Technical Notes	105
Data Sources and Comparability	105
Data Presentation	105
Survey Questions and Coding	105
Data Tables for Figures 1–36	109

Trend Tables

Health Status and Determinants	147
Population	147
Fertility and Natality	154
Mortality	176
Determinants and Measures of Health	249
Utilization of Health Resources	308
Ambulatory Care	308
Inpatient Care	353
Health Care Resources	374
Personnel	374
Facilities	384
Health Care Expenditures and Payors	392
National Health Expenditures	392
Health Care Coverage and Major Federal Programs	416
State Health Expenditures and Health Insurance	435

Appendixes

Contents	441
I. Data Sources.....	445
Government Sources	446
Private and Global Sources	490
II. Definitions and Methods.....	496
III. Additional Data Years Available	550

Index

Index	553
-------------	-----

List of Chartbook Figures

Population

1A. Total population, by age: United States, 1980–2050	15
1B. Percent distribution of the total population, by age: United States, 1980, 2007, 2050.	15
2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2008	17
3. Population of living veterans, by service-connected disability status: United States, 1970–2007	19
4. Poverty by age: United States, 1966–2007	21
5. Low income by age, race and Hispanic origin: United States, 2007	23

Health Risk Factors and Disease Prevention

6. Cigarette smoking among men, women, and high school students: United States, 1965–2007	25
7. Overweight and obesity, by age: United States, 1960–2006	27
8. Trouble sleeping or sleeping pill use in the past month among adults 18 years of age and over, by sex and age: United States, 2005–2006	29
9. Influenza and pneumococcal vaccination among middle-age and older adults, by age: United States, 1989–2007	31

Morbidity and Limitation of Activity

10. Hypertension, diabetes, and serious heart conditions among adults 45–64 years of age, by percent of poverty level: United States, 2007.	33
11. Nonfatal occupational injuries and illnesses in private industry: United States, 1989–2007.	35
12. Depression among adults 18 years of age and over, by sex and age: United States, 2005–2006.	37
13. Limitation of activity caused by selected chronic health conditions among children, by age: United States, 2006–2007	39
14. Limitation of activity caused by selected chronic health conditions among working-age adults, by age: United States, 2006–2007	41
15. Limitation of activity caused by selected chronic health conditions among older adults, by age: United States, 2006–2007	43

Mortality

16. Life expectancy at birth and at 65 years of age, by race and sex: United States, 1970–2006.	45
17. Infant, neonatal, and postneonatal mortality rates: United States, 1950–2006.	47
18. Death rates for leading causes of death for all ages: United States, 1950–2006.	49

Health Insurance and Expenditures

19. Health insurance coverage at the time of interview among persons under 65 years of age: United States, 1984–2007	51
20. Uninsured for at least part of the 12 months prior to interview among persons under 65 years of age, by length of time uninsured and selected characteristics: United States, 2007	53
21. Personal health care expenditures, by source of funds and type of expenditures: United States, 2007	55
22. Personal health care expenditures, by source of funds: United States, 1990–2007	57

Special Feature: Medical Technology

23. History of medical technology: Selected milestones, 1816–2008	62
24. Federally regulated (CLIA) laboratories: United States, 1993–2008	67
25. Ambulatory care visits with MRI/CT/PET scans ordered or provided during the visit, by age and location of care: United States, 1996–2007	69
26. Use of mammography within the past 2 years among women 40 years of age and over, by race and Hispanic origin: United States, 1987–2008	73
27. Discharges with at least one knee or hip replacement procedure in nonfederal short-stay hospitals among adults 45 years of age and over, by type of procedure: United States, 1996–2006	77
28. Hospital discharges with a PTCA procedure among persons 45 years of age and over, by type of procedure and age: United States, 1996–2006	79
29A. Cholecystectomy procedures among adults 18 years of age and over, by location of care: United States, 1996 and 2006	81
29B. Type of cholecystectomy procedure among adults 18 years of age and over, by location of care: United States, 2006	81
30. Ambulatory surgery visits for upper endoscopy or colonoscopy procedures among adults 18 years of age and over, by age: United States, 1996 and 2006	83

31.	Medicare decedents 65 years of age and over with an ICU/CCU stay in the last 6 months of life, by state: United States, 2005	85
32.	Selected solid organ transplantation, by type of organ: United States, 1997–2006	89
33.	Assisted reproductive technology (ART) cycles initiated among women, by age: United States, 1996–2006	93
34.	Adults 45 years of age and over reporting prescription drug use in the past month for selected drug categories, by age and sex: United States, 1988–1994 and 2003–2006	95
35.	Death rates for human immunodeficiency virus (HIV) disease for all ages, by sex and race and Hispanic origin: United States, 1987–2006	99
36.	Costs for hospital stays with the six most expensive principal procedures: United States, 1999–2006 . .	103

Summary List of Trend Tables by Topic

All Topics (Tables 1–150)

Population (Tables 1–3)

Resident population
Persons in poverty
and more . . .

Fertility and Natality (Tables 4–16)

Births
Low birthweight
Breastfeeding
and more . . .

Mortality (Tables 17–45)

Infant mortality
Life expectancy
Death rates, by cause
and more . . .

Determinants and Measures of Health (Tables 46–74)

Health status
Cigarette smoking
Alcohol consumption
High blood pressure
Overweight and obesity
and more . . .

Ambulatory Care (Tables 75–97)

Visits: health care, dentists, emergency departments,
and more . . .

Prevention: mammograms, pap smears, vaccinations

Inpatient Care (Tables 98–105)

Hospital stays and procedures
Nursing homes
and more . . .

Personnel (Tables 106–114)

Physicians
Dentists
Nurses
Health professions school enrollment
and more . . .

Facilities (Tables 115–121)

Hospitals
Nursing homes
and more . . .

National Health Expenditures (Tables 122–136)

Personal health expenditures
Out-of-pocket costs
Prescription drugs
Nursing home costs
and more . . .

Health Care Coverage and Major Federal Programs (Tables 137–147)

Insurance coverage:
Medicare
Medicaid
Private coverage
Uninsured
HMOs
and more . . .

State Health Expenditures and Health Insurance (Tables 148–150)

Medicare, Medicaid, HMO expenditures/enrollees
Uninsured persons
and more . . .

List of Trend Tables

Health Status and Determinants

Population

1. Resident population , by age, sex, race, and Hispanic origin: United States, selected years 1950–2007	147
2. Inmates in state or federal prisons and local jails , by sex, race, Hispanic origin, and age: United States, selected years 1999–2008	150
3. Persons and families below poverty level, by selected characteristics, race, and Hispanic origin: United States, selected years 1973–2007	152

Fertility and Natality

4. Crude birth rates, fertility rates , and birth rates , by age, race, and Hispanic origin of mother: United States, selected years 1950–2006	154
5. Live births , by plurality, and detailed race and Hispanic origin of mother: United States, selected years 1970–2006	157
6. Twin and higher-order multiple births , by race, Hispanic origin, and age of mother: United States, selected years 1971–2006	158
7. Prenatal care for live births, by detailed race and Hispanic origin of mother: United States, selected years 1970–2000 and selected states 2005–2006	159
8. Teenage childbearing , by detailed race and Hispanic origin of mother: United States, selected years 1970–2006	160
9. Nonmarital childbearing , by detailed race and Hispanic origin of mother, and maternal age: United States, selected years 1970–2006	161
10. Mothers who smoked cigarettes during pregnancy, by selected characteristics: United States, selected years 1990–2000 and selected states 2005–2006	162
11. Low birthweight live births, by detailed race, Hispanic origin, and smoking status of mother: United States, selected years 1970–2006	163
12. Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2006	164
13. Low birthweight live births, by race and Hispanic origin of mother, and state: United States, average annual 1998–2000, 2001–2003, and 2004–2006	167
14. Legal abortions and legal abortion ratios , by selected patient characteristics: United States, selected years 1973–2005	169
15. Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002	171
16. Breastfeeding among mothers 15–44 years of age, by year of baby's birth and selected characteristics of mother: United States, average annual 1986–1988 through 1999–2001	175

Mortality

17. Infant, neonatal, and postneonatal mortality rates , by detailed race and Hispanic origin of mother: United States, selected years 1983–2005	176
18. Infant mortality rates , by birthweight: United States, selected years 1983–2005	178
19. Infant mortality rates , fetal mortality rates, and perinatal mortality rates, by race: United States, selected years 1950–2006	179
20. Infant mortality rates , by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005	180
21. Neonatal mortality rates , by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005	182
22. Infant mortality rates and international rankings: Selected countries and territories, selected years 1960–2006	184
23. Life expectancy at birth and at 65 years of age, by sex: Selected countries and territories, selected years 1980–2005	185
24. Life expectancy at birth, at 65 years of age, and at 75 years of age, by race and sex: United States, selected years 1900–2006	187
25. Age-adjusted death rates , by race, Hispanic origin, and state: United States, average annual 1979–1981, 1989–1991, and 2004–2006	188
26. Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2006	190
27. Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2006	194
28. Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2006	198
29. Leading causes of death and numbers of deaths, by age: United States, 1980 and 2006	202
30. Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2004–2006	204
31. Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	207
32. Death rates for diseases of heart , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	211
33. Death rates for cerebrovascular diseases , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	214
34. Death rates for malignant neoplasms , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	217
35. Death rates for malignant neoplasms of trachea, bronchus, and lung , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	221

36. Death rates for malignant neoplasm of breast among females, by race, Hispanic origin, and age: United States, selected years 1950–2006	224	55. Basic actions difficulty and complex activity limitation among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007	266
37. Death rates for chronic lower respiratory diseases , by sex, race, Hispanic origin, and age: United States, selected years 1980–2006	226	56. Vision and hearing limitations among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007	268
38. Death rates for human immunodeficiency virus (HIV) disease , by sex, race, Hispanic origin, and age: United States, selected years 1987–2006	229	57. Respondent-assessed health status , by selected characteristics: United States, selected years 1991–2007	270
39. Maternal mortality for complications of pregnancy, childbirth, and the puerperium, by race, Hispanic origin, and age: United States, selected years 1950–2006	231	58. Serious psychological distress in the past 30 days among adults 18 years of age and over, by selected characteristics: United States, average annual, selected years 1997–1998 through 2006–2007	272
40. Death rates for motor vehicle-related injuries , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	232	59. Suicidal ideation, suicide attempts, and injurious suicide attempts among students in grades 9–12, by sex, grade level, race, and Hispanic origin: United States, selected years 1991–2007	274
41. Death rates for homicide , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	236	60. Current cigarette smoking among adults 18 years of age and over, by sex, race, and age: United States, selected years 1965–2007	276
42. Death rates for suicide , by sex, race, Hispanic origin, and age: United States, selected years 1950–2006	240	61. Age-adjusted prevalence of current cigarette smoking among adults 25 years of age and over, by sex, race, and education level: United States, selected years 1974–2007	278
43. Death rates for firearm-related injuries , by sex, race, Hispanic origin, and age: United States, selected years 1970–2006	243	62. Current cigarette smoking among adults, by sex, race, Hispanic origin, age, and education level: United States, average annual 1990–1992, 1995–1998, and 2005–2007	279
44. Deaths from selected occupational diseases among persons 15 years of age and over: United States, selected years 1980–2006	246	63. Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002, 2006, and 2007	281
45. Occupational injury deaths and rates, by industry, sex, age, race, and Hispanic origin: United States, selected years 1995–2007	247	64. Use of selected substances among high school seniors, 10th graders, and 8th graders, by sex and race: United States, selected years 1980–2008	283
Determinants and Measures of Health		65. Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007	286
46. Nonfatal occupational injuries and illnesses with days away from work, job transfer, or restriction, by industry: United States, 2003–2007	249	66. Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007	289
47. Selected notifiable disease rates and number of new cases: United States, selected years 1950–2007	250	67. Selected health conditions and risk factors: United States, 1988–1994 through 2005–2006	292
48. Acquired immunodeficiency syndrome (AIDS) cases, by year of diagnosis and selected characteristics: United States, 2003–2007	252	68. Hypertension and elevated blood pressure among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006	293
49. Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2006	254	69. Serum total cholesterol levels among persons 20 years of age and over, by selected characteristics: United States, selected years 1960–1962 through 2003–2006	295
50. Five-year relative cancer survival rates for selected cancer sites, by race and sex: United States, selected geographic areas, selected years 1975–1977 through 1999–2005	257	70. Mean energy and macronutrient intake among persons 20–74 years of age, by sex and age: United States, 1971–1974 through 2003–2006	298
51. Diabetes among adults 20 years of age and over, by sex, age, and race and Hispanic origin: United States, 1988–1994, 1999–2002, and 2003–2006	258	71. Leisure-time physical activity among adults 18 years of age and over, by selected characteristics: United States, 1998, 2006, and 2007	299
52. Incidence and prevalence of end-stage renal disease , by selected characteristics: United States, selected years 1980–2006	259	72. Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006	301
53. Severe headache or migraine, low back pain, and neck pain among adults 18 years of age and over, by selected characteristics: United States, selected years 1997, 2006, and 2007	260		
54. Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2006, and 2007	262		

73. Overweight among children and adolescents 6–19 years of age, by selected characteristics: United States, 1963–1965 through 2003–2006	305
74. Untreated dental caries , by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004	306

Utilization of Health Resources

Ambulatory Care

75. No usual source of health care among children under 18 years of age, by selected characteristics: United States, average annual 1993–1994, 2003–2004, and 2006–2007	308
76. No usual source of health care among adults 18–64 years of age, by selected characteristics: United States, average annual, selected years 1993–1994 through 2006–2007	310
77. Reduced access to medical care during the past 12 months due to cost, by selected characteristics: United States, 1997, 2006, and 2007	312
78. Reduced access to medical care during the past 12 months due to cost, by state: 25 largest states and United States, average annual 1997–1998, 2001–2002, and 2006–2007	314
79. No health care visits to an office or clinic within the past 12 months among children under 18 years of age, by selected characteristics: United States, average annual 1997–1998, 2001–2002, and 2006–2007	315
80. Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2006, and 2007	317
81. Influenza vaccination among adults 65 years of age and over: Selected countries, 1998–2006	320
82. Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2007	321
83. Vaccination coverage among children 19–35 months of age, by state and selected urban area: United States, 2002–2007	323
84. Influenza vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007	325
85. Pneumococcal vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007	327
86. Use of mammography among women 40 years of age and over, by selected characteristics: United States, selected years 1987–2008	329
87. Use of Pap smears among women 18 years of age and over, by selected characteristics: United States, selected years 1987–2008	331
88. Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2006, and 2007	333

89. Emergency department visits within the past 12 months among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007	336
90. Injury-related visits to hospital emergency departments, by sex, age, and intent and mechanism of injury: United States, average annual 1995–1996, 1999–2000, and 2006–2007	338
91. Visits to physician offices, hospital outpatient departments, and hospital emergency departments , by selected characteristics: United States, selected years 1995–2007	340
92. Visits to primary care generalist and specialist physicians , by selected characteristics and type of physician: United States, selected years 1980–2007	343
93. Dental visits in the past year, by selected characteristics: United States, 1997, 2006, and 2007	345
94. Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005	347
95. Prescription drug use in the past month by sex, age, and race and Hispanic origin: United States, 1988–1994 and 2003–2006	350
96. Dietary supplement use among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006	351
97. Admissions to mental health organizations , by type of service and organization: United States, selected years 1986–2004	352

Inpatient Care

98. Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2006, and 2007	353
99. Discharges , days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006	356
100. Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006	359
101. Discharge rate in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006	362
102. Average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006	365
103. Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006	368
104. Hospital admissions , average length of stay, outpatient visits, and outpatient surgery, by type of ownership and size of hospital: United States, selected years 1975–2007	372
105. Nursing home residents 65 years of age and over, by age, sex, and race: United States, selected years 1973–2004	373

Health Care Resources

Personnel

106. Persons employed in health service sites, by site and sex: United States, 2000–2008	374
107. Active physicians and physicians in patient care, by state: United States, selected years 1975–2007	375
108. Doctors of medicine , by place of medical education and activity: United States and outlying U.S. areas, selected years 1975–2007	376
109. Doctors of medicine in primary care, by specialty: United States and outlying U.S. areas, selected years 1949–2007	377
110. Active dentists , by state: United States, selected years 1993–2006	378
111. Employees and wages , by selected health care occupations: United States, selected years 1999–2007	379
112. First-year enrollment and graduates of health professions schools , and number of schools, by selected profession: United States, selected years 1980–1981 through 2006–2007	380
113. Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: United States, selected academic years 1980–1981 through 2006–2007	381
114. First-year and total enrollment of women in schools for selected health occupations: United States, selected academic years 1980–1981 through 2006–2007	383

Facilities

115. Hospitals , beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2007	384
116. Mental health organizations and beds for 24-hour hospital and residential treatment, by type of organization: United States, selected years 1986–2004	385
117. Community hospital beds and average annual percent change, by state: United States, selected years 1960–2007	386
118. Occupancy rates in community hospitals and average annual percent change, by state: United States, selected years 1960–2007	387
119. Nursing homes , beds, residents, and occupancy rates, by state: United States, selected years 1995–2008	388
120. Medicare-certified providers and suppliers : United States, selected years 1975–2007	390
121. Number of magnetic resonance imaging (MRI) units and computed tomography (CT) scanners: Selected countries, selected years 1990–2006	391

Health Care Expenditures and Payors

National Health Expenditures

122. Total health expenditures as a percent of gross domestic product, and per capita health expenditures in dollars, by selected countries: Selected years 1960–2006	392
123. Gross domestic product, federal, and state and local government expenditures, national health expenditures , and average annual percent change: United States, selected years 1960–2007	393
124. Consumer Price Index and average annual percent change for all items, selected items, and medical care components: United States, selected years 1960–2008	394
125. Growth in personal health care expenditures and percent distribution of factors affecting growth: United States, 1960–2007	395
126. National health expenditures , average annual percent change, and percent distribution, by type of expenditure: United States, selected years 1960–2007	396
127. Personal health care expenditures , by source of funds and type of expenditure: United States, selected years 1960–2007	398
128. Personal health care expenditures, by age : United States, selected years 1987–2004	400
129. National health expenditures for mental health services , average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003	402
130. National health expenditures for substance abuse treatment , average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003	403
131. Expenses for health care and prescribed medicine , by selected population characteristics: United States, selected years 1987–2006	404
132. Sources of payment for health care , by selected population characteristics: United States, selected years 1987–2006	407
133. Out-of-pocket health care expenses among persons with medical expenses, by age: United States, selected years 1987–2006	410
134. Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected years 1987–2007	411
135. Employers' costs per employee-hour worked for total compensation, wages and salaries, and health insurance , by selected characteristics: United States, selected years 1991–2009	413
136. Hospital expenses , by type of ownership and size of hospital: United States, selected years 1980–2007	415

Health Care Coverage and Major Federal Programs

137. Private health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007	416
138. Private health insurance coverage obtained through the workplace among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007	418
139. Medicaid coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007	420
140. No health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007	422
141. Health insurance coverage of Medicare beneficiaries 65 years of age and over, by type of coverage and selected characteristics: United States, selected years 1992–2007	424
142. Medicare enrollees and expenditures and percent distribution , by Medicare program and type of service: United States and other areas, selected years 1970–2008	426
143. Medicare enrollees and program payments among fee-for-service Medicare beneficiaries, by sex and age: United States and other areas, selected years 1994–2007	428
144. Medicare beneficiaries , by race, Hispanic origin, and selected characteristics: United States, 1992, 2005, and 2006	429
145. Medicaid beneficiaries and payments , by basis of eligibility, and race and Hispanic origin: United States, selected fiscal years 1972–2006	431
146. Medicaid beneficiaries and payments , by type of service: United States, selected fiscal years 1972–2006	432
147. Department of Veterans Affairs health care expenditures and use , and persons treated, by selected characteristics: United States, selected fiscal years 1970–2008	434

State Health Expenditures and Health Insurance

148. Medicare enrollees , enrollees in managed care, payment per enrollee, and short-stay hospital utilization, by state: United States, 1994 and 2007	435
149. Medicaid beneficiaries , beneficiaries in managed care, payments per beneficiary, and beneficiaries per 100 persons below the poverty level, by state: United States, selected fiscal years 1989–2006	437
150. Persons without health insurance coverage , by state: United States, average annual 1995–1997 through 2005–2007	438

Executive Summary

Health, United States, 2009 is the 33rd annual report on the health status of the Nation, prepared by the Secretary of the Department of Health and Human Services for the President and the Congress. In a Chartbook and 150 detailed tables, the report provides an annual picture of the health of the entire United States. Trends are presented for health status and health care utilization, resources, and expenditures. This year's report includes a special feature on medical technology. As advances in medical technology continue to transform the provision of health care and lengthen and improve quality of life, questions are increasingly raised about the appropriate and equitable use of this technology and how best to control its contribution to rising health care expenditures.

Monitoring the health of the American people is an essential step in making sound health policy and setting research and program priorities. *Health, United States* presents trends and current information on measures and determinants of the Nation's health. It also identifies variations in health status, modifiable risk factors, and health care utilization among people by age, race and ethnicity, gender, education and income level, and geographic location. Given the increasing diversity of the Nation and the continuing changes in health care infrastructure, this is a challenging and critically important task.

In 2007, American men could expect to live 3.5 years longer—and women 1.6 years longer—than they did in 1990 (preliminary data; [Table 24](#) and [Figure 16](#)). The gap in life expectancy between the black and white populations has narrowed, but it persists ([Table 24](#) and [Figure 16](#)). Mortality from heart disease, stroke, and cancer has continued to decline in recent years, although mortality from chronic lower respiratory diseases and unintentional injuries has not ([Tables 26, 32–34, and 37](#), and [Figure 18](#)). Infant mortality—a major component of overall life expectancy—declined through 2001 and has changed little since then ([Table 17](#) and [Figure 17](#)). However, both life expectancy and infant mortality continue to lag behind levels in many other developed countries ([Tables 22 and 23](#)).

Longer life spans are generally considered desirable, particularly when healthy years of life are increased. But with an aging population and longer life expectancy come an increasing prevalence of chronic diseases and conditions associated with aging, including hypertension, diabetes, end-stage renal disease, and certain types of cancer ([Tables 49–52 and 68](#)), as well as Alzheimer's disease and other dementias ([Figure 15](#)).

Although aging is associated with increased functional limitations and conditions that affect quality of life, those at

younger ages may also face these issues. In 2007, 69 million adults 18 years of age and over had either basic actions difficulty (including movement or emotional difficulty or trouble seeing or hearing) or complex activity limitation (such as work or self-care limitations), an increase from about 61 million in 1997. One-quarter of adults 18–64 years of age had at least one basic actions difficulty or complex activity limitation in 2007, compared with 62% of adults 65 years of age and over ([Table 55](#); for definitions, see [Appendix II, Basic actions difficulty; Complex activity limitation](#)). The percentage of adults 65 and over with fair or poor respondent-reported overall health status was 27% in 2007, down 2 percentage points for this older age group since 1991 ([Table 57](#)). About one-half of the adult population 75 years of age and over reported joint pain in 2007, similar to the percentage in 2002 ([Table 54](#)).

Infectious disease remains an important cause of morbidity and mortality. The number of new cases of many infectious diseases, such as measles and rubella, has decreased greatly as a result of vaccination and other prevention initiatives ([Table 47](#) and [Figure 9](#)). However, incidence rates of some communicable diseases, including chlamydia, have increased ([Table 47](#)). In addition, newly recognized infectious agents have emerged and caused substantial public health concern and investment. These include influenza H1N1, SARS, H5N1 avian influenza, and some particularly virulent or drug-resistant bacterial strains, such as Methicillin-Resistant *Staphylococcus aureus* (MRSA) (1). Influenza and pneumonia remain major causes of death, particularly among persons 65 years of age and over, and HIV/AIDS continues to spread ([Tables 29 and 48](#)).

Of concern for all Americans is the high prevalence of people with risk factors such as tobacco use, high cholesterol, obesity, and insufficient exercise, which are associated with chronic diseases and conditions such as heart disease, cancer, diabetes, and hypertension. Declines in tobacco use have slowed in the past decade, and in 2007 22% of men and 17% of women were cigarette smokers ([Table 60](#)). Cholesterol levels have been dropping, in particular for the oldest adults, due in large part to increased use of drug therapy ([Figure 34](#), and [Tables 69 and 94](#)). Obesity rates do not appear to be increasing as rapidly as they did in past decades but remain high, with more than one-third of adults 20 years of age and over classified as obese in 2005–2006 ([Tables 67 and 72](#), and [Figure 7](#)). Obesity rates among women continue to vary by race and ethnicity; 53% of non-Hispanic black women 20 years of age and over were obese in 2003–2006, compared with 42% of women of Mexican origin and 32% of non-Hispanic white women ([Table 72](#), age-adjusted). The percentage of adults 18 years of age and over who engaged in regular leisure-time physical activity has not increased in the past decade ([Table 71](#)).

Americans use vast quantities of health care services. The percentage of the population with at least one hospital stay in the past 12 months has remained constant since 1997 at about 7%–8% (Table 98). In 2006, that translated to about 35 million hospital discharges (Table 100). In 2007, there were 1.2 billion visits to physician offices, hospital outpatient departments, and emergency departments (Table 91). The average number of visits each year to physician offices remained steady, at about three per person, between 1995 and 2007 (Table 91). In 2003–2006, almost one-half (47%) of Americans interviewed had at least one drug prescribed in the previous month, compared with 39% in 1988–1994 (Table 95).

Preventive health care services improve health by protecting against disease, lessening its impact, or detecting disease at an early stage when it is easier to treat. Although Americans use many types of clinical preventive services, utilization remains suboptimal for some services. In 2007, only 67% of children 19–35 months of age received a combined vaccination series protecting them against seven childhood infectious diseases (Table 82). One-half of adults 50 years of age and over received an influenza vaccination in 2007, similar to the percentage in 2000 (Table 84 and Figure 9). Nearly 60% of adults 65 years of age and over ever had a pneumococcal vaccination in 2007, a slight increase over the level in 2000 (Table 85 and Figure 9). In 2008, two-thirds of women 40 years of age and over had a mammogram in the past 2 years (Table 86 and Figure 26). Disparities by poverty level remain in the use of pneumococcal vaccination, mammography, and Pap smears (Tables 85–87).

Although most Americans have access to the health care services they need, in 2007 8% of adults 18–64 years of age reported that they did not get needed medical care due to cost—an increase from 6% in 1997 (Table 77). Ten percent of this age group reported that they did not get needed prescription drugs during the 12 months prior to the interview, also due to cost, compared with 6% in 1997 (Table 77).

Access to health care is strongly associated with health insurance coverage. People with no health insurance are less likely to receive some needed health services than people with insurance (Table 77). About 43 million people—16.6% of Americans under 65 years of age—did not have health insurance coverage at the time they were interviewed in 2007 (Table 140). This represents a small decrease from 1997, when an estimated 17.5% of persons under age 65 were uninsured. Hispanic persons remain substantially more likely to be uninsured than persons in other racial and ethnic groups (Table 140 and Figure 20). The percentage of people under age 65 with Medicaid or Children’s Health Insurance Program (CHIP) coverage increased from 10% in 1997 to 14% in 2007, primarily due to increased Medicaid or CHIP

coverage among children (Table 139), whereas the percentage of persons under age 65 with private insurance coverage decreased from 71% to 67% during that time period (Table 137).

Health care technologies, facilities, equipment, and provider specialties have changed over recent decades. Until the mid-20th century, general hospitals and primary care physicians were the major providers of health care. There are now more physician specialties and subspecialties, and more specialized health care facilities, including imaging centers, outpatient surgical centers, and dialysis centers (Tables 108, 120, and 121). More procedures are being furnished on an outpatient basis (Table 104). The number of physicians per capita has been increasing, but physicians are not distributed equally across the Nation (Table 107). Projections indicate that there may be a continuing shortage of the nurses, pharmacists, and other health professionals needed to care for our aging population and handle the increasing use of technologically complex equipment and procedures (2,3).

The United States spends more on health per capita than any other country, and health spending continues to increase (Tables 122 and 123). In 2007, national health expenditures in the United States totaled \$2.2 trillion—a 6% increase from 2006 (Table 123). This represents 16% of the total U.S. gross domestic product (GDP); in 1980, national health expenditures were 9% of the GDP (Table 123). Hospital spending, which accounts for 31% of national health expenditures, increased 7% in 2007 (Table 126). Spending for prescription drugs accounted for 10% of national health expenditures in 2007. This spending increased only 5% in 2007—the smallest increase in many decades (Table 126).

This year, *Health, United States* includes a special feature focusing on advances in medical technology, which have improved our ability to monitor, prevent, diagnose, control, and cure a growing number of health conditions. Medical technology can be defined as the application of science to develop solutions to health problems or issues, such as the prevention or delay of onset of disease or the promotion and monitoring of good health (4,5). Examples include medical and surgical procedures (angioplasty, joint replacements, organ transplants), diagnostic tests (laboratory tests, biopsies, imaging), drugs (biologic agents, pharmaceuticals, vaccines), medical devices (implantable defibrillators, stents, prosthetics), and new support systems (electronic medical records and telemedicine). Figure 23 presents selected key health care technologies developed in the past two centuries that have greatly influenced medical practice and health care outcomes.

As some types of medical technology become easier to use and less expensive—and as equipment becomes more transportable and recovery times for procedures are reduced—even complex technologies can diffuse out of

hospitals and institutional settings and into ambulatory surgery centers, provider offices, outpatient facilities, imaging centers, and patients' homes, making the technologies more accessible. For example, laparoscopic surgical techniques have made cholecystectomy (gallbladder removal) available to high-risk, reluctant, or mildly symptomatic patients and have helped shift the procedure to outpatient care (Figure 29). Better prosthetic materials and improvements in surgical techniques may help explain why the rate of hospital discharges for total knee replacement procedures among persons 45 years of age and over increased 70% from 1996 to 2006 (Figure 27). Advanced imaging has improved the ability to diagnose and treat conditions more effectively, and utilization rates have increased substantially over the past decade (Figure 25). New medical devices such as drug-eluting stents have changed treatment for blocked arteries, and rates of stent procedures have also increased over the past 10 years (Figure 28).

Access to technologies differs among subgroups of the population in need, as well as by geography. For example, gender, racial, and ethnic differences in HIV mortality persist, even with the advent of highly active antiretroviral therapy (HAART) (Figure 35). In 2008, Hispanic women 40 years of age and over were less likely to have received a mammogram in the past 2 years than non-Hispanic white or non-Hispanic black women (Figure 26). Among Medicare beneficiaries, use of ICU/CCU care in the last 6 months of life varied considerably across the states (Figure 31).

New technology—and new uses for existing technology—can improve the length and quality of life. However, questions remain about how much improvement is possible when resources are scarce and costs continue to increase (5,6). In addition, there is concern about whether target populations are being appropriately and equitably served.

To improve the health of all Americans, it is critical to continue collecting data on all components of health; documenting trends in risk factors, health status, and access to and utilization of health care services; and disseminating reliable and accurate information about the health of our population. Equally important is gaining an understanding of the health care needs and utilization patterns of population subgroups. Such insights will enable policymakers to set program priorities and allocate target resources most effectively. The *Health, United States, 2009* highlights that follow summarize the latest findings gathered from public and private data sources to help the Department of Health and Human Services, the President, and the Congress carry out their mission of monitoring and improving the health of the Nation.

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Highlights

Health, United States, 2009 is the 33rd report on the health status of the Nation. The report contains a Chartbook and 150 trend tables presenting current and historic information on the health of the U.S. population. The trend tables are organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures and payors. The 2009 Chartbook focuses on selected determinants and measures of health and includes a special feature on medical technology.

Population

The health status of the Nation, as well as its need for health care resources, is determined in part by the size and composition of its population.

In 2007 there were 302 million **U.S. residents**, up from 281 million in 2000 and 227 million in 1980 ([data table for Figure 1](#)).

Between 1980 and 2007, the percentage of **Americans age 75 and over** increased from 4% to 6% ([Figure 1](#)).

Between 1980 and 2008, the percentage of **children who were Hispanic or Asian** more than doubled. During the same period, the percentage of adults who were Hispanic more than doubled, and the percentage of adults who were Asian tripled ([Figure 2](#)).

In 2007, there were 24 million living **veterans**, 12% of whom were receiving compensation for service-connected disability ([Figure 3](#)).

Fertility and Natality

Teenage mothers and their children are more likely to be disadvantaged and have a generally less favorable health status than older new mothers and their children. Low birthweight is a major correlate of infant illness and mortality.

Between 2005 and 2007 (preliminary data), the **birth rate among teenagers** 15–19 years of age rose 5%, from 40.5 to 42.5 live births per 1,000 females, with most of the increase occurring between 2005 and 2006. This 2-year increase follows a 14-year downward trend between 1991 and 2005 in which the teen birth rate fell by 34% from a peak of 61.8 births per 1,000 in 1991 ([Table 4](#)).

Low birthweight is associated with elevated risk of death and disability in infants. In 2007 (preliminary data), the percentage of low birthweight births (infants less than 2,500 grams (5.5 pounds) at birth) declined slightly to 8.2% from

8.3% in 2006. The 2007 percentage is 17% higher than for 1990 (7%) ([Table 11](#)).

Life Expectancy and Mortality

As overall death rates have declined, racial and ethnic disparities in mortality have persisted, but the gap in life expectancy between the black and white populations has narrowed. Life expectancy at birth in the United States lags behind that in most other industrialized countries. Life expectancy and infant mortality are often used to gauge the overall health of a population. Life expectancy in this country shows a long-term upward trend, and infant mortality shows a long-term downward trend.

In 2007 (preliminary data), **life expectancy** at birth for the total population reached a record high of 77.9 years, up from 75.4 years in 1990 ([Table 24](#)).

Between 1990 and 2007 (preliminary data), **life expectancy at birth** increased 3.5 years for **males** and 1.6 years for **females**. The gap in life expectancy between males and females narrowed from 7.0 years in 1990 to 5.1 years in 2007 (preliminary data) ([Table 24](#)).

Between 1990 and 2007 (preliminary data), **life expectancy at birth** increased more for the **black** than for the **white** population, thereby narrowing the gap in life expectancy between these two racial groups. In 1990, life expectancy at birth for the white population was 7.0 years longer than for the black population. By 2007 (preliminary data), the difference had narrowed to 4.6 years ([Figure 16](#) and [Table 24](#)).

Among **37 countries and territories** that submitted data to the Organisation for Economic Co-operation and Development (OECD) in 2005, **life expectancy** in the U.S. was below that of most other industrialized countries ([Table 23](#)).

Overall mortality was 25% higher for **black Americans** than for white Americans in 2007 (preliminary data), compared with 37% higher in 1990. In 2006, age-adjusted death rates for the black population exceeded those for the white population by 48% for **stroke** (cerebrovascular disease), 31% for **heart disease**, 21% for **cancer** (malignant neoplasms), 113% for **diabetes**, and 786% for **HIV disease** ([Table 26](#)).

In 2007 (preliminary data), the **infant mortality** rate was 6.77 infant deaths per 1,000 live births, 27% lower than in 1990 ([Figure 17](#)).

Large disparities in **infant mortality** rates among **racial and ethnic groups** continue to exist. In 2005, infant mortality rates were highest for infants of non-Hispanic black mothers (13.63 deaths per 1,000 live births), American Indian or

Alaska Native mothers (8.06 per 1,000), and Puerto Rican mothers (8.30 per 1,000), and lowest for infants of Cuban (4.42 per 1,000), Central and South American (4.68 per 1,000), and Asian or Pacific Islander mothers (4.89 per 1,000) (Table 17 and National Vital Statistics Report, available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf).

The **leading cause of death** differs by age group. In 2007 (preliminary data), the leading cause of death was unintentional injuries for people 1–44 years of age, cancer for adults 45–64 years of age, and heart disease for adults 65 years and over (Table 29).

Age-adjusted mortality from **heart disease**—the leading cause of death overall—declined 41% between 1990 and 2007 (preliminary data), continuing a long-term downward trend (Figure 18 and Table 32).

Age-adjusted mortality from **cancer** (malignant neoplasms)—the second leading cause of death overall—decreased 18% between 1990 and 2007 (preliminary data) (Figure 18 and Table 34).

The age-adjusted death rate for **HIV disease** has declined slowly since 1999, after a sharp decrease during the mid 1990s associated with the widespread adoption of highly active antiretroviral therapy (HAART). The death rate for HIV disease is higher for those 35–54 years of age than for other ages (Figure 35 and Table 38).

The **homicide** rate for **black males 15–24 years of age** decreased sharply from the early to the late 1990s and has remained relatively stable since then (Table 41).

Health Risk Factors

Obesity increases the risk of heart disease, diabetes, and stroke. Heavy and chronic use of alcohol and use of illicit drugs increase the risk of disease and injuries. Cigarette smoking increases the risk of lung cancer, heart disease, emphysema, and other diseases. Regular physical activity reduces the risk of disease and enhances mental and physical functioning.

Between 1976–1980 and 2005–2006, the prevalence of **overweight among preschool-age children** 2–5 years of age more than doubled, from 5% to 11% (Figure 7).

The prevalence of **overweight among school-age children** and adolescents increased between 1976–1980 and 2005–2006. The prevalence of overweight more than doubled, from 7% to 15%, among children 6–11 years of age and more than tripled, from 5% to 18%, among adolescents 12–19 years (Table 73 and Figure 7).

Among **adults** 20–74 years of age, **obesity** rates have more than doubled since 1976–1980. From 1976–1980 to

2005–2006, the percentage of adults who were obese increased from 15% to 35% (age-adjusted) (Figure 7).

In 2007, 8% of people 12 years of age and over reported use of any illicit drugs in the past month, 6% reported marijuana use, and 3% reported nonmedical use of prescription drugs. Use of **illicit drugs** was higher among persons 16–25 years of age than for persons in other age groups (Table 63).

In 2007, 21% of adults 18 years of age and over reported having **five or more drinks in a day** at least once in the past year, and 9% reported having five or more drinks in a day at least 12 times in the past year (Table 66).

In 2007, 20% of U.S. adults were current **cigarette smokers**, only a slight decrease from 21% in the previous 3 years. Men were more likely to be current cigarette smokers than women (22% compared with 18%, age-adjusted) (Figure 6 and Table 60).

In 2005–2006, 30% of adults often or almost always had **trouble sleeping** in the past month (Figure 8).

Measures of Health and Disability

Measures of health status presented in this report include respondent-assessed health status, prevalence of selected diseases and conditions, and mental health status. Measures of disability presented include prevalence of basic actions difficulty, complex activity limitations, and limitations in functioning associated with chronic health conditions.

In 2007, the percentage of noninstitutionalized adults reporting their **health as fair or poor** ranged from 6% of those 18–44 years of age to 31% of those 75 years and over. The proportion of all persons with fair or poor health was three times higher among persons living in poverty compared with those in higher income families (Table 57).

The prevalence of **hypertension**—defined as elevated blood pressure or taking antihypertensive medication—increases with age. In 2003–2006, 36% of men and women 45–54 years of age had hypertension, compared with 65% of men and 80% of women 75 years and over (Table 68).

The percentage of adults with **diabetes** (including both diagnosed and undiagnosed) increased from 1988–1994 (8%) to 2003–2006 (10%). Diabetes is more common among non-Hispanic black persons and Mexican Americans than among non-Hispanic white persons (Table 51).

Between 1988–1994 and 2003–2006, the percentage of both men and women 55 years of age and over with a **high total serum cholesterol level** (greater than or equal to 240 mg/dL) declined. However, older women were more likely to have high serum cholesterol than older men. In 2003–2006, 24% of women 65–74 years of age had high serum

cholesterol, compared with 11% of men of the same age (Table 69).

From 1990 to 2006, the number of **new cases of lung and bronchus cancer** per 100,000 population declined on average 2% per year among males and remained unchanged among females. Cancer of the lung and bronchus is the second most common newly diagnosed cancer among males (after prostate cancer) and females (after breast cancer) (Table 49).

Between 1988–1994 and 2001–2004, approximately one-quarter of adults 20–64 years of age and children 6–19 years of age had **untreated dental caries**, down from approximately one-half in 1971–1974 (Table 74).

In 2007, approximately 2.0 million nonfatal **workplace injuries and illnesses** in the private sector involved days away from work, job transfer, or restricted duties at work, for a rate of 2.1 cases per 100 full-time workers. The rate of all reported nonfatal occupational injuries and illnesses in private industries was cut in half from 1989 (8.6 cases per 100 full-time workers) to 2007 (4.2 cases per 100) (Table 46 and Figure 11).

In 2007, there were nearly 36,000 **new AIDS cases** reported. Males 13 years of age and over accounted for 73% of all new cases. Black males made up 31% of all new cases, and black females accounted for 17% of all new cases (Table 48).

From 1990 to 2007, the incidence rate for **chlamydia** increased from 160 to 370 cases per 100,000 population, while the rate for **gonorrhea** and **syphilis** declined. In 2007, incident cases of **acute viral hepatitis A and B** were at historically low levels (Table 47).

In 2006–2007, 3% of the noninstitutionalized population 18 years of age and over was classified as having **serious psychological distress**. Adults living below the poverty level were more than four times as likely to report serious psychological distress as adults in families with an income at least twice the poverty level (7.2% compared with 1.6%, age-adjusted) (Table 58).

In 2005–2006, women 18 years of age and over (6.6%) were about 50% more likely than men (4.4%) to have current **depression** (Figure 12).

Between 1991 and 2007, the percentage of **high school students** who reported attempting suicide ranged between 7% and 9%, and the percentage who reported a **suicide attempt** that required medical attention ranged between 2% and 3% (Table 59).

In 2007, 59% of noninstitutionalized adults 65 years of age and over had **basic actions difficulty** (including movement or emotional difficulty or trouble seeing or hearing), and 34%

had a **complex activity limitation** (such as work or self-care limitations) (Table 55).

In 2007, 10% of adults 18 years of age and over reported **trouble seeing, even with glasses or contacts**. Trouble seeing increased with age from 7% of adults 18–44 years of age to 18% of adults 75 years and over (Table 56).

In 2006–2007, speech problems, learning disabilities, and attention-deficit/hyperactivity disorder (ADHD or ADD) were the most frequently reported causes of **activity limitation among children** 5–11 years of age (Figure 13).

Arthritis and other musculoskeletal conditions were the leading causes of **activity limitation** among working-age **adults 18–64 years** of age in 2006–2007. Mental illness was the second most frequently mentioned condition causing activity limitation among adults 18–44 years of age and the third most frequently mentioned among adults 45–54 years of age (Figure 14).

Health Care Utilization

Factors associated with the utilization of health care services include health behaviors, health status, health insurance coverage, health care resources, family income, and other demographic variables.

Use of Medical Care Services

Use of inpatient hospital care remained relatively stable over the past decade, use of physician services increased slowly, and use of prescription drugs increased more rapidly.

In 2007, there were about 1.2 billion **visits to physician offices, hospital outpatient departments, and hospital emergency departments**. There were 994 million visits to physician offices, 89 million visits to hospital outpatient departments, and 117 million visits to hospital emergency departments (Table 91).

In 2006–2007, 7% of children under 6 years of age and 14% of children 6–17 years of age **did not have a health care visit to a doctor's office or a clinic** in the past year (Table 79).

In 2007, 20% of adults 18 years of age and over had at least one **emergency department visit** in the past year, and 7% had two or more visits. Emergency department utilization was higher among persons with family income below 200% of poverty than for higher income persons (24%–30% compared with 18%) (Table 89).

Between 1997 and 2007, about two-thirds of persons 2 years of age and over **had seen a dentist in the past year**. Dental visit rates were higher among children 2–17 years of

age than among adults, with three-quarters (73%–77%) of children having had a recent dental visit during this period (Table 93).

Between 1995 and 2006, nonfederal short-stay **hospital discharge rates** remained stable after declining sharply during the 1980s. During this period, average length of stay declined by about one-half a day, to 4.8 days in 2006 (Table 99).

In 1973–1974, the **nursing home resident rate** for the white population 65 years of age and over was more than twice that for the black population (61 compared with 28 per 1,000 population; age-adjusted). By 2004, the resident rate for the black population (50 per 1,000) exceeded that for the white population (34 per 1,000) (Table 105).

The percentage of the population with at least one **prescription drug** during the previous month increased from 39% in 1988–1994 to 47% in 2003–2006. During the same period, the percentage taking three or more prescription drugs increased from 12% to 21% (percentages are age-adjusted, Table 95).

In 2003–2006, 54% of adults 20 years of age and over reported taking a **dietary supplement** in the past month. The use of dietary supplements is higher among women than men, and reported use increases with age (Table 96).

In 2005–2006, 9% of adults had often or almost always used **sleeping pills or medication to help them sleep** in the past month (Figure 8).

Use of Preventive Medical Care Services

Preventive health care improves the health of the Nation's population. Children are protected from a number of childhood infectious diseases through routine vaccination. Vaccinations are an effective tool for protecting children and adults against influenza and other vaccine-preventable diseases. Mammography detects breast cancer at an earlier stage, when it is easier to treat. Pap smear screening detects infectious diseases and cervical cancer.

In 2007, 67% of **children 19–35 months** of age received the **combined vaccination series** of four doses of DTaP (diphtheria-tetanus-acellular pertussis) vaccine, three doses of polio vaccine, one dose of measles-containing vaccine, three doses of Hib (*Haemophilus influenzae* type b) vaccine, three doses of hepatitis B vaccine, one dose of varicella vaccine, and four or more doses of pneumococcal conjugate vaccine (Table 82).

Between 1989 and 2007, the percentage of noninstitutionalized **adults 65 years of age and over** who received an **influenza vaccination** in the past year more

than doubled (from 30% to 67%). In 2007, 62% of those 65–74 years of age and 73% of those 75 years and over had an influenza vaccination in the past year (Figure 9 and Table 84).

Between 1989 and 2007, the percentage of noninstitutionalized **adults 65 years of age and over** who ever received a **pneumococcal vaccination** quadrupled (from 14% to 58%). In 2007, 52% of those 65–74 years of age and 64% of those 75 years and over ever had a pneumococcal vaccination (Figure 9 and Table 85).

The percentage of women 40 years of age and over who had a **mammogram** in the past 2 years more than doubled, increasing from 29% in 1987 to 70% in 1999. Between 1999 and 2008, the percentage of women 40 years and over who had a mammogram within the past 2 years decreased slightly, from 70% to 68% (Table 86 and Figure 26).

In 2008, 82% of women 18–44 years of age reported having a recent **Pap smear** (in the past 3 years). Recent Pap smear use remained higher among insured women 18–64 years of age than uninsured women (83% compared with 67% in 2008) (Table 87).

Unmet Need for Medical Care

Because health care can be expensive, people without health insurance, or those who are underinsured, may not receive needed health care services or prescription drugs due to cost.

The percentage of adults 18–64 years of age who reported **not getting needed medical care** in the past year due to the cost increased from 6% to 8% between 1997 and 2007, and the percentage **not getting needed prescription drugs** increased from 6% to 10%, while the percentage who reported **delaying medical care** due to cost remained stable at 10% (Table 77).

In 2007, the percentage of persons who reported **not receiving needed medical care** because of cost varied by **geographic region**, from 4% in the Northeast to 7% in the South (Table 77).

In 2007, 20% of people under 65 years of age who were uninsured for up to a year **did not receive needed medical care** in the past 12 months **due to the cost**, compared with 3% of people covered by health insurance for the full year. Twenty-four percent of people under age 65 years who were **uninsured** for more than a year reported not receiving needed medical care due to cost (Table 77).

On January 1, 2006, Medicare Part D, which provides coverage for prescription medications for Medicare beneficiaries, went into effect. The percentage of **adults 65 years of age and over** with income below the poverty level

who reported they **did not get the prescription drugs** they needed **due to cost** was 8%–9% in 2006 and 2007 (Table 77).

Health Care Resources

Use of health care services is determined in part by the number of providers and institutions available to provide treatment. The ratio of physicians per population continues to increase, but the supply is not equally distributed across the country. The ratio of dentists per population is stable, but varies by state. The number of inpatient mental health beds continues to decline, and nursing home occupancy rates remain high.

In 2006, 43% of doctor visits were to **specialty care physicians**, up from 36% in 1990. During this period, the proportion of office-based doctor visits to **general and family practice physicians** decreased from 30% to 23% (Table 92).

Between 1995 and 2007, the number of **physicians in patient care** per 10,000 population increased 19%, to 25.3 per 10,000 population (Table 107).

Between 1993 and 2006, the number of **dentists** per 10,000 population remained stable at about 6.0. In 2006, the District of Columbia (10.5), Massachusetts (8.2), New Jersey (8.2), and Hawaii (8.1) had the most dentists per 10,000 population. The states with the fewest dentists per 10,000 population included Mississippi (4.0), Arkansas (4.1), and Alabama (4.4) (Table 110).

Between 1990 and 2007, the number of **community hospital beds** declined 14%, from about 927,000 to 801,000. Since 1990, the community hospital occupancy rate has remained between 63% and 67% (Table 115).

Between 1990 and 2004, the overall rate of **inpatient mental health beds** per 100,000 civilian population in the United States declined by 45%. The number of mental health beds per 100,000 population declined by 53% in state and county mental hospitals, by 48% in private psychiatric hospitals, and by 34% in nonfederal general hospital psychiatric services (Table 116).

In 2008, there were 1.7 million **nursing home beds** in 16,000 certified nursing homes. Between 1995 and 2008, nursing home bed occupancy was relatively stable at 82%–85%. **Occupancy rates** were 90% or higher in 14 states and the District of Columbia in 2008 (Table 119).

Health Care Expenditures and Payors

Health Care Expenditures

The United States spends more on health per capita than any other country, and U.S. health spending continues to increase. Spending increases are due to increased intensity and cost of services, and a higher volume of services, along with an aging population. Major payors for health care include private health insurers and public programs such as Medicaid and Medicare.

The United States spends a larger share of its **gross domestic product (GDP) on health** than does any other major industrialized country. In 2006, the United States devoted 15% of its GDP to health, compared with 11% in Switzerland, the country with the next highest share (Table 122).

In 2007, **national health care expenditures** in the United States totaled \$2.2 trillion, a 6.1% increase from 2006. The average per capita expenditure on health in the United States was \$7,400 in 2007 (Table 123).

Prescription drug expenditures increased 5% between 2006 and 2007, compared with a 9% increase between 2005 and 2006 (Table 126).

Expenditures for hospital care accounted for 31% of all national health expenditures in 2007. Physician and clinical services accounted for 21% of the total in 2007, prescription drugs for 10%, and nursing home care for 6% (Table 126).

In 2004, **per capita personal health care expenditures** increased with age, from \$2,700 for children under 19 years of age to \$25,700 for adults 85 years and over (Table 128).

Health Care Payors

Medicaid is jointly funded by the federal and state governments to provide health care for certain groups of low-income persons. Medicare is funded by the federal government and provides health care coverage for most persons 65 years of age and over and disabled persons.

In 2007, 36% of **personal health care expenditures** were paid by private health insurance, consumers paid 14% out of pocket, and 45% were paid by public funds. The majority of public funds went toward Medicare and Medicaid expenditures (Figure 21 and Table 127).

In 2008, the **Medicare** program had 45 million **enrollees and expenditures** of \$468 billion, up from \$432 billion the previous year. Expenditures for the new Medicare drug program (Part D), introduced in 2006, were \$49 billion in 2008 (Table 142).

Of the 35 million **Medicare enrollees in the fee-for-service program** in 2007, 18% were under 65 years of age, compared with 12% in 1994 (Table 143).

In 2006, children under 21 years of age accounted for 48% of **Medicaid recipients** but only 19% of expenditures. Aged, blind, and disabled persons accounted for 22% of recipients and 65% of expenditures (Table 145).

In 2007, the **Children's Health Insurance Program (CHIP)** accounted for less than 1% of personal health care expenditures (Table 127).

Health Insurance Coverage

Lack of health insurance coverage is a major barrier to obtaining most health care services. Out-of-pocket health care expenses may deter people from seeking health care services. People without health insurance are likely to face the highest costs, but the insured may also face substantial copayments, deductibles, and other out-of-pocket health care expenses.

In 2007, 17% of the **population under 65 years of age had no health insurance coverage** (public or private) at the time of interview. Between 1995 and 2007, this percentage fluctuated between 16% and 18% (Figure 19 and Table 140).

Among the under 65 population, persons with a family income less than 200% of the poverty level were 2.7 to 3 times more likely to be **uninsured at the time of interview** than persons in higher income families (Table 140).

In 2007, 9% of **children** under 18 years of age were **uninsured at the time of interview**. Between 2000 and 2007, among children in families with income just above the poverty level (100%–150% of poverty), the percentage uninsured dropped from 25% to 16%, whereas the percentage with coverage through Medicaid or CHIP increased from 35% to 55% (Tables 139 and 140).

In 2007, among persons under 65 years of age, almost one-third of **Hispanic persons** and almost two-fifths of **American Indian and Alaska Native persons** were **uninsured at the time of interview**, compared with fewer than one-fifth of those in other racial and ethnic groups (Table 140).

In 2007, one-third of people under 65 years of age with a family income below 200% of poverty were **uninsured for at least part of the 12 months prior to interview**, compared

with 14% of people living in higher income families (Figure 20).

In 2007, 39% of people of **Mexican origin** were **uninsured for at least part of the 12 months prior to interview**, compared with 17% of non-Hispanic white people (Figure 20).

In 2005–2007, the percentage of persons **who reported being uninsured for the entire year** ranged from 8% in Hawaii and Massachusetts to 20% or more in Florida, New Mexico, and Texas (Table 150).

Special Feature: Medical Technology

Technology continues to transform the medical care system as new and existing types of tests, imaging, procedures, devices, and machinery are increasingly utilized but at substantial cost.

Between 1996 and 2007, there was a more than three-fold increase in the number of visits per 100 population to physician offices and hospital outpatient departments during which **MRI/CT/PET scans** were ordered or provided, as well as a four-fold increase in advanced imaging ordered or provided during emergency department visits (Figure 25).

Between 1996 and 2006, the rate of hospital discharges with an **angioplasty procedure** without the insertion of a stent declined by 80% among persons 45 years of age and over. Since their introduction in 2003, **drug-eluting coronary stents** have rapidly displaced bare stents and were used in three-quarters of angioplasty discharges in 2006 (Figure 28).

Hospital discharges with at least one **knee or hip replacement procedure** among adults 45 years of age and over increased steadily from 1996 to 2006. Total hip replacement discharge rates increased by one-third, partial hip replacements increased by 60%, and total knee replacement discharge rates increased by 70% during that time period (Figure 27).

Ambulatory surgery procedure visits for **cholecystectomy (gallbladder removal)** increased more than 30%, from 16 visits per 10,000 population in 1996 to 21 per 10,000 in 2006, while inpatient cholecystectomy rates declined 19% during this period. By 2006, laparoscopic procedures accounted for three-quarters of inpatient cholecystectomies and virtually all ambulatory surgery cholecystectomies (Figure 29).

Between 1996 and 2006, ambulatory surgery visits per 10,000 population among adults for **upper endoscopy (EGD)** increased 90%, and **lower endoscopy (colonoscopy)** rates tripled (Figure 30).

All facilities that perform laboratory testing for the diagnosis, prevention, or treatment of disease or the assessment of human health are regulated under the Clinical Laboratory

Improvement Amendments (CLIA). The percentage of **CLIA laboratories** that perform only waived or simple tests increased from 44% in 1993 to 64% in 2008 (Figure 24).

Between 1997 and 2006, the number of **new kidney and liver transplantations** per 1 million population increased 31% and 42%, respectively. In 2006, 16,700 kidney transplantations and 6,100 liver transplantations were performed (Figure 32).

The total number of **assisted reproductive technology (ART) cycles** initiated among women doubled from 1996 to 2006. During this period, the growth in ART cycles among women over 40 years of age increased at a faster rate on average (11% per year) than among women 35–40 years (8% per year) and those under 35 years (7% per year) (Figure 33).

Use of **intensive care units in the last 6 months of life among Medicare decedents** ranged from 23% of Medicare decedents in Vermont and North Dakota to 49% in New Jersey and Florida in 2005 (Figure 31).

Use of **antidiabetic drugs** among adults 45 years of age and over increased about 50% from 1988–1994 to 2003–2006. The use of **statin drugs** to control elevated serum cholesterol among adults 45 years and over increased almost 10-fold over this time period, from 2% to 22% (Figure 34).

HIV mortality fell sharply following the introduction of the HIV drug “cocktail” known as **highly active antiretroviral therapy (HAART)** in 1996. From 1995 to 1997, the death rate from HIV disease for males declined by two-thirds, from 27.3 deaths population in 1995 to 9.6 per 100,000 in 1997. Declines in HIV death rates also occurred for females and for all racial and ethnic groups (Figure 35).

Hospitalizations with respiratory intubation and mechanical ventilation, or coronary angioplasty, as the principal procedure contributed the most to overall **hospital costs** in 2006 (Figure 36).

Population

Age

As the number of Americans increases, more demands are placed on the Nation's health care system.

The health status of the Nation, as well as its need for health care resources, is determined in part by the size and composition of its population. From 1980 to 2007, the U.S. population increased on average 1.1% per year (Figure 1A). In 2007, there were 302 million U.S. residents, up from 227 million in 1980 (see data table for Figures 1A and 1B). By 2050, the U.S. population is projected to reach 440 million.

Between 1980 and 2007, the population continued to age as the percentage of the U.S. middle-age population (45–64 years of age) increased from 20% to 25%, while the percentage under 18 years fell from 28% to 25% (Figure 1B). During this period, the percentage of the population of reproductive age (18–44 years) decreased from 41% to 38%. Among the older population, the percentage 65–74 years of age decreased slightly, from 7% to 6%, while the percentage of Americans 75 years of age and over increased from 4% to 6%.

From 2007 to 2050, the U.S. population is projected to grow older. The percentage of the population under 18 years of age is projected to remain at about 23%–25%, and the percentage of the population 18–44 and 45–64 years of age is projected to decline. In contrast, the percentage of the older population is projected to increase as the baby boomers (those born in the post-World War II period 1946–1964) continue to age. During this period, the percentage of the population 65–74 years of age is projected to increase from 6% to 9%, and the percentage 75 years of age and over projected to almost double, rising from 6% to 11%. As the population ages, the need and demand for health care will increase because older adults are more likely to suffer from chronic conditions and to seek medical care and other services associated with the aging process (Tables 54, 55, 58, 71, 101, and 131).

Population growth is the net result of the natural increase in population from births and international migration and the natural decrease in population from deaths and emigration. After declining sharply in the 1960s and 1970s, the Nation's birth rate remained relatively stable between 1980 and 2006 (Table 4). The U.S. Census Bureau projects that the population under 1 year of age will increase progressively until 2050 (1). Children are more likely to live in poverty than any other age group (Figures 4 and 5).

Almost one-third of current population growth is estimated to be caused by net immigration (1). Between 1980 and 2004, the percentage of the U.S. population that was foreign-born doubled from 6% to 12% (2). The immigrant population is younger and disproportionately more likely to be low-income and uninsured (3). They are also more likely to face other barriers to accessing health care, including ineligibility for many government-sponsored programs and difficulty in finding providers who speak their language and provide culturally sensitive care (4).

Between 1980 and 2006, the age-adjusted all-cause mortality rate declined 25%, primarily due to steep declines in heart disease and stroke mortality (Figure 18). Life expectancy at birth increased by almost 4 years from 1980 to 2005 (Figure 16). Life expectancy has increased for all racial and ethnic groups, but substantial disparities persist (Table 24).

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Figure 1A. Total population, by age: United States, 1980–2050

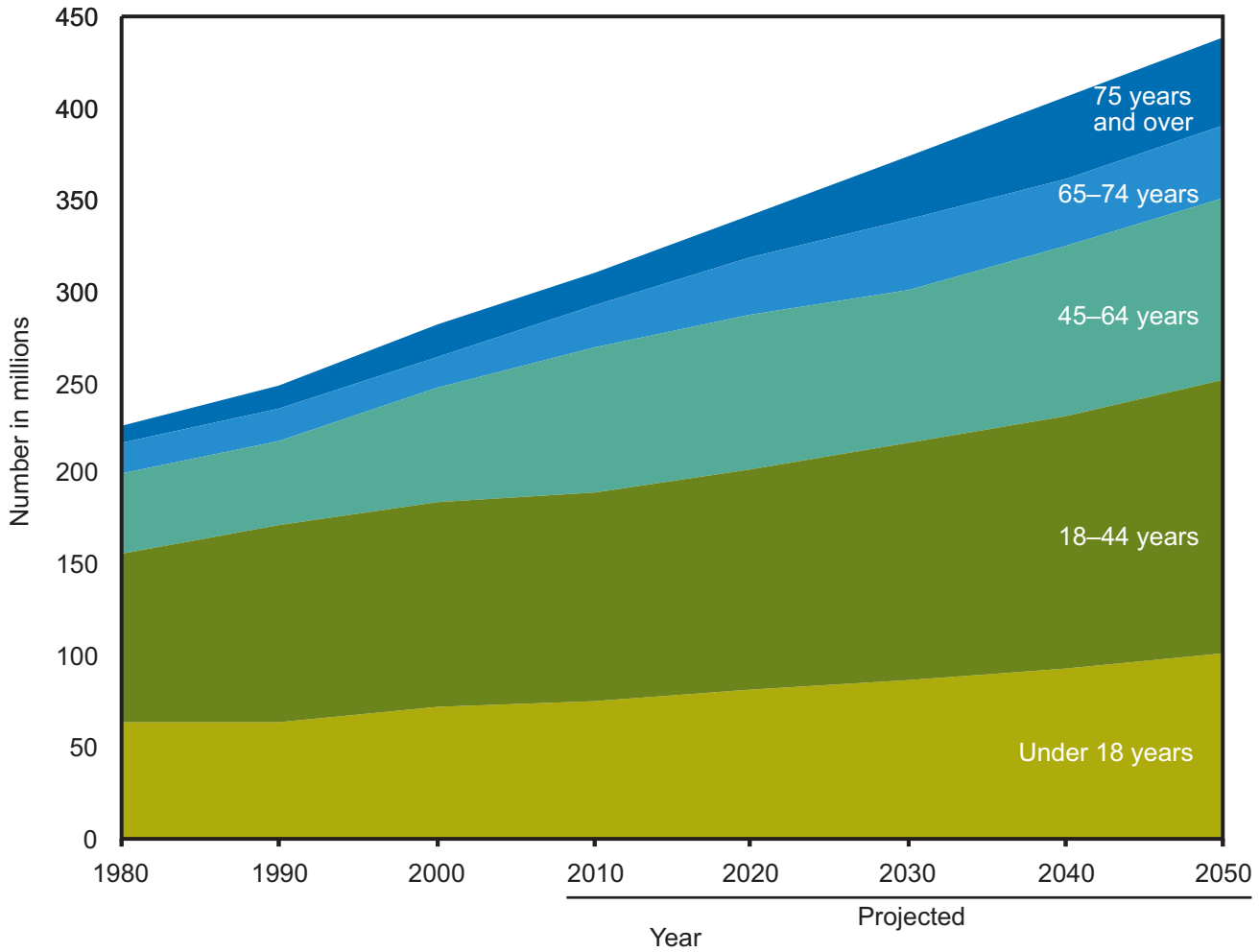
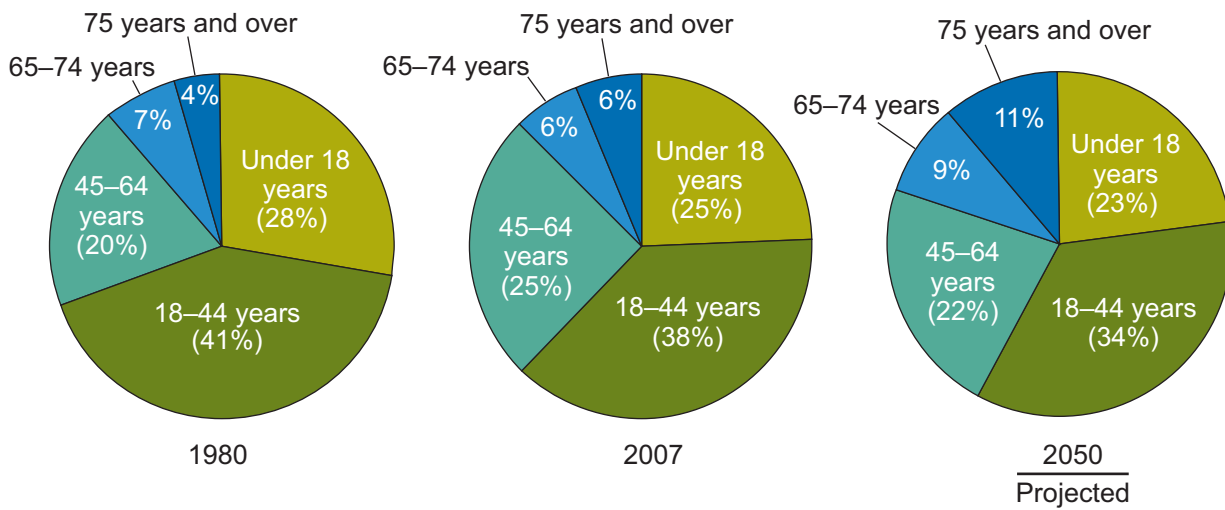


Figure 1B. Percent distribution of the total population, by age: United States, 1980, 2007, 2050



NOTE: See [data table for Figure 1](#).

SOURCE: U.S. Census Bureau.

Race and Ethnicity

Between 1980 and 2008, there was substantial growth in the Hispanic and Asian populations in the United States.

The United States population is growing (Figure 1), and its racial and ethnic composition is changing. Changes in the racial and ethnic composition of the population have important consequences for the health of the Nation because many risk factors, behaviors, levels of disease prevalence and disability, and access to and utilization of health services differ substantially by race and ethnicity. Health insurance coverage—a major determinant of access to health care—differs significantly by racial and ethnic groups (Tables 137–141). Nearly one in three Hispanic persons under age 65 years is uninsured (Table 140). One of the overarching goals of U.S. public health policy is the elimination of racial and ethnic disparities in health.

Diversity has long been a characteristic of the U.S. population. In the past few decades, the racial and ethnic composition of the population under 18 years of age has changed. In 1980, 9% of children were of Hispanic origin and 2% were Asian. By 2008, the percentage of children in the Hispanic and Asian populations had more than doubled (Figure 2). Growth in the population of Hispanic children is fueled by higher birth rates (Table 4).

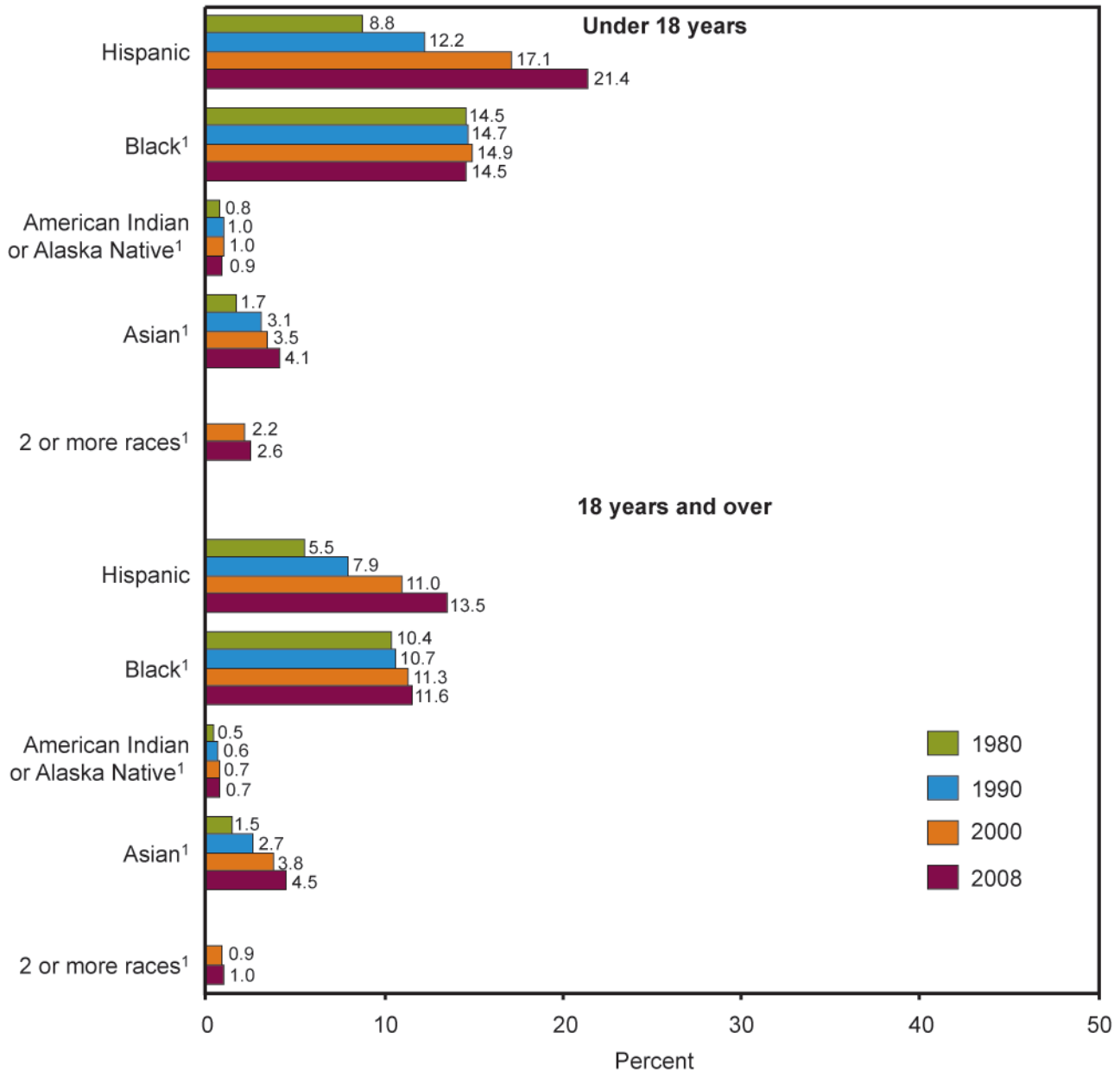
The racial and ethnic composition of the adult population has also changed over time. Between 1980 and 2008, the percentage of adults who were Hispanic more than doubled, while the percentage of Asian adults tripled (Figure 2). Growth in the Hispanic and Asian adult populations is primarily due to immigration (1,2). The Hispanic and Asian populations are projected to continue to increase in the future; by 2050 they are estimated to comprise 25% and 8% of the total population, respectively (1).

In the 1980 and 1990 decennial censuses, persons could choose only one racial category to describe their race (3). Beginning with the 2000 census, the question on race was modified to allow the choice of more than one racial category (3). Although, overall, a small percentage (1%) of persons of non-Hispanic origin selected two or more races in 2008, the percentage of children described as being of more than one race was more than twice as high as the percentage of adults (Figure 2). The number of adults identifying themselves or their children as multiracial is expected to increase in the future (4). The percentage of persons reporting two or more races varies considerably across racial groups, with those of American Indian or Alaska Native origin more likely to report two or more races (3).

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Figure 2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2008



¹Not Hispanic.

NOTES: Persons of Hispanic origin may be of any race. Race data for 2000 and beyond are not directly comparable with data for 1980 and 1990. Individuals could report only one race in 1980 and 1990 and more than one race in 2000 and beyond. Persons who selected only one race in 2000 and beyond are included in single-race categories; persons who selected more than one race in 2000 and beyond are shown as having

2 or more races and are not included in single-race categories. In 1980 and 1990, the Asian category included Asian and Native Hawaiian or Other Pacific Islander; in 2000 and beyond, this category includes only Asian. See [data table for Figure 2](#).

SOURCE: U.S. Census Bureau.

Living Veterans

In 2007, there were 24 million living veterans, 12% of whom were receiving compensation for service-connected disability.

Veterans may receive health care through a variety of sources, including private health insurance, Medicaid, Medicare, and the Department of Veterans Affairs (VA). Veterans with service-related disabilities, other disabilities, and those with low income are more likely to rely on VA services (1). Differences in usage of VA services reflect, in part, veterans' qualifications for and access to other health care services. In addition, the VA classifies veterans into priority groups based on service-connected disabilities (SCDs), service-related exposures, Medicaid eligibility, income, and other factors (1,2). For example, veterans with an SCD rated 50% or more disabling are priority group 1, whereas veterans without SCD and with incomes and net worth above VA thresholds are priority group 8. Cost-sharing rules vary by priority group, and at times enrollment for those classified as priority group 8 has been frozen due to budgetary limitations.

Because of their military service, veterans may have specialized health care needs. Veterans who were injured during their service may need prosthetics, rehabilitation services, and other specialized follow-up care for traumatic injuries. Veterans may suffer from a variety of mental health conditions as a result of their service, including post-traumatic stress disorder (3) and the aftereffects of being prisoners of war (4). Veterans in a variety of arenas have been exposed to chemical agents that were later determined to cause health problems. These include World War II veterans who were exposed to the chemical weapons mustard gas and lewisite; such exposure has been linked to respiratory cancers and other chronic respiratory diseases, corneal conditions, and psychological disorders (5). Exposure to Agent Orange and other herbicides during the Vietnam era has been associated with Hodgkin and non-Hodgkin lymphoma and chronic lymphocytic leukemia (6). Studies of the health of Gulf War veterans found that about one-quarter of those serving in the Persian Gulf from 1990 to 1991 have had persistent health problems. A group of symptoms known as Gulf War illness has been linked to anti-nerve agents and pesticide exposure (7,8).

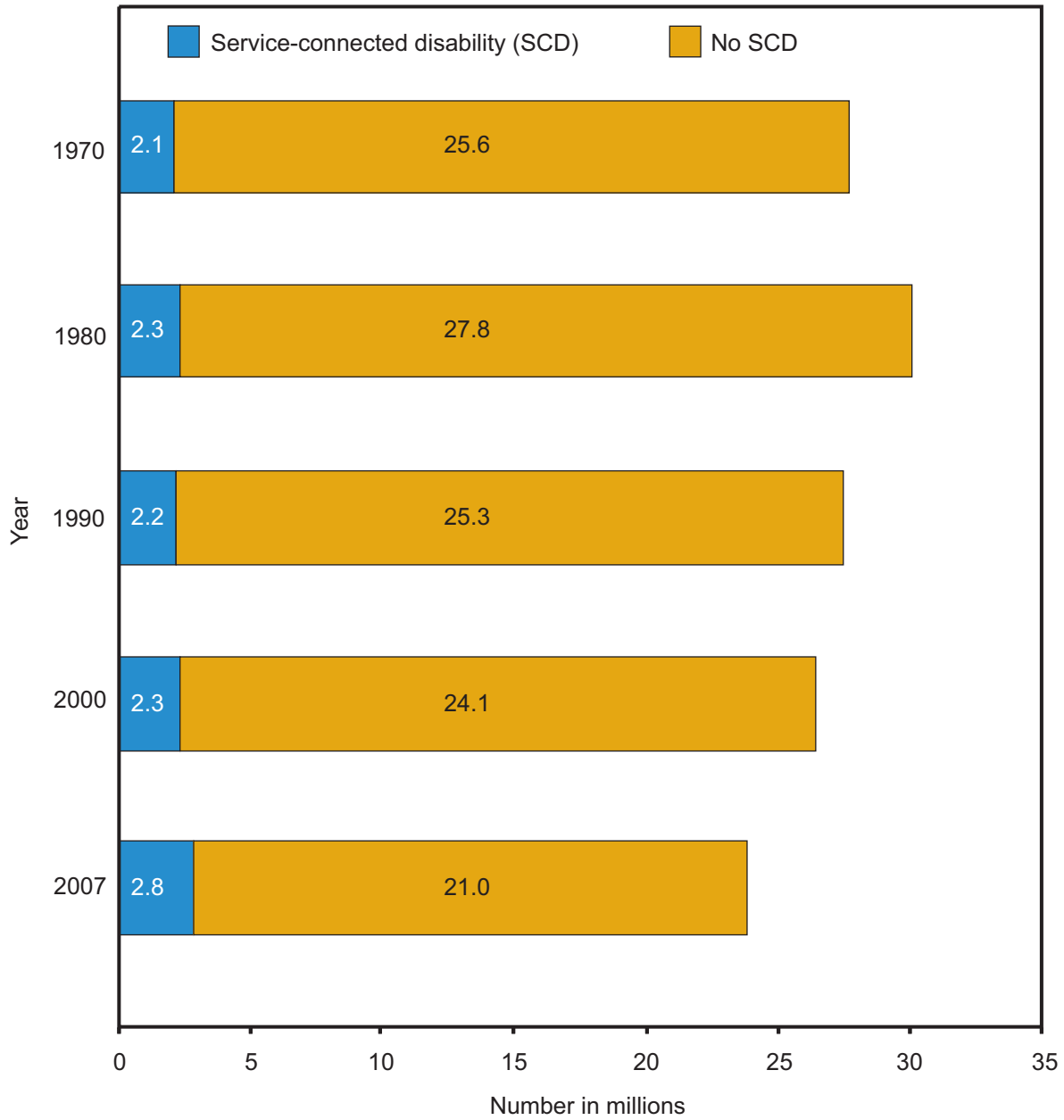
Because the need for health care services may be related to service-related exposures and conditions, data for veterans are often classified by their period of service. Of the 24 million living veterans in 2007, almost 5 million served during the Gulf War era (defined as any active duty from August 2, 1990 to present), almost 8 million had served in the Vietnam era, almost 3 million each had service during the Korean

conflict and World War II, and another 6 million served during peacetime (veterans are classified by their earliest period of service). The percentage of living veterans receiving compensation for SCD reached a high of 12% in 2007 (Figure 3), up from 8% to 9% in the decades between 1970 and 2000 (data table for Figure 3).

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Figure 3. Population of living veterans, by service-connected disability status: United States, 1970–2007



NOTES: Veterans with SCD are receiving financial compensation. See [data table for Figure 3](#).

SOURCES: U.S. Department of Veterans Affairs and U.S. Census Bureau.

Poverty

In 2007, Hispanic and black Americans in all age groups were more likely to live in poverty than white and Asian Americans.

Children and adults in families with income below or near the federal poverty level have worse health than those with higher income (Tables 57 and 58; see Appendix II, Poverty, for a definition of the federal poverty level). Although in some cases illness can lead to poverty, more often poverty is associated with poor health by its connection with inadequate nutrition, substandard housing, exposure to environmental hazards, unhealthy lifestyles, and decreased access to and use of health care services (1,2) (Tables 75–80).

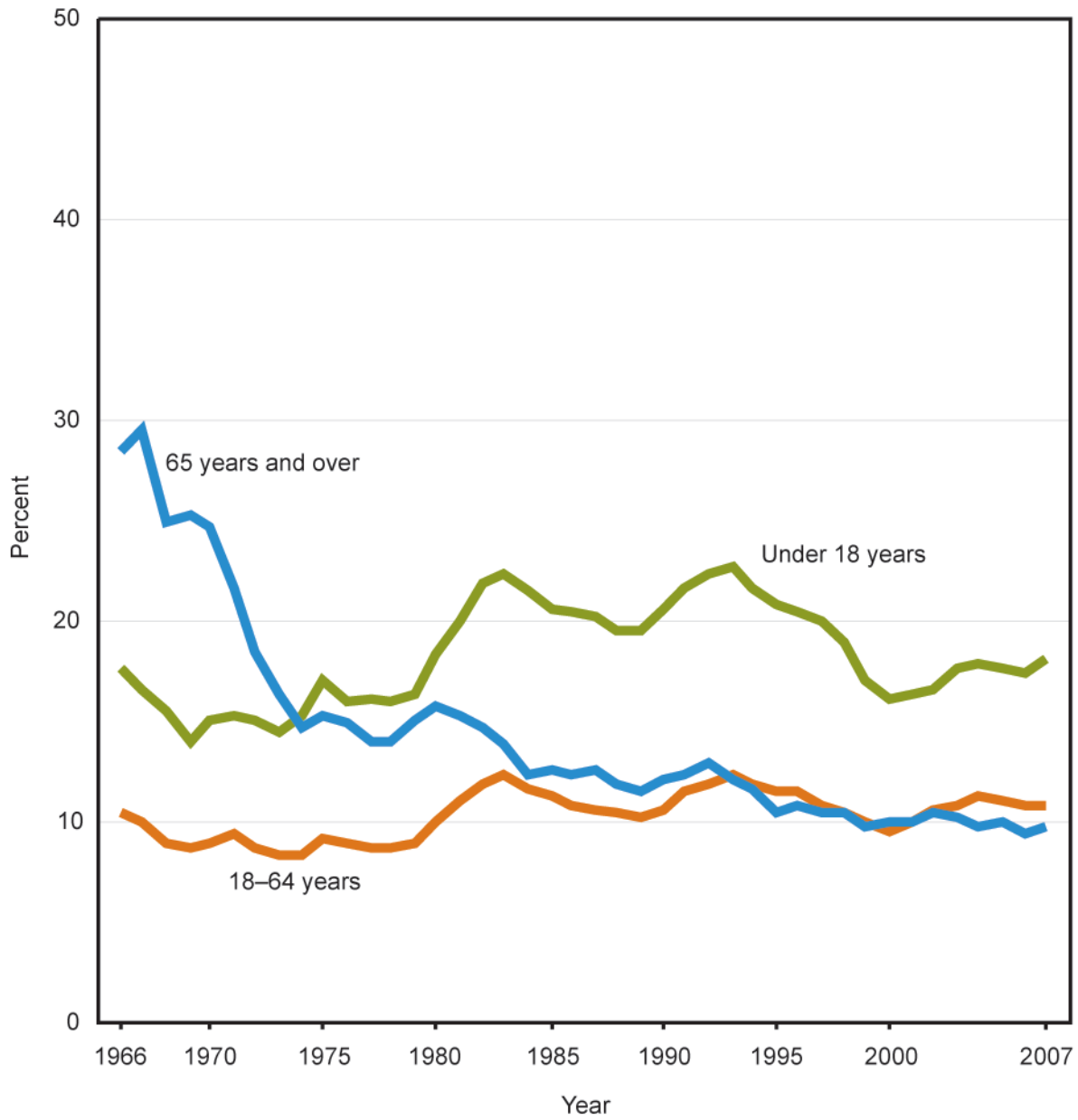
In 2007, the percentage of the U.S. population living in poverty was 12.5%, unchanged from 2006 but higher than in 2000 at 11.3% (3). The poverty rate among children increased between 2006 and 2007 but remained unchanged among adults 18–64 years of age and 65 years and over (2) (data table for Figure 4).

Since 1974, children have been more likely than either working-age or older adults to live in poverty (Figure 4). In 2007, 13.3 million children (18.0%) lived in poverty and another 15.7 million children (21.2%) were classified as near poor, with a family income between 100% and 200% of the poverty level (data table for Figure 5). In 2007, children represented 35.7% of all Americans living in poverty but only 24.8% of the total population (3).

Prior to 1974, persons 65 years of age and over were more likely to be poor than people of other ages. With the increased benefits provided by government social insurance programs such as Social Security, the poverty rate of older adults declined rapidly until 1974 and then continued a gradual decline through 1999 (4). Between 1999 and 2007, poverty rates among older adults fluctuated around 10%. In 2007, 3.6 million persons 65 years and over (9.7%) lived in poverty, with an additional 9.7 million older persons (26.4%) classified as near poor (data table for Figure 5).

(Continued)

Figure 4. Poverty by age: United States, 1966–2007



NOTES: Data shown are the percentage of persons with family income below the poverty level. See [data table for Figure 4](#).

SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

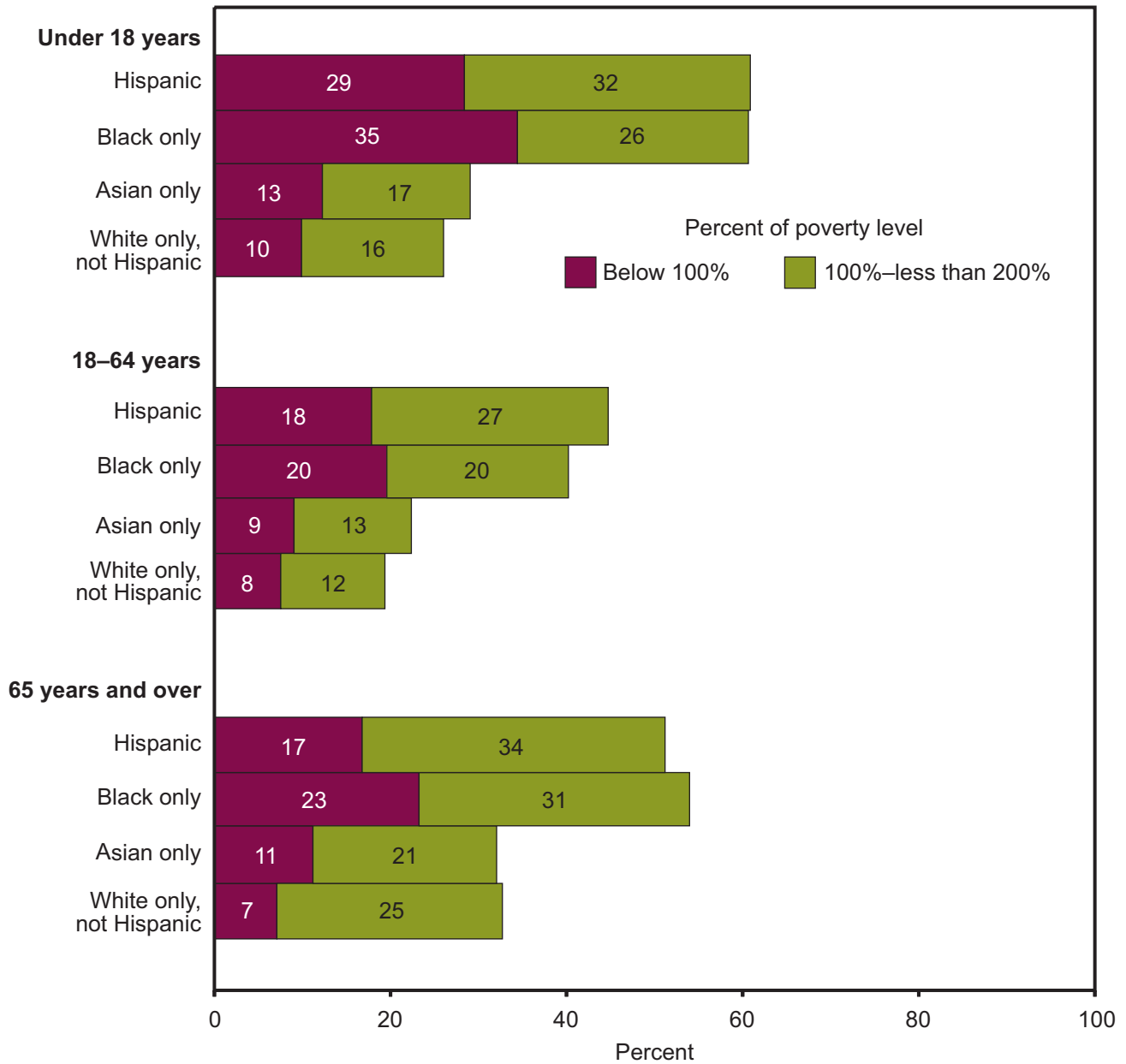
Poverty *(Continued)*

The poverty rate in 2007 was unchanged from 2006 levels for non-Hispanic white persons, black persons, and Asian persons, but increased for persons of Hispanic origin (3). At all ages, a higher percentage of Hispanic and black persons than non-Hispanic white persons were poor (Figure 5). In 2007, 29%–35% of Hispanic and black children were poor, compared with 10%–13% of non-Hispanic white and Asian children. Similarly, among persons 65 years of age and over, 17.1% of Hispanic and 23.2% of black persons were poor, compared with 7.4% of non-Hispanic white persons and 11.3% of Asian persons. In 2005–2007, 26.6% of American Indian or Alaska Native persons lived in poverty (5).

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Figure 5. Low income by age, race and Hispanic origin: United States, 2007



NOTES: Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Persons of Hispanic origin may be of any race. Black and Asian races include persons of Hispanic and non-Hispanic origin. See [data table for Figure 5](#).

SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

Health Risk Factors and Disease Prevention

Tobacco Use

In recent years, progress in reducing tobacco use has slowed.

Cigarette smoking remains the Nation's leading cause of premature, preventable death; during 2000–2004, approximately 443,000 premature deaths in the United States each year were attributed to cigarette smoking (1). Smoking causes deaths from heart disease, stroke, lung and other types of cancer, and chronic lung diseases. Smoking during pregnancy is an important preventable cause of poor pregnancy outcomes (2). Exposure to secondhand smoke causes premature death and disease in children and adults who do not smoke themselves (3). Decreasing cigarette smoking among adolescents and adults is a major public health objective for the United States. Preventing smoking among teenagers and young adults is essential because smoking usually begins in adolescence (4). Helping smokers quit smoking, as early in life as possible, is critical to avoid the negative health effects of long-term tobacco use. The Institute of Medicine has issued a blueprint for further reducing tobacco use, including several measures aimed at reducing use among youth (5).

Following the Surgeon General's report on smoking in 1964, cigarette smoking declined sharply for men and at a slower pace for women, thus narrowing the gap between smoking rates for men and women (Figure 6). Declines in current cigarette smoking over the past two decades have slowed compared with earlier periods (data table for Figure 6). In 2007, 22% of men and 17% of women were current cigarette smokers (crude estimate, Table 60). Men 25–34 years of age were most likely to smoke cigarettes (29% in 2007), and this percentage decreased with increasing age. Among women 18–64 years of age, 19%–20% were current cigarette smokers, and the percentage of current cigarette smoking declined substantially among women 65 years of age and over (8%).

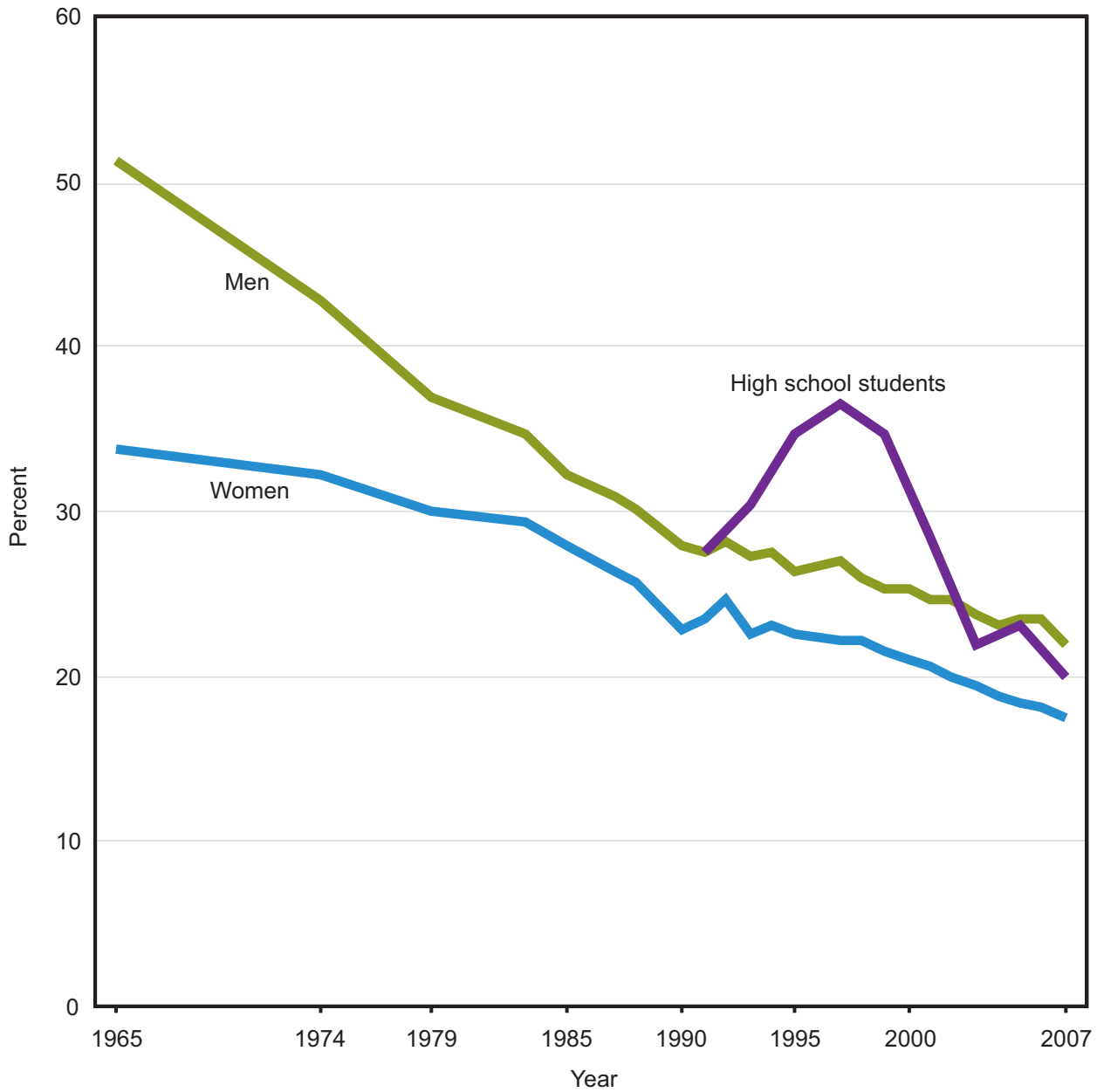
Educational attainment is closely linked to cigarette use. In 2007, adults with less than a high school education were three times as likely to smoke as those with a bachelor's degree or more education (Table 61). Cigarette smoking also varied by race and ethnicity and gender, with the highest prevalence found among non-Hispanic black men and American Indian and Alaska Native men (Table 62).

In 2007, 20% of high school students in grades 9–12 had smoked cigarettes in the past month. Male high school students were equally as likely to smoke as female high school students (6). Cigarette smoking rates among high school students peaked during 1995–1999 and then decreased (Figure 6). Since 2003, cigarette smoking rates among high school students have held steady at 20%–23%. Fourteen percent of high school students had smoked cigars, and 8% had used smokeless tobacco in the past month in 2007 (4). Also in 2007, about one-half of high school students who were current cigarette smokers reported they had tried to quit smoking cigarettes in the past year.

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Figure 6. Cigarette smoking among men, women, and high school students: United States, 1965–2007



NOTES: Estimates for men and women are age-adjusted. Cigarette smoking is defined as (for men and women 18 years of age and over) at least 100 cigarettes in lifetime and now smoke every day or some days; (for students in grades 9–12) one or more cigarettes in the 30 days preceding the survey. See [data table for Figure 6](#).

SOURCES: CDC/NCHS, National Health Interview Survey (data for men and women); CDC/National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey (data for high school students).

Overweight and Obesity

The percentage of American adults who are obese has doubled over the past three decades to about one-third of all adults.

Excess body weight is associated with excess morbidity and mortality (1). Obesity is correlated with excess mortality and is associated with increased risk of heart disease, stroke, diabetes, some cancers, hypertension, osteoarthritis, gallbladder disease, and disability (1–7). The health care costs associated with obesity and its associated conditions are thought to be substantial, and a recent study suggests that the health care costs associated with obesity are rising for both private and public payers (1,8). Among children and adolescents, overweight increases the risk of hypertension, high cholesterol, orthopedic disorders, sleep apnea, diabetes, low self-esteem, and becoming an overweight adult (9,10). Diet, physical inactivity, genetic factors, environment, and health conditions all contribute to overweight and obesity. The potential health benefits from reducing the prevalence of overweight—and obesity in particular—are of significant public health importance.

The prevalence of overweight (body mass index (BMI) greater than or equal to 25) and obesity (BMI greater than or equal to 30, a subset of overweight) changed little between the early 1960s and 1976–1980 (Figure 7). Findings from the National Health and Nutrition Examination Survey show substantial increases in overweight among adults starting with 1988–1994 data. The upward trend in overweight since 1976–1980 reflects an increase in the percentage of adults who are obese, although the adult population is heavier in general (11). The percentage of adults 20–74 years of age who are obese (BMI greater than or equal to 30) has more than doubled from 15% in 1976–1980 to 35% in 2005–2006 (age-adjusted) (Figure 7). The sharp increases in the percentage of adults who are obese seen from 1976–1980 to 1999–2000 have tapered off in more recent years (data table for Figure 7). There was no significant change in the prevalence of adult obesity between 2003–2004 and 2005–2006 (11). In contrast to increases in obesity over time, the percentage of adults who are overweight but not obese (BMI greater than or equal to 25 but less than 30) has held steady at about one-third since 1960–1962 (Figure 7 and Table 72), although the trends for some subgroups differ from the overall pattern.

The increasing prevalence of obesity among adults has been accompanied by an increase of overweight among children (defined as a BMI at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts). The percentage of children (6–11 years of age) and adolescents (12–17 years of age) who are overweight has

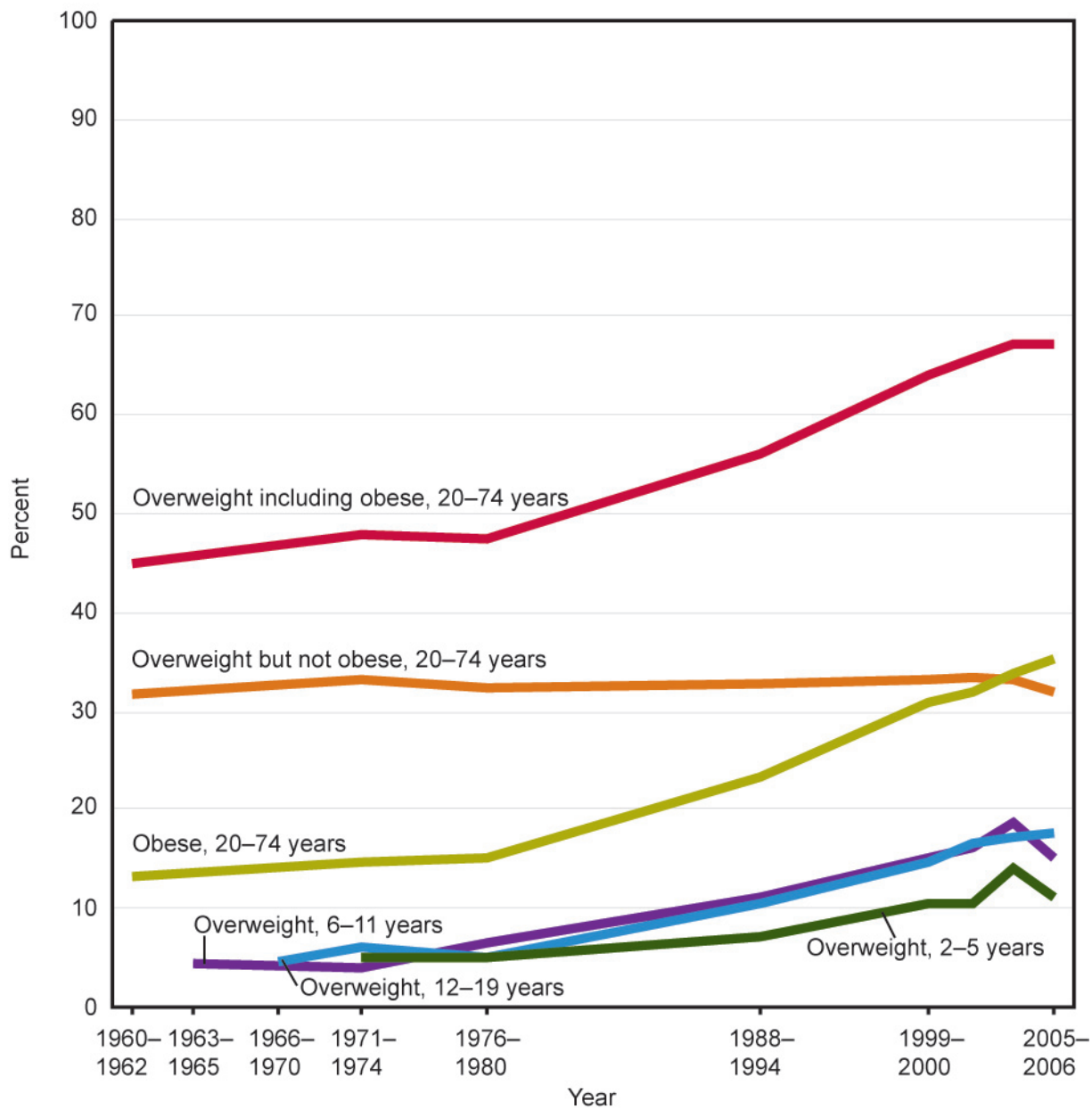
risen since 1976–1980. In 2005–2006, 15%–18% of school-age children and adolescents were overweight (Figure 7). The percentage of preschool-age children (2–5 years of age) who are overweight doubled from 1976–1980 (5%) to 2005–2006 (11%) (12) (Figure 7; also see Table 73).

Overall, the prevalence of obesity among adults did not vary by sex. In 2003–2006, 33% of men and 35% of women 20–74 years of age were obese (Table 72, age-adjusted). The prevalence of obesity among women differed significantly by racial and ethnic group (among the groups presented). In 2003–2006, one-half of non-Hispanic black women and two-fifths of Mexican American women were obese compared with one-third of non-Hispanic white women. In contrast, the prevalence of obesity among men was similar by race and ethnicity.

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Figure 7. Overweight and obesity, by age: United States, 1960–2006



NOTES: Estimates for adults are age-adjusted. For adults: overweight including obese is defined as a body mass index (BMI) greater than or equal to 25, overweight but not obese as a BMI greater than or equal to 25 but less than 30, and obese as a BMI greater than or equal to 30. For children: overweight is defined as a BMI at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts: United States. Obese is not defined for children. See [data table for Figure 7](#).

SOURCES: CDC/NCHS, National Health Examination Survey and National Health and Nutrition Examination Survey.

Sleep

In 2005–2006, women were more likely than men to report having trouble sleeping or frequently using sleeping pills or other medications to help them sleep.

Americans are not getting enough sleep, and it is more than just a nighttime annoyance. Sleep deprivation affects decision making, memory, and mood, in addition to negatively impacting hormone release, glucose regulation, and cardiovascular function (1,2). Sleep deprivation may also be associated with the increased prevalence of obesity and Type 2 diabetes (3). Lack of sleep has direct costs, including the cost of physician visits for diagnosis and treatment of insomnia, tests for the evaluation of sleep, prescription and over-the-counter medications to aid sleep, and other types of treatment for insomnia (4). Indirect societal costs include increased absenteeism, decreased worker productivity, and higher injury rates, including motor vehicle crash rates (4,5).

Primary insomnia is difficulty getting to sleep or staying asleep, or having nonrefreshing sleep for at least 1 month without any known physical or mental condition (6). Common causes of primary insomnia include alcohol, caffeine, stress, and anxiety. Secondary insomnia is insomnia caused by a medical condition, often depression. Symptoms of insomnia include difficulty falling asleep, waking up several times during the night, and feeling tired. The new generation of prescription medications may help sleep without the addictive component of older medications, but as with all medications, they are not without side effects or concerns (7,8).

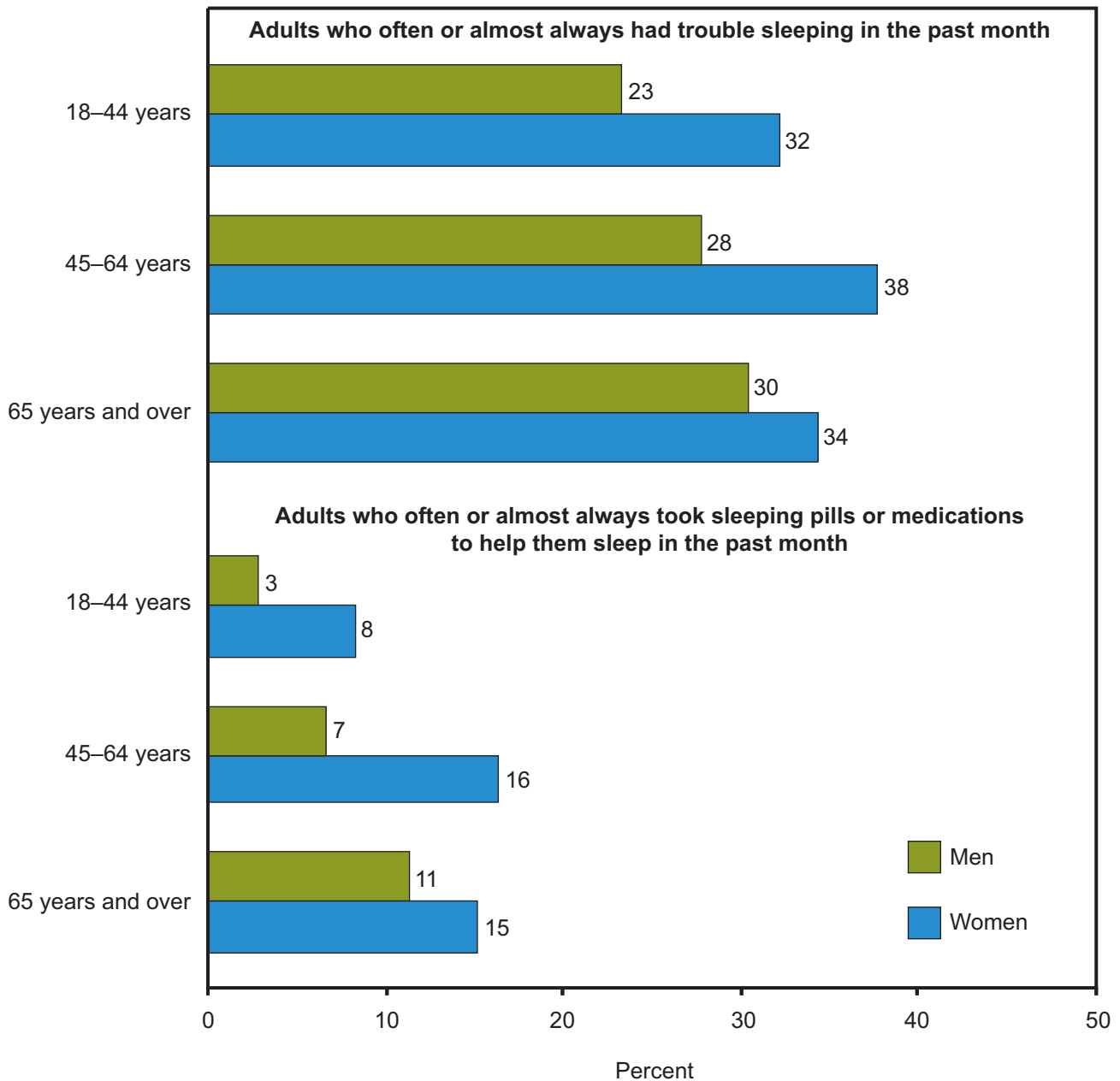
In 2005–2006, 30% of American adults reported they often or almost always (5–30 times in the past month) had trouble sleeping, which included trouble falling asleep, staying asleep, or waking up too early in the morning and not being able to get back to sleep (data table for Figure 8). Women 18–64 years of age were more likely than men of the same age group to report often or almost always having difficulty sleeping in the past month (Figure 8). Among older adults, women and men were equally as likely to report they often or almost always had trouble sleeping.

In 2005–2006, 9% of American adults reported they often or almost always (5–30 times in the past month) took sleeping pills or other medications to help them sleep (data table for Figure 8). Women 18–64 years of age were more likely than men to have used sleeping pills or other medications in the past month to help them sleep. Women 18–44 years of age were nearly three times as likely, and women 45–64 were nearly two and a half times as likely, as men of the same age group to often or almost always use sleeping pills or medications to help them sleep (Figure 8).

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Figure 8. Trouble sleeping or sleeping pill use in the past month among adults 18 years of age and over, by sex and age: United States, 2005–2006



NOTES: Often or almost always is defined as 5–30 times in the past month. See [data table for Figure 8](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Influenza and Pneumococcal Vaccination Among Middle-age and Older Adults

Between 1989 and 2007, influenza and pneumococcal vaccination levels increased substantially, but differences by age remain.

Vaccination of persons at risk for complications from influenza is a key public health strategy for preventing morbidity and mortality in the United States. In the United States, annual epidemics of influenza occur typically during the winter season (1). It was estimated that during 1990–1999, approximately 36,000 of the respiratory and circulatory deaths that occurred each year were associated with influenza (1). During 1979–2001, an estimated 226,000 of the primary respiratory and circulatory hospitalizations that occurred each year, on average, were associated with influenza (2).

In April 2000, the Advisory Committee on Immunization Practices (ACIP) recommended that all adults 50 years of age and over receive an annual influenza vaccination (3). In response to the unexpected shortfall in the 2000–2001 and 2004–2005 influenza vaccine supply, the ACIP and CDC modified the universal recommendation for influenza vaccination among adults 50 years of age and over and established vaccine priority groups. These groups included persons 65 years of age and over and children and adults with chronic underlying health conditions (4,5).

Between 1989 and 1997, influenza vaccine coverage among persons living in the community tripled for adults 50–64 years of age and approximately doubled for all age groups of adults 65 years and over (Figure 9). Between 1997 and 2004, influenza vaccine coverage remained essentially stable. As a result of the 2004–2005 influenza vaccine shortage, 2005 estimates of vaccine coverage decreased among adults 50–64 years, 65–74 years, and 75–84 years of age and were unchanged among adults 85 years of age and over. In 2006 and 2007, influenza vaccine coverage generally returned to the 2004 level. Influenza vaccine coverage increases with older age; persons 85 years of age and over were twice as likely as those 50–64 years of age to have had a vaccination in the past 12 months in 2007.

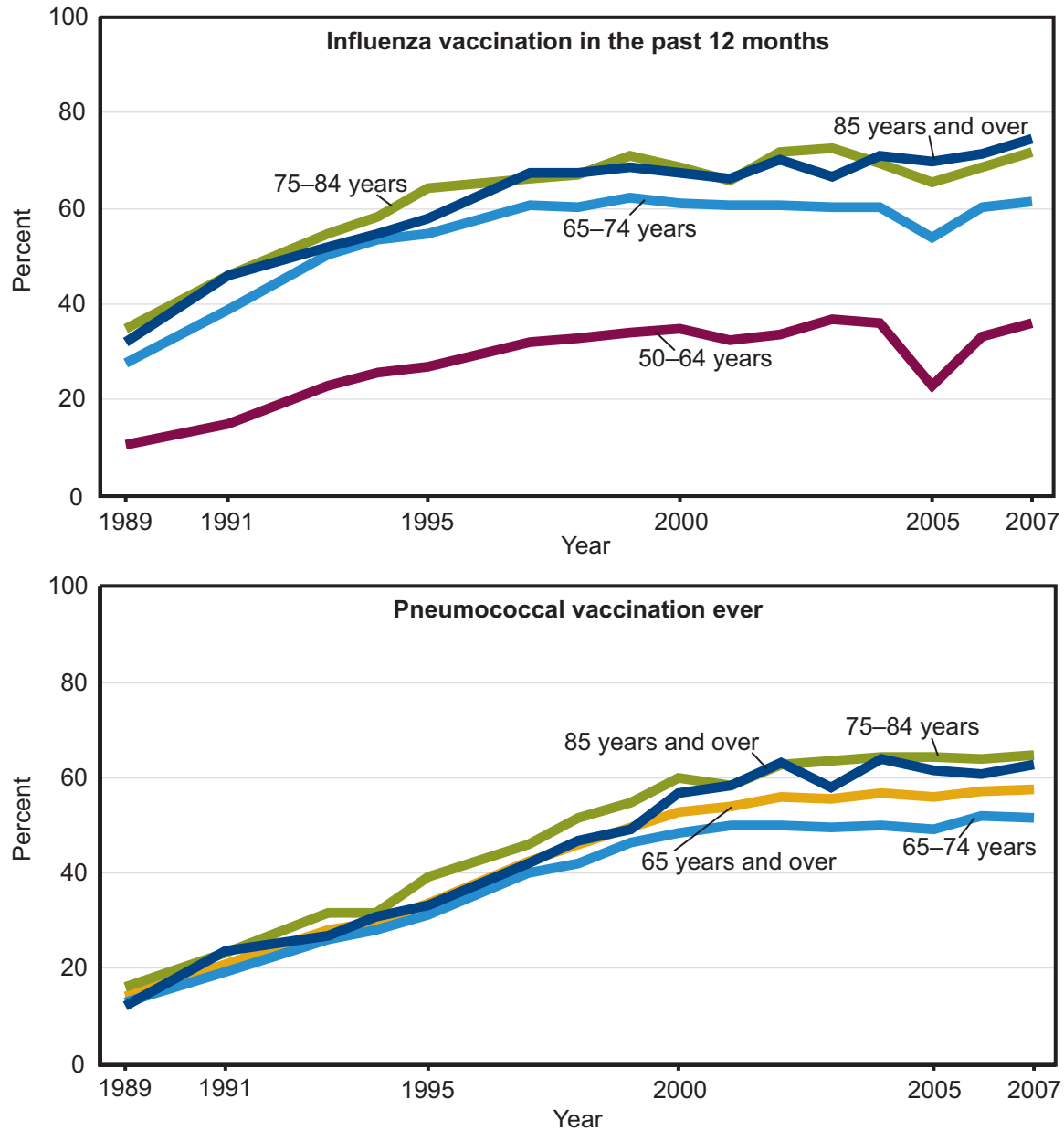
Pneumococcal infection is a serious disease that kills more people in the United States each year than any other vaccine-preventable bacterial disease (6). Each year in the United States, pneumococcal infection causes an estimated 40,000 deaths, with the highest death rates among older persons and those with underlying medical conditions. A one-time pneumococcal polysaccharide vaccine has been recommended by the ACIP since 1997 for all adults 65 years of age and over.

Between 1989 and 2007, the percentage of noninstitutionalized adults 65 years of age and over who reported ever having received a pneumococcal vaccination increased from 14% to 58% (Figure 9). Pneumococcal vaccination coverage has remained consistently below that of influenza vaccination coverage. Pneumococcal vaccination rates were lower among adults 65–74 years of age than among adults 75–84 years of age and 85 years of age and over.

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Figure 9. Influenza and pneumococcal vaccination among middle-age and older adults, by age: United States, 1989–2007



NOTES: In 1997, the Advisory Committee on Immunization Practices recommended universal pneumococcal vaccination for adults 65 years of age and over, and in 2000 they recommended universal influenza vaccination for adults 50 years of age and over. See [data table for Figure 9](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Morbidity and Limitation of Activity

Poverty and Chronic Conditions

Poverty is strongly associated with diabetes, serious heart conditions, and hypertension among adults 45–64 years of age.

Studies of adult health have shown an association between income and health (1,2). The relationship between income and health problems reflects both the effect of income on health and the effect of poor health on the ability to work and earn a living. Poverty is associated with some modifiable risk factors for hypertension, diabetes, and heart disease. Obesity and inactivity are modifiable risk factors for diabetes, heart disease, and hypertension (3–5). Cigarette smoking is a modifiable risk factor for heart disease and high blood pressure. Poverty is associated with higher levels of inactivity (Table 71) and cigarette smoking (6) but not with obesity (Table 72). Poverty is also associated with factors that affect access to health care, such as being uninsured (Table 140) and delaying or not receiving needed medical care or prescription medications due to cost (Table 77).

Data from the National Health Interview Survey were used to assess the prevalence of diagnosed hypertension, diabetes, and serious heart conditions among noninstitutionalized adults 45–64 years of age—the time in life when the prevalence of these conditions begins to rise (6) (Tables 51 and 68). Prevalence estimates are based on respondent reports of ever being told by a physician or other health professional that they had the specified health condition. The prevalence of these conditions is underestimated because some persons may have the condition but have not been diagnosed yet. This is especially of concern for diabetes, which in the early stages is often asymptomatic and requires a blood test for diagnosis. However, data from the National Health and Nutrition Examination Survey, in which respondents report conditions and also undergo clinical examination and laboratory testing, indicate that undiagnosed diabetes was not more common among lower income persons (7).

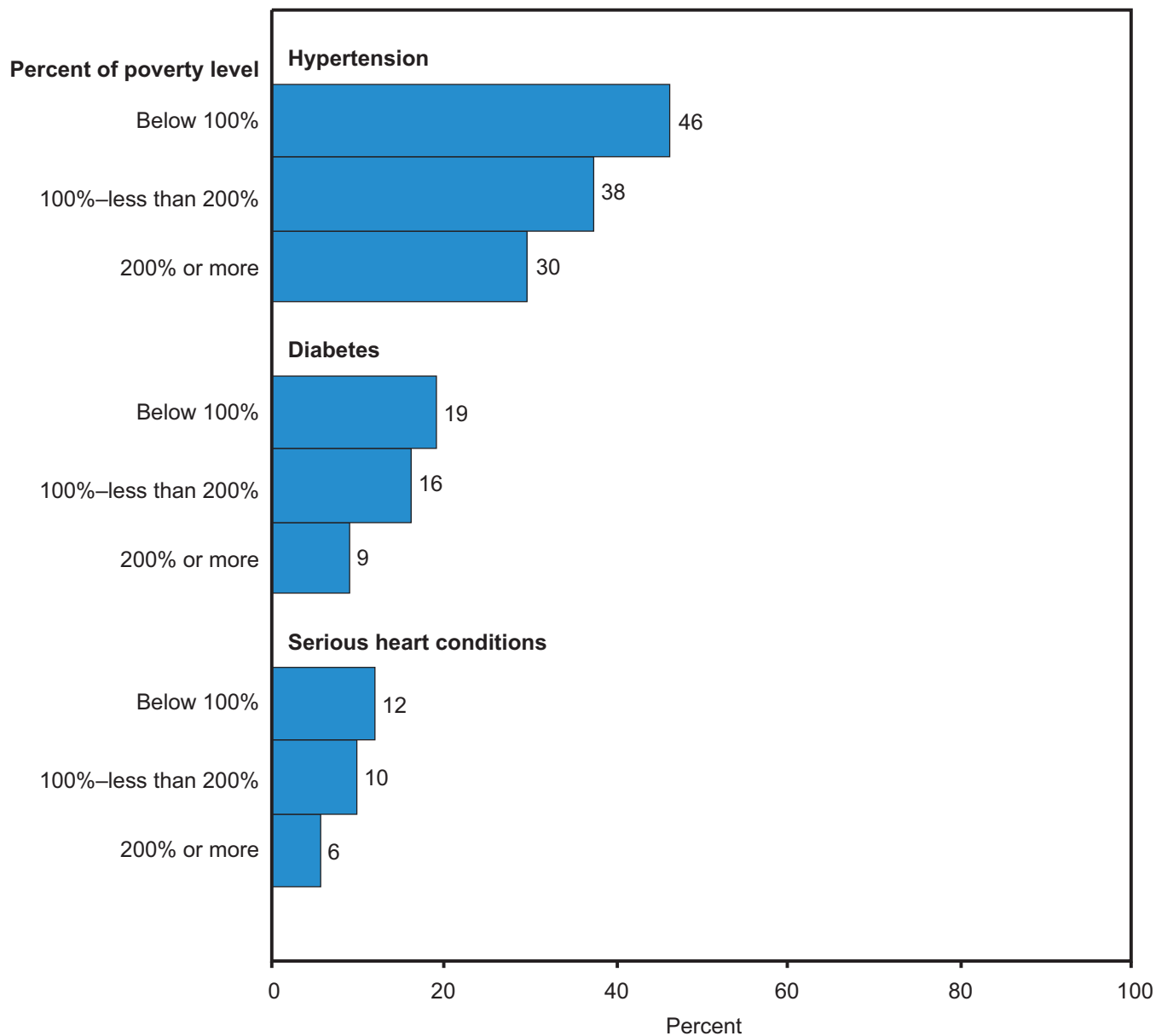
The prevalence of respondent-reported diagnosed hypertension, diabetes, and serious heart conditions was higher among poor adults 45–64 years of age than among their higher income counterparts. In 2007, poor adults in that age group were 56% more likely than those with family income more than twice the poverty level to have diagnosed hypertension and more than twice as likely to have diagnosed diabetes or diagnosed serious heart conditions (Figure 10).

The percentage of poor adults 45–64 years of age with hypertension was similar to the percentage of higher income persons who were 65–74 years of age (46%–48%; data table for Figure 10). Also, for diabetes, the estimates were similar for poor persons 45–64 years of age and higher-income persons 65–74 years of age (18%–19%; data table for Figure 10). By 65–74 years of age, the poverty differentials for the selected chronic conditions had narrowed, and among those 75 years of age and over had disappeared (data table for Figure 10).

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Figure 10. Hypertension, diabetes, and serious heart conditions among adults 45–64 years of age, by percent of poverty level: United States, 2007



NOTES: Conditions are respondent-reported as ever being told by a doctor or other health professional. Serious heart disease includes heart attack, coronary heart disease, or angina. Hypertension is told on at least two occasions. See [data table for Figure 10](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Occupational Health

The rate of reported nonfatal occupational injuries and illnesses in private industries was cut in half between 1989 (8.6 cases per 100 full-time workers) and 2007 (4.2 cases).

Health and safety in the workplace have long been of concern. In 1912, the Bureau of Labor Statistics launched a survey of workplace conditions, studying industrial accidents in the iron and steel industry (1). The 1919 Conference on Industrial Hygiene was one of the first major attempts to examine the issues related to occupational health (2). Early efforts to improve the workplace were local and often industry-specific, such as regulations aimed at improving mining safety (2). Ongoing data collection of workplace injury data began in the 1930s, but efforts were hampered because reporting was voluntary. The modern era of occupational health and safety began in 1970 with the creation of the Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH). OSHA is charged with promoting health and safety in the workplace by setting and enforcing standards. NIOSH is responsible for providing research, education, and training in the field of occupational safety and health (3).

OSHA regulations require that employers maintain records of occupational fatalities, injuries, and illnesses. The Bureau of Labor Statistics conducts the Survey of Occupational Injuries and Illnesses (SOII) to collect data on occupational injuries and illnesses from a sample of establishments. The SOII is a federal/state program that collects statistics that are used to identify problems with workplace safety and develop programs to improve workplace safety (see [Appendix I, Survey of Occupational Injuries and Illnesses](#)). Data include the number of new nonfatal injuries and illnesses in private industry, including those cases requiring days away from work (also see [Table 46](#)). OSHA instituted data collection changes in 1992, 1995, and 2002 aimed at improving data quality (4). These data collection changes may affect the comparability of the data over time. Therefore, caution is urged when interpreting trends. A recent House of Representatives report (5) reviewed the importance of accurate recordkeeping by employers, including evidence that injuries and illnesses are significantly underreported (6–8). The hearings included testimony on the reasons why injury and illness statistics may be underreported. See [Technical Notes](#) for more information.

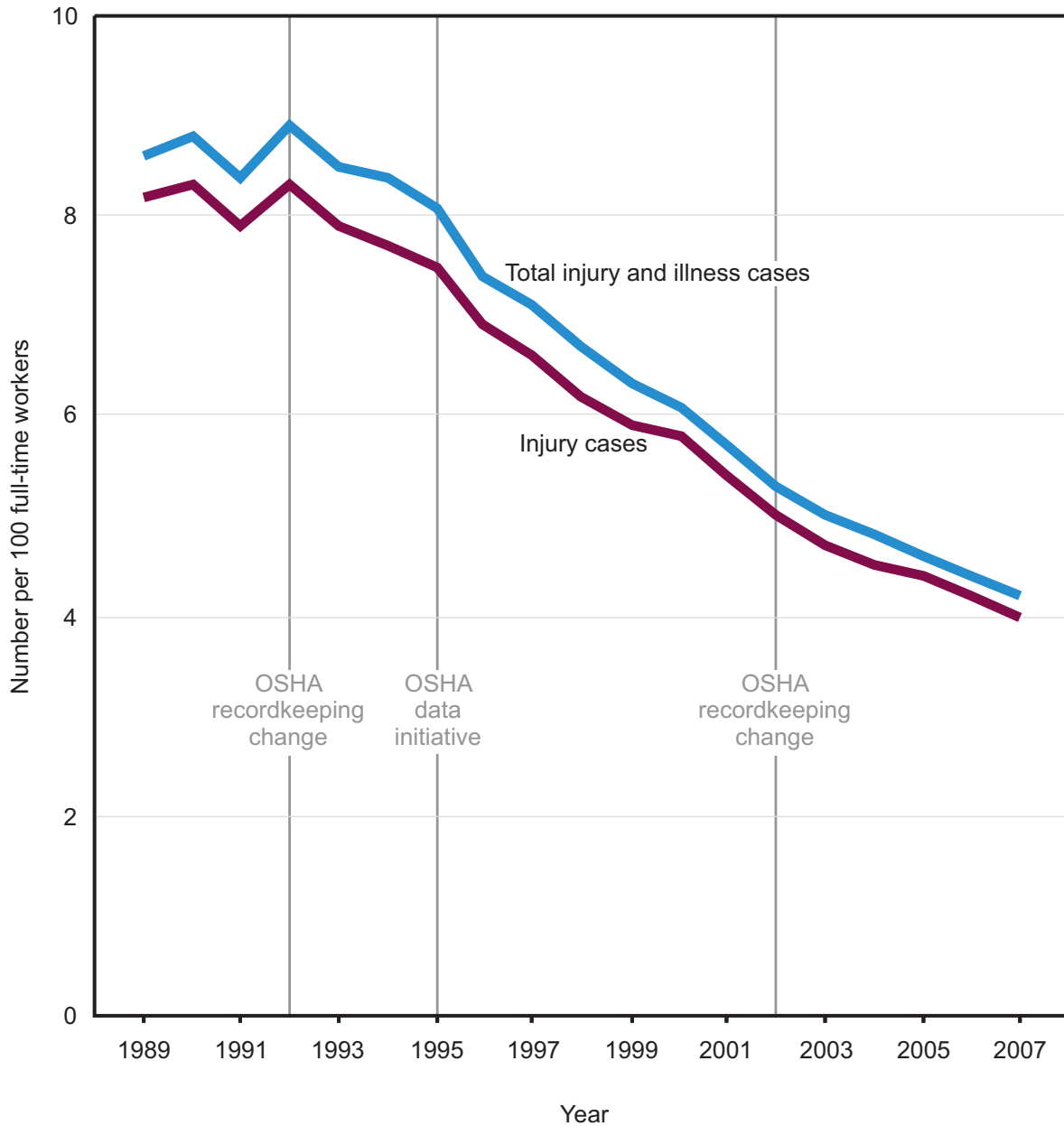
The rate of reported nonfatal occupational injuries and illnesses in private industry was cut in half between 1989 (8.6 cases per 100 full-time workers) and 2007 (4.2 cases) ([Figure 11](#)). More than 95% of these cases are related to occupational injuries, such as cuts, fractures, or sprains resulting from work-related events or exposures. The remaining cases are occupational illness cases, including acute and chronic illnesses or diseases caused by inhalation, absorption, ingestion, or direct contact associated with employment (3,4).

Data on fatal occupational injuries are collected separately from nonfatal injuries and illnesses (3) (see [Appendix I, Census of Fatal Occupational Injuries](#)). In 2007, 5,657 workers were killed on the job, for a rate of 3.8 deaths from injury per 100,000 employed workers ([Table 45](#)). This is a decrease from 4.9 deaths per 100,000 employed workers in 1995. The industries with the highest rates of fatal injuries in 2007 were agriculture, forestry, fishing, and hunting (27.9); mining (25.1); and transportation and warehousing (16.9).

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Figure 11. Nonfatal occupational injuries and illnesses in private industry: United States, 1989–2007



NOTES: OSHA is Occupational Safety and Health Administration, U.S. Department of Labor. See [data table for Figure 11](#).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses.

Depression

In 2005–2006, women (6.6%) were about 50% more likely to have current depression than men (4.4%).

Depression is a common condition that has been described as one of the world's most burdensome (1,2). Depression is typified by difficulties with mood, sleep, feelings of self-worth, and concentration and energy levels (3). Depression is associated with increased morbidity and mortality, reduced productivity, and poorer quality of life (4–8). Major depression may be incapacitating (6,8). The introduction of a new class of antidepressant drugs—selective serotonin reuptake inhibitors (SSRIs)—represented a major technological advance in the treatment of this condition (9) (Figure 23), yet depression remains underdiagnosed and inadequately treated (1,6,10).

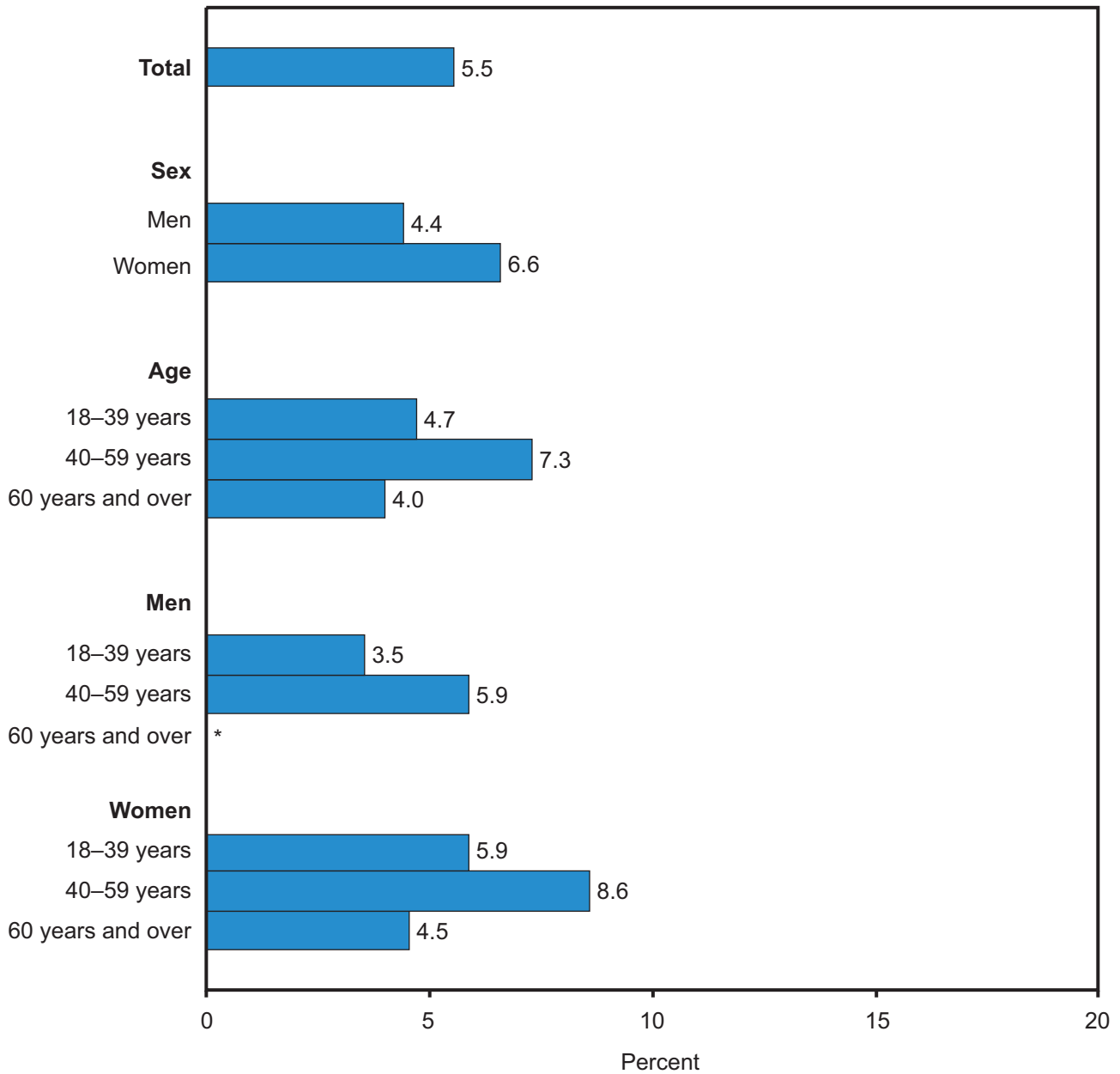
Depression is measured through a self-reported assessment based on a series of questions in the National Health and Nutrition Examination Survey 2005–2006 component. The Patient Health Questionnaire (PHQ) included nine questions on the signs and symptoms of depression experienced by respondents in the 2 weeks prior to interview. Respondents indicated how frequently they felt down, had trouble sleeping, had little energy, felt bad about themselves, and other symptoms. Responses were scored based on the frequency of these symptoms, from “not at all” (0) to “nearly every day” (3). A score of 10 or higher (out of a possible total score of 27) was classified as depression in this analysis (11,12). For more information on the measure of depression used in this analysis, see [Technical Notes](#).

In 2005–2006, 5.5% of adults 18 years of age and over were classified as having depression, based on symptoms over the prior 2 weeks. Women were about 50% more likely to have current depression than men (Figure 12). In 2005–2006, 6.6% of women and 4.4% of men were classified as having depression. Depression was significantly more common among those 40–59 years of age (7.3%) than among younger adults 18–39 years of age (4.7%) and older adults 60 years of age and over (4.0%).

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Figure 12. Depression among adults 18 years of age and over, by sex and age: United States, 2005–2006



* Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

NOTE: See [data table for Figure 12](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Limitation of Activity Caused by Chronic Conditions: Children

Conditions associated with learning, emotional, behavioral, and developmental problems are among the leading causes of activity limitation among children.

Limitation of activity due to chronic physical, mental, or emotional conditions is a broad measure of health and functioning that gauges a child's ability to engage in major age-appropriate activities. This measure of health is also related to a child's need for special educational and medical services. The National Health Interview Survey identifies children with activity limitation through questions about specific limitations in activities such as play, self-care, walking, memory, and other activities, and the current use of special education or early intervention services. Estimates of the number of children with an activity limitation may differ depending on the type of limitations included and the methods used to identify them (1).

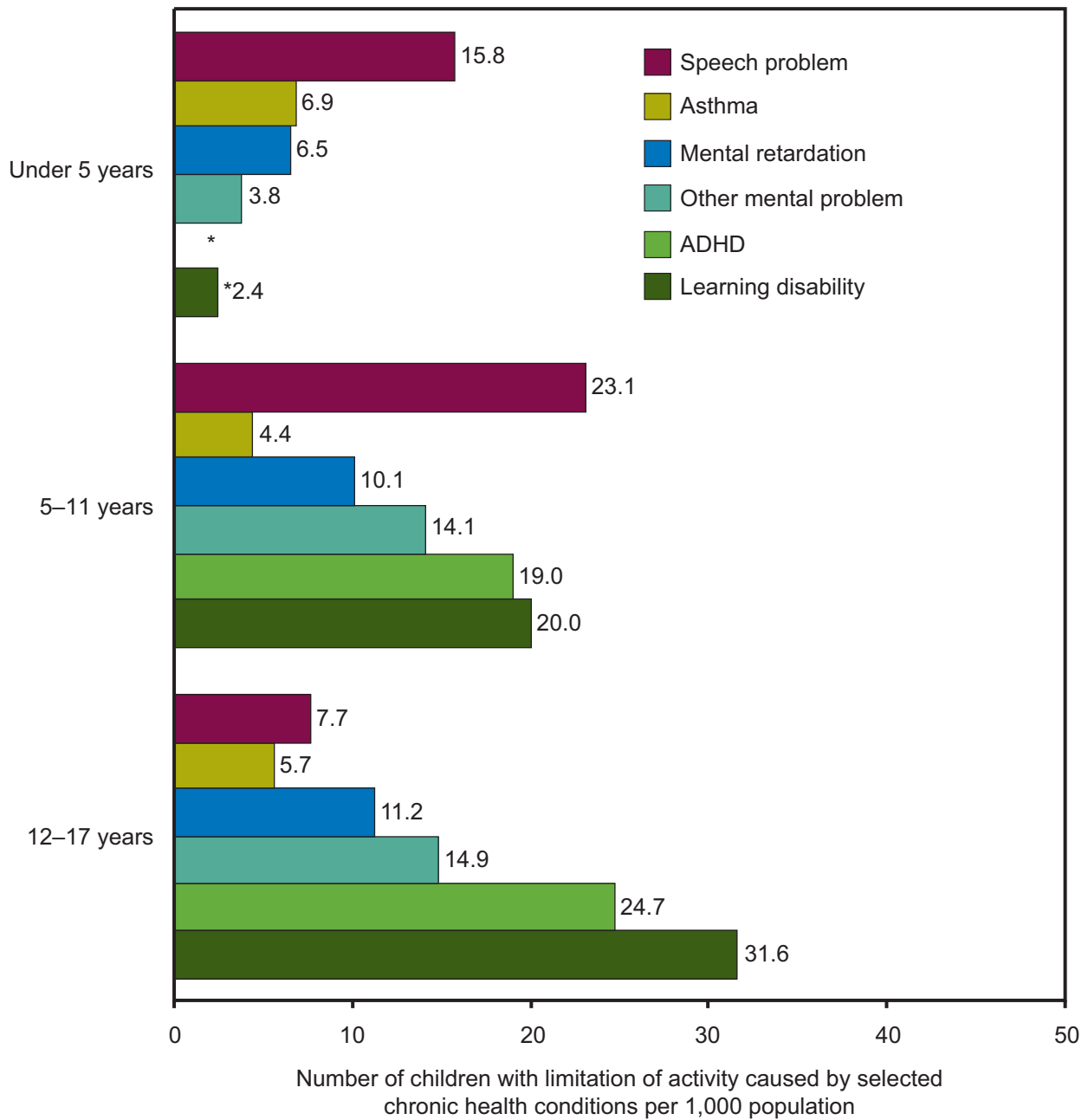
Between 1997 and 2007, the percentage of children with activity limitation was 7% (2). In 2006–2007, the percentage of younger (8%) and older (9%) school-age children with activity limitation was double the percentage of preschoolers with activity limitation (4%) (3). Most school-age children with activity limitation were identified as limited solely by their participation in special education (4).

In 2006–2007, chronic health conditions causing activity limitation in children varied by age (Figure 13). A speech problem, mental retardation, and asthma were identified by parents as the leading causes of activity limitation among preschool children. Learning disability and attention-deficit/hyperactivity disorder (ADHD or ADD) were mentioned as important causes of activity limitation among all school-age children. Among younger school-age children (5–11 years of age), a speech problem was also reported as an important condition causing activity limitation. Among older school-age children (12–17 years), a mental, emotional, or behavioral problem (other than ADHD or mental retardation or another developmental problem) was reported as an important condition causing activity limitation.

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Figure 13. Limitation of activity caused by selected chronic health conditions among children, by age: United States, 2006–2007



* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

SOURCE: CDC/NCHS, National Health Interview Survey.

NOTES: ADHD is attention-deficit/hyperactivity disorder. Data are for noninstitutionalized children. Children with more than one chronic health condition causing activity limitation were counted in each category. See [data table for Figure 13](#).

Limitation of Activity Caused by Chronic Conditions: Working-age and Older Adults

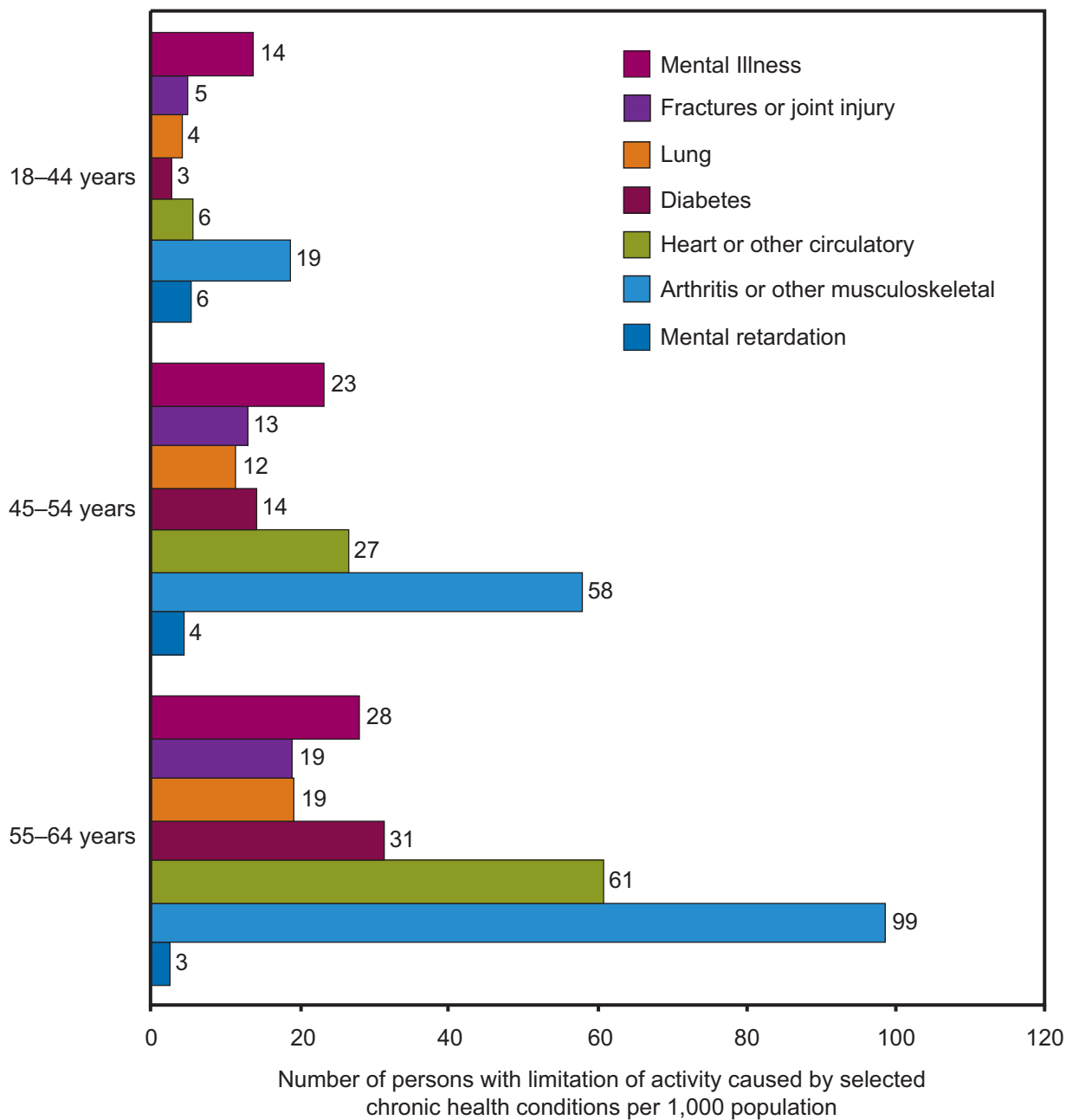
Arthritis and other musculoskeletal conditions are the most frequently reported cause of activity limitation among both working-age and older adults.

Chronic physical, mental, and emotional conditions can limit the ability of adults to perform important activities such as working and doing everyday household chores. With advancing age, an increasing percentage of adults experience limitation of activity. Estimates of the number of working-age and older adults with limitation of activity are important for determining current and future health care needs and associated costs (1,2).

Between 1997 and 2007, the percentage of noninstitutionalized working-age adults 18–64 years of age reporting an activity limitation caused by a chronic health condition remained relatively stable at 10% (3). In 2006–2007, the percentage of working-age adults who reported limitations ranged from 6% at age 18–44 years to 20% at age 55–64 years (3). Arthritis and other musculoskeletal conditions were the most frequently mentioned conditions causing limitation among working-age adults of all ages in 2006–2007 (Figure 14). Among adults 18–44 years of age, mental illness was the second leading cause of activity limitation. Among adults 45–64 years of age, heart and circulatory conditions were the second leading cause of limitation, and mental illness was another frequently mentioned condition.

(Continued)

Figure 14. Limitation of activity caused by selected chronic health conditions among working-age adults, by age: United States, 2006–2007



NOTES: Data are for the civilian noninstitutionalized population. Adults with more than one chronic health condition causing activity limitation were counted in each category. See [data table for Figure 14](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

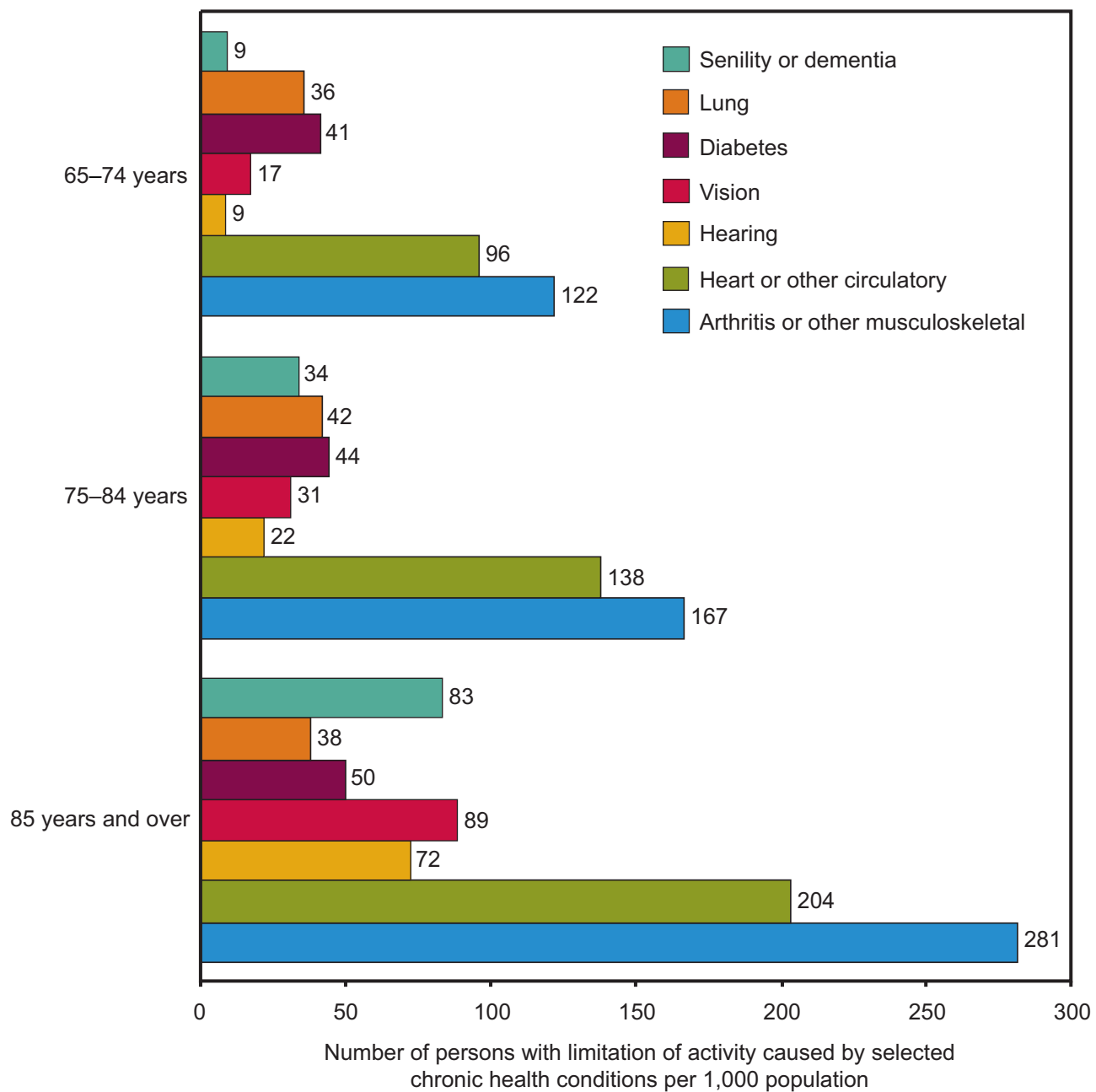
Limitation of Activity Caused by Chronic Conditions: Working-age and Older Adults *(Continued)*

The percentage of noninstitutionalized adults 65 years of age and over with limitation of activity decreased from 39% to 36% between 1997 and 1999 and then remained at 34%–35% between 2000 and 2007 (3). In 2006–2007, the percentage of older adults with limitation of activity increased from 26% of 65–74 year olds, to 36% of 75–84 year olds, and to 62% of adults 85 years old and over (3). Arthritis and other musculoskeletal conditions were the most frequently mentioned chronic conditions causing limitation of activity (Figure 15). Heart and circulatory conditions were the second leading cause of activity limitation. Among noninstitutionalized adults 85 years and over, senility or dementia, vision conditions, and hearing problems were frequently mentioned causes of activity limitation.

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Figure 15. Limitation of activity caused by selected chronic health conditions among older adults, by age: United States, 2006–2007



NOTES: Data are for the civilian non-institutionalized population. Adults with more than one chronic health condition causing activity limitation were counted in each category. See [data table for Figure 15](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Mortality

Life Expectancy

The gap in life expectancy at birth between white persons and black persons persists but has narrowed since 1990.

Life expectancy is a measure often used to gauge the overall health of a population. As a summary measure of mortality, life expectancy represents the average number of years of life that could be expected if current death rates were to remain constant. Shifts in life expectancy are often used to describe trends in mortality. Life expectancy at birth is strongly influenced by infant and child mortality. Life expectancy later in life reflects death rates at or above a given age and is independent of the effect of mortality at younger ages (1).

From 1900 through 2006, life expectancy at birth increased from 46 to 75 years for men and from 48 to 80 years for women (Table 24). Life expectancy at age 65 also increased during this period (2). Among men, life expectancy at age 65 rose from 13 to 17 years, and among women from 15 to 20 years, from 1950 through 2006 (Table 24). Improved access to health care, advances in medicine, healthier lifestyles, and better health before age 65 are factors underlying decreased death rates among older Americans.

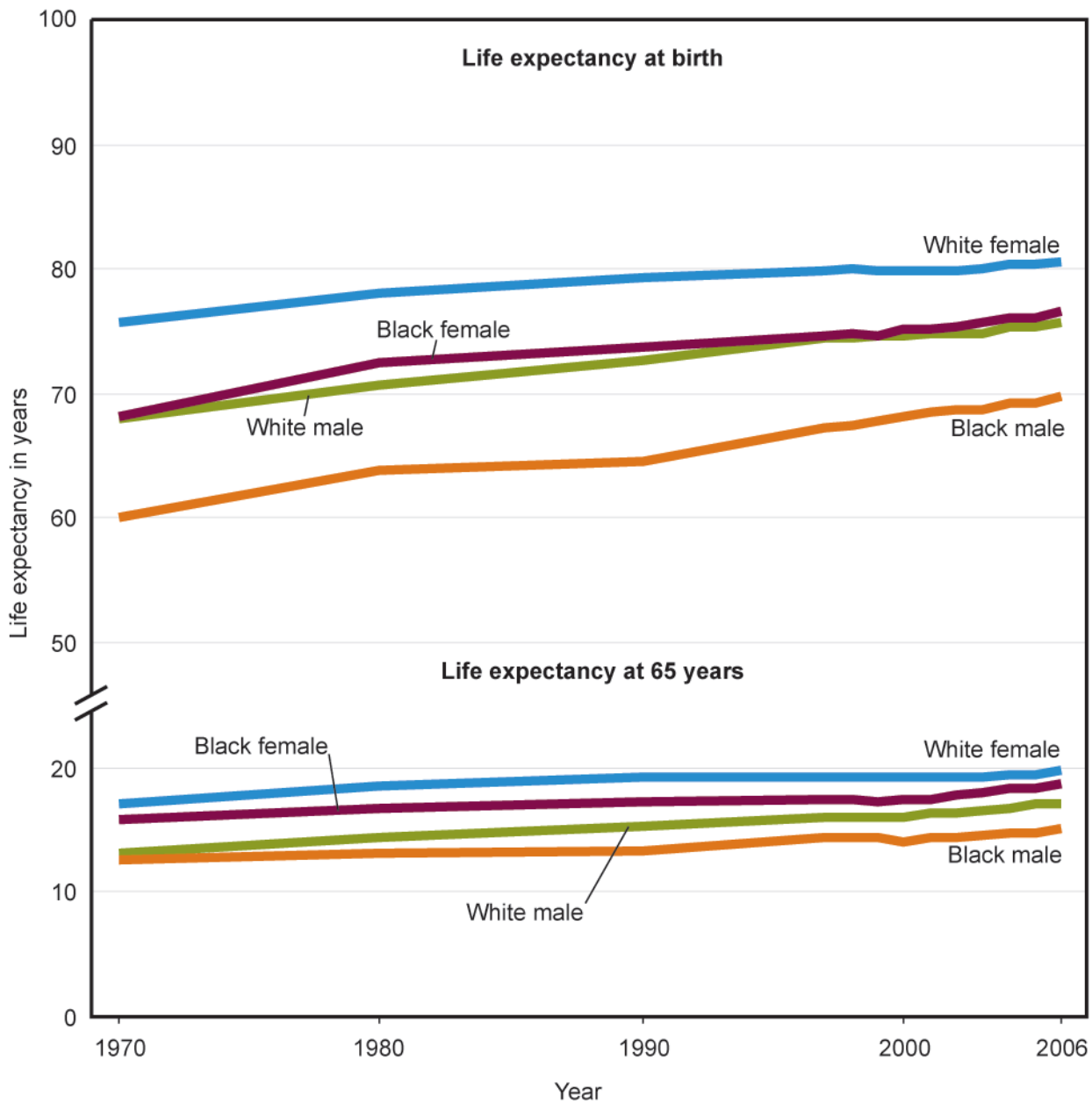
In 2006, life expectancy at birth was 76 years for white males compared with 70 years for black males, and was 81 years for white females compared with 77 years for black females (data table for Figure 16). Life expectancy at birth increased more for the black than for the white population between 1990 and 2006 (Figure 16). During this period, the gap in life expectancy between white males and black males narrowed from 8 years to 6 years (data table for Figure 16). During the same period, the gap in life expectancy between white females and black females decreased from 6 years to 4 years.

The gap in life expectancy between white and black people at age 65 years is narrower than at birth. Since 1990, the difference in life expectancy at age 65 between white males and black males has remained a stable 2-year difference. In 2006, life expectancy at age 65 was 17 years for white males and 15 years for black males. The difference in life expectancy between white and black females has also been stable in recent years; in 2006, at age 65, white females and black females could expect to live an additional 20 and 19 years, respectively.

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Figure 16. Life expectancy at birth and at 65 years of age, by race and sex: United States, 1970–2006



NOTES: Death rates used to calculate life expectancies for 1997–1999 are based on postcensal 1990-based population estimates; life expectancies for 2000 and beyond are calculated using death rates based on Census 2000. See [data table for Figure 16](#).

SOURCE: CDC/NCHS, National Vital Statistics System.

Infant Mortality

After declining substantially between 1950 and 2000, infant, neonatal, and postneonatal mortality rates have remained constant in recent years.

The infant mortality rate—the risk of death during the first year of life—is related to the underlying health of the mother, public health practices, socioeconomic conditions, and the availability and use of appropriate health care for infants and pregnant women. Disorders related to short gestation and low birthweight, and congenital malformations, are the leading causes of death during the neonatal period (less than 28 days of life). Sudden infant death syndrome (SIDS) and congenital malformations rank as the leading causes of infant deaths during the postneonatal period (28 days through 11 months of life) (1). Results from a new analysis of preterm-related causes of death show that 37% of infant deaths in 2005 were due to preterm-related causes (2).

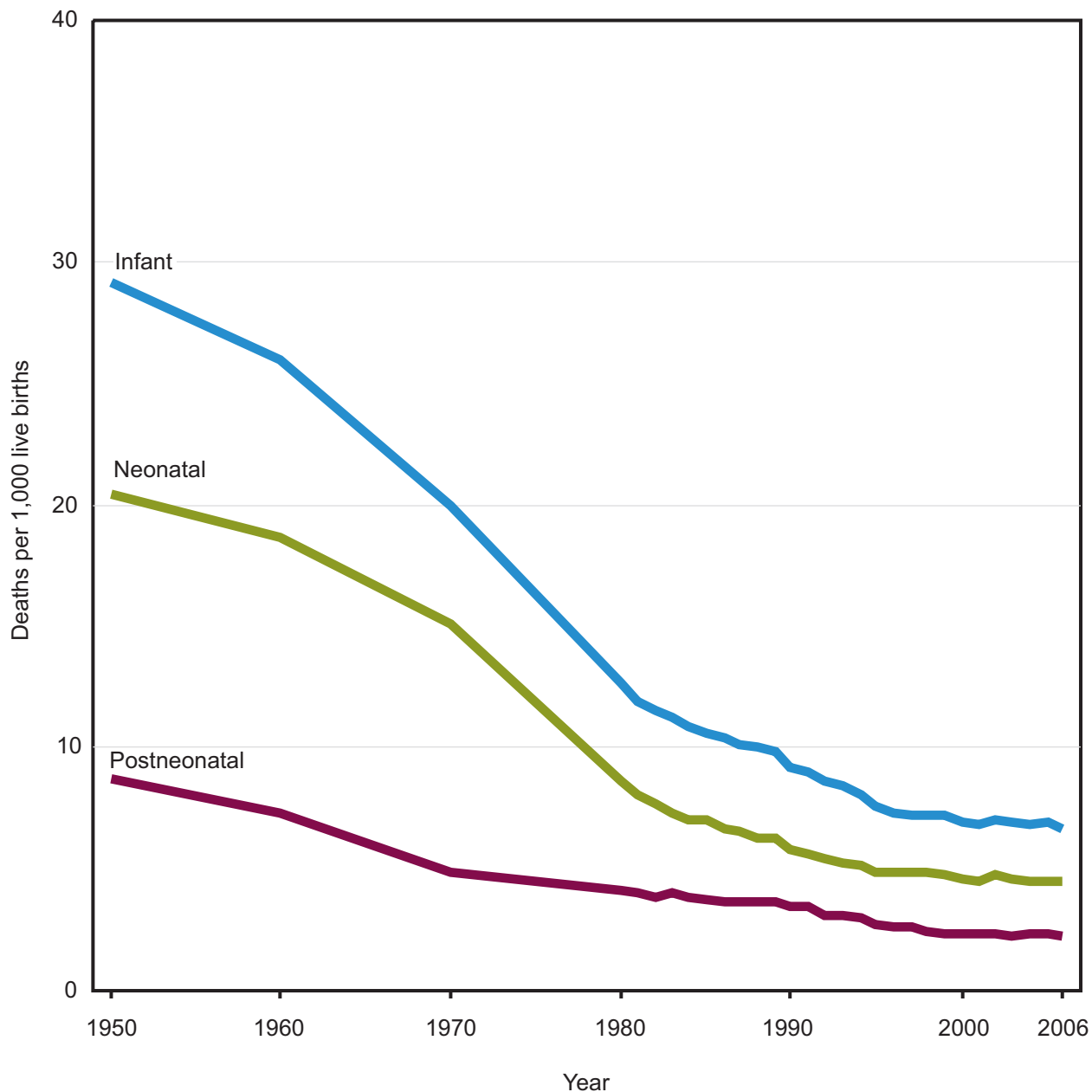
From 2000–2006, there was little progress in lowering the U.S. infant mortality rate. The infant mortality rate decreased 2.6%, from 6.87 per 1,000 live births in 2005 to 6.69 in 2006 (3) (Figure 17). The 2006 infant mortality rate was 77% lower than in 1950 due to annual declines from 1960–2000. Infant mortality rates fell fairly rapidly from 1950 to 1980, then more slowly until 1995, and have declined much more slowly since 1995.

Infant mortality rates have declined for most racial and ethnic groups, but large disparities among the groups remain. During 1995–2006, the infant mortality rate was consistently highest for infants of non-Hispanic black mothers. Infant mortality rates were also high among infants of American Indian or Alaska Native mothers and Puerto Rican mothers. Infants of Central and South American mothers, Asian mothers, and Cuban mothers had lower infant mortality rates (2,3).

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Figure 17. Infant, neonatal, and postneonatal mortality rates: United States, 1950–2006



NOTES: Infant is defined as under 1 year of age, neonatal as under 28 days of age, and postneonatal as 28 days through 11 months of life. See [data table for Figure 17](#).

SOURCE: CDC/NCHS, National Vital Statistics System.

Leading Causes of Death for All Ages

Mortality from heart disease, stroke, and unintentional injuries is substantially lower than in 1950.

In 2006, a total of 2.4 million deaths were reported in the United States (Table 28). The overall age-adjusted death rate was 46% lower in 2006 than in 1950 (Figure 18). The reduction in overall mortality since 1950 was driven mostly by declines in mortality from heart disease, stroke, and unintentional injuries (Figure 18).

In 2006, the age-adjusted death rate for heart disease—the leading cause of death—was 66% lower than the rate in 1950 (Figure 18 and Table 32). The age-adjusted death rate for stroke (cerebrovascular disease), the third leading cause of death, had declined 76% since 1950 (Table 33). Heart disease and stroke mortality are associated with risk factors such as diabetes, high cholesterol, high blood pressure, smoking, and dietary factors (1,2). Other important factors include socioeconomic status, obesity, and physical inactivity. Factors contributing to the decline in heart disease and stroke mortality include better control of risk factors, improved access to screening, increased early detection, and better treatment and care, including new drugs and expanded uses for existing drugs (2).

Overall age-adjusted death rates for cancer, the second leading cause of death, rose between 1960 and 1990 and then declined (Figure 18 and Table 34). Between 1990 and 2006, overall death rates for cancer declined 16%. The trend in the overall cancer death rate reflects in part the trend in the death rate for lung cancer (Table 35). Since 1970, the death rate for lung cancer for the total population has been higher than the death rate for any other cancer site.

Chronic lower respiratory diseases (CLRD) were the fourth leading cause of death in 2006. CLRD included deaths from bronchitis, emphysema, and asthma. The age-adjusted death rate for CLRD in 2006 was 43% higher than the rate in 1980 (Figure 18 and Table 37).

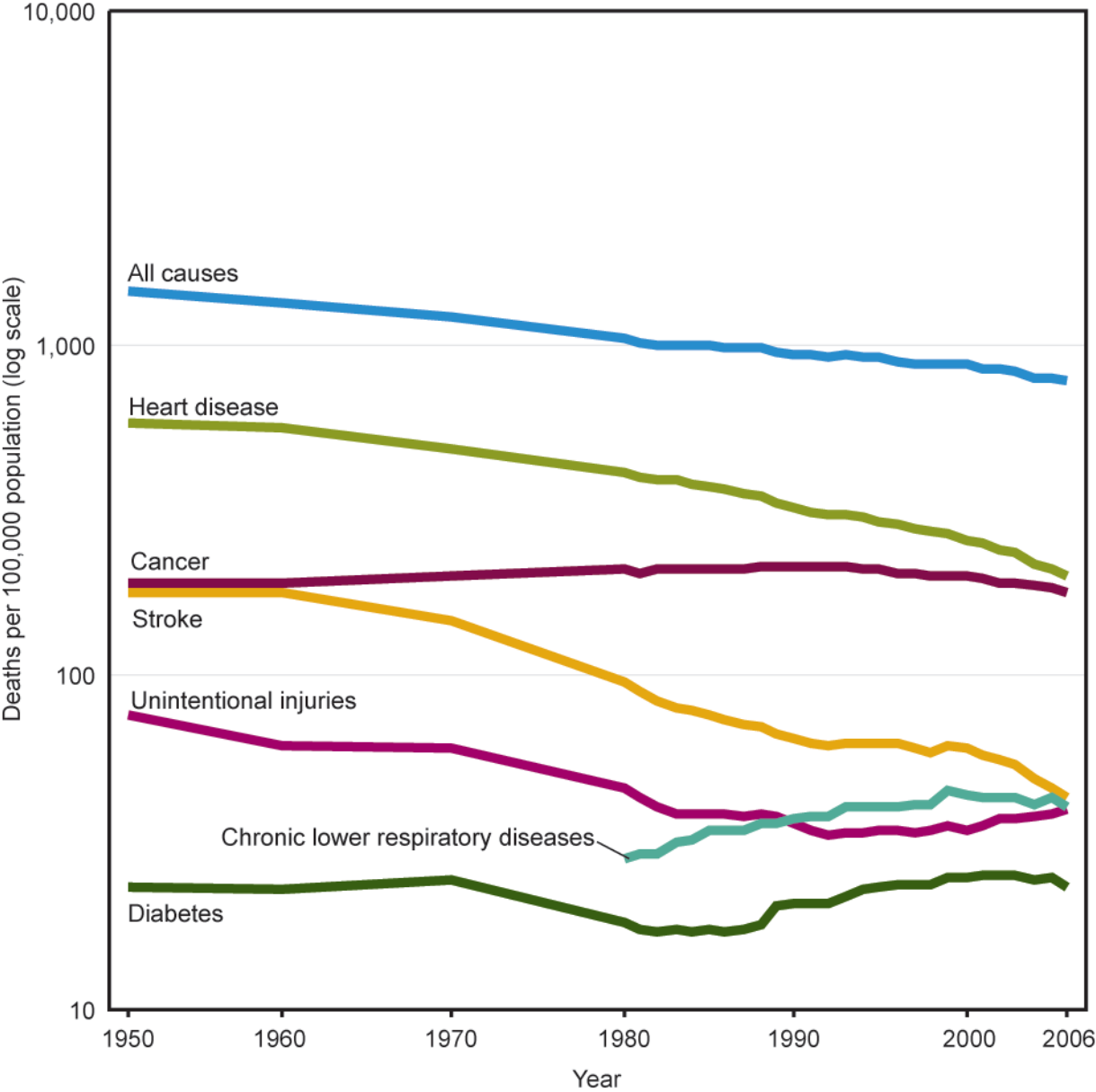
The fifth leading cause of death in 2006 was unintentional injuries. Age-adjusted death rates for unintentional injuries declined during the period 1950–1992 (Figure 18 and Table 26). Since 1992, the unintentional injury mortality rate has gradually increased. Despite recent increases, the death rate for unintentional injuries in 2006 was 49% lower than in 1950.

The sixth leading cause of death in 2006 was diabetes. Following a period of decline in the 1970s and some fluctuation in the early 1980s, the age-adjusted death rate for diabetes increased 48% between 1986 and 2002 (Figure 18). As the prevalence of diabetes increases (also see Table 51), there have been efforts to improve reporting of diabetes on death certificates, and changes in death rates for diabetes over time may reflect those efforts (3). The rate has decreased slightly since 2002. The rate in 2006 was 8% lower than the rate in 2002.

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Figure 18. Death rates for leading causes of death for all ages: United States, 1950–2006



NOTES: Estimates are age-adjusted. Causes of death shown were the six leading causes of death for all ages in 2006. Starting with 1999 data, causes of death were coded according to the *International Classification of Diseases, tenth revision* (ICD-10). See [data table for Figure 18](#).

SOURCE: CDC/NCHS, National Vital Statistics System.

Health Insurance and Expenditures

Health Insurance at the Time of Interview

Between 1999 and 2007, the percentage of people under age 65 years with private health insurance declined, while enrollment in public coverage programs expanded.

Health insurance coverage is an important determinant of access to health care (1). Uninsured children and adults under 65 years of age are substantially less likely to have a usual source of health care or a recent health care visit than their insured counterparts (Tables 75–77 and 79–80). Uninsured people are more likely to forego needed health care because they cannot afford it (Table 77). The major source of coverage for persons under 65 years of age is private employer-sponsored group health insurance (Table 138). Private health insurance may also be purchased on an individual basis, but is generally more costly and tends to provide less adequate coverage than group health insurance. Public programs such as Medicaid and the Children’s Health Insurance Program (CHIP) provide coverage for many low-income children and adults (Table 139). Almost all adults 65 years of age and over are covered by the Medicare program, resulting in very few older adults without health insurance. Medicare enrollees may obtain additional private or public coverage to supplement their Medicare benefit package.

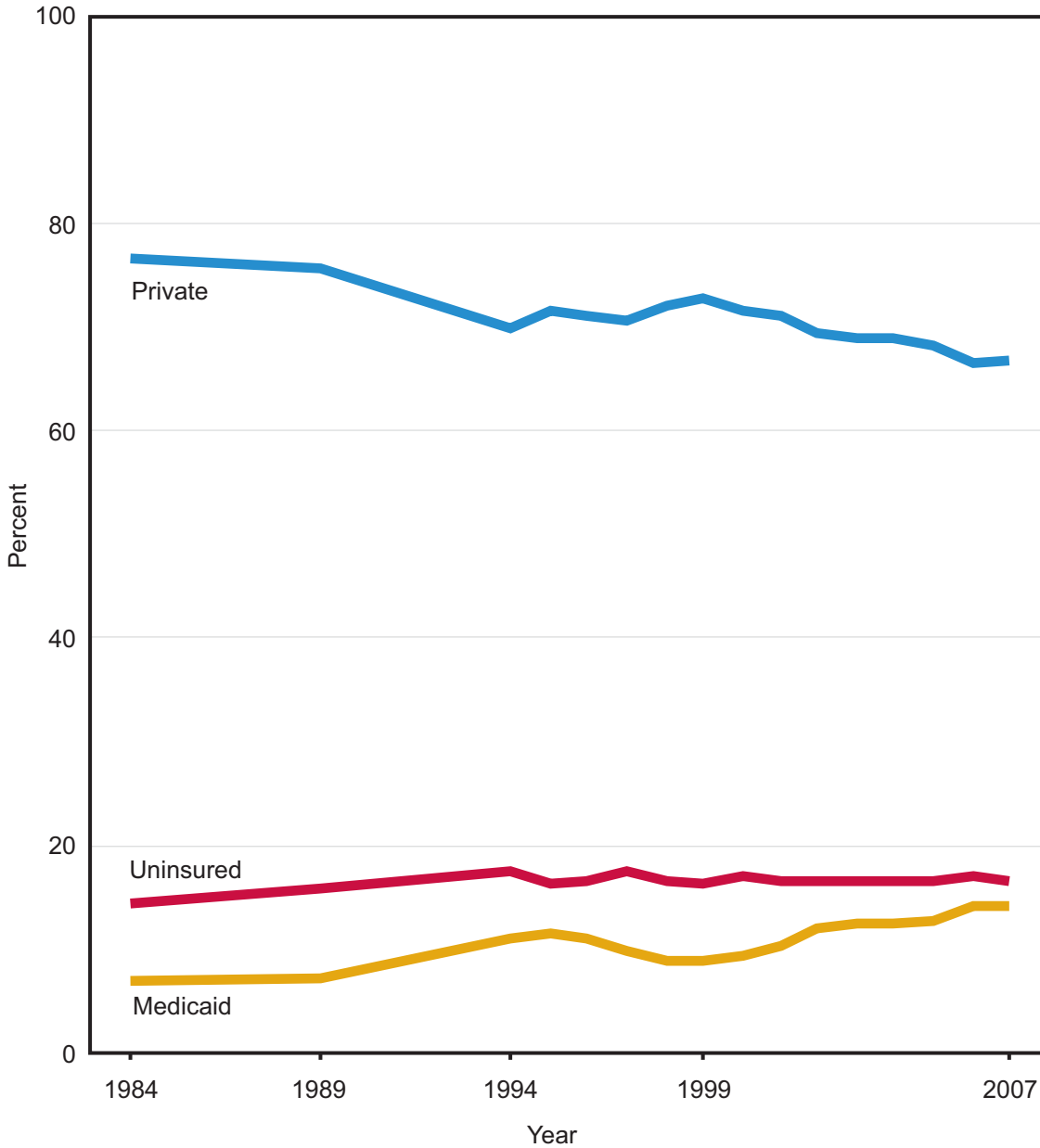
To estimate the percentage of people without coverage at a point in time, respondents to the National Health Interview Survey (NHIS) were asked whether they had health insurance at the time of their interview (Figure 19) (see Appendix II, Health insurance coverage). Between 1984 and 1994, private coverage declined among people under 65 years of age, while Medicaid enrollment and the percentage with no health insurance increased (Figure 19; Appendix II, Health insurance coverage). After rising to 73% in 1999, the percentage with private health insurance declined, reaching 67% in 2007. This decrease has been offset by an increase in the percentage with Medicaid or CHIP, resulting in little change in the percentage of persons under age 65 years who were uninsured.

In recent years, 16%–17% of people under 65 years of age had no health insurance at the time of their interview (Table 140), and 12% of people under 65 lacked insurance coverage for more than 12 months, making them chronically uninsured (data table for Figure 20). In 2007, cost was cited by more than one-half of these uninsured as the reason for their lack of coverage (2). Other reasons given were having lost a job or a change in employment (25%), Medicaid benefits stopped (11%), and ineligibility for family insurance coverage due to age or leaving school (8%).

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Figure 19. Health insurance coverage at the time of interview among persons under 65 years of age: United States, 1984–2007



NOTES: Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates. See [data table for Figure 19](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Length of Time Without Health Insurance

People of Mexican origin are more likely than those in other racial or ethnic groups to be uninsured for more than 12 months.

Many people under age 65 years, particularly those with low income, do not have health insurance coverage consistently throughout the year. Reasons for discontinuities in coverage may include loss or change of employment and financial reversals, divorce, births and other changes in life circumstances, and migration between states. Chronically uninsured adults under age 65 experience greater declines in health status and die sooner than adults with continuous health insurance coverage because they are less likely to receive routine care, basic preventive services, and medications to manage conditions (1).

To estimate the percentage without coverage for different lengths of time, those covered by health insurance at the time of interview were asked whether there was any time during the 12 months prior to the interview when they did not have health insurance and those who were uninsured at the time of interview were asked how long it had been since they last had health coverage (Figure 20). In 2007, 21% of people under 65 years of age reported being uninsured for at least part of the 12 months prior to interview (Figure 20). Among those who reported any time without insurance coverage during the 12 months prior to interview, the majority reported being uninsured for more than 12 months. About 12% of people under age 65 reported being uninsured for more than 12 months, 8% reported being uninsured for any period up to 12 months, and 1% reported being uninsured and had missing data for the length of time they were uninsured (see data table for Figure 20).

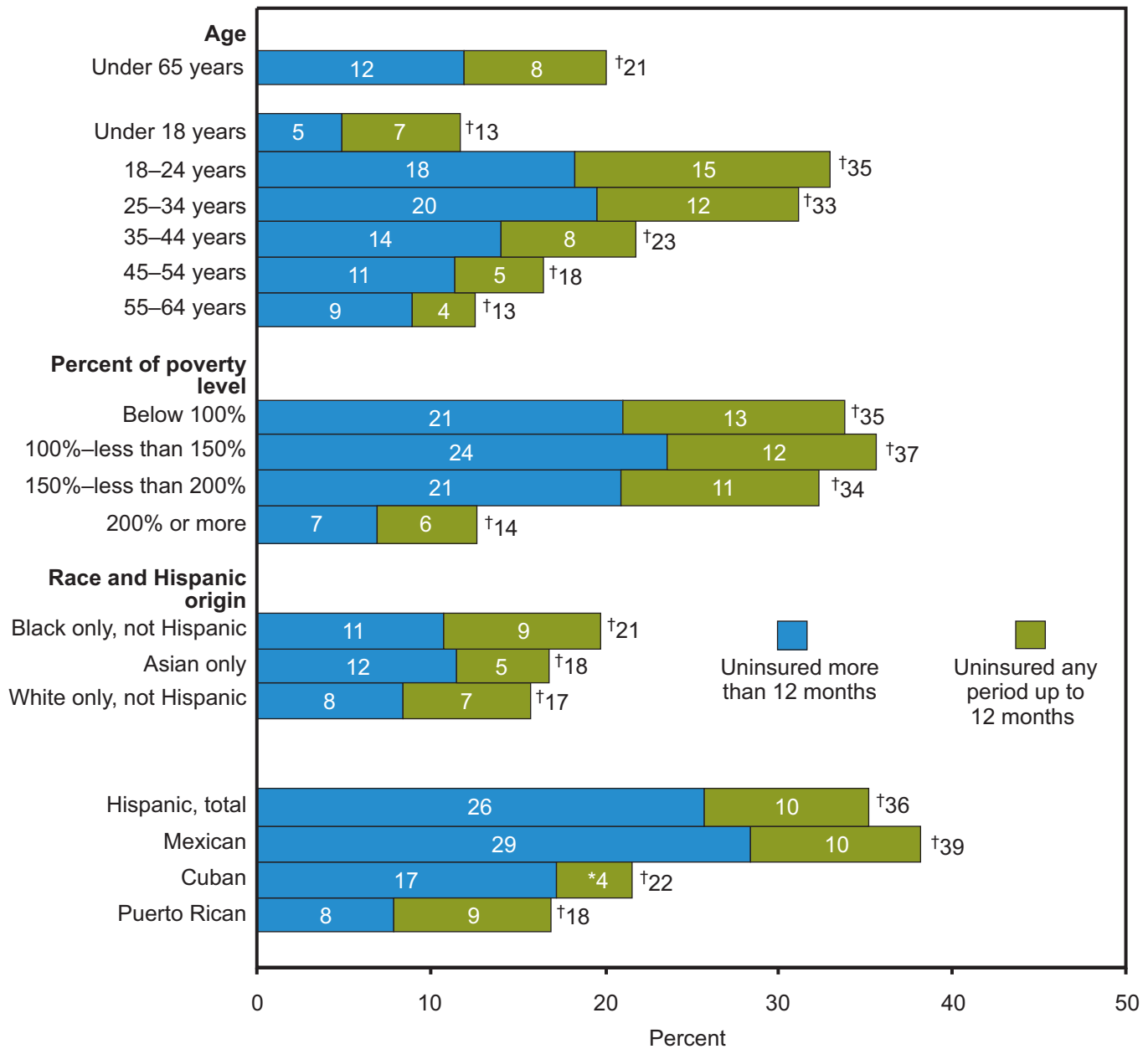
Children under 18 years of age were less likely to be uninsured than were adults because low-income children are eligible for public programs such as CHIP designed specifically for them. The percentage of adults under age 65 without health insurance coverage decreased with age (Figure 20). In 2007, adults 18–34 years of age were more likely than adults 55–64 years of age to lack coverage for at least part of the 12 months prior to interview (33%–35%, compared with 13%) (Figure 20). About 18%–20% of adults 18–34 years of age lacked coverage for more than 12 months.

More than one-third of people with low family income (less than twice the poverty level) had no health insurance coverage for at least part of the 12 months prior to interview, compared with 14% of those with higher family income (Figure 20). More than one-fifth of people in these lower income families were uninsured for more than 12 months, compared with 7% of people in higher income families. People of Mexican origin were more likely than those in any other racial or ethnic group to be uninsured for at least part of the 12 months prior to interview. In 2007, 39% of Mexican-origin people lacked coverage for at least part of the 12 months prior to interview, with 29% lacking coverage for more than 12 months (Figure 20).

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Figure 20. Uninsured for at least part of the 12 months prior to interview among persons under 65 years of age, by length of time uninsured and selected characteristics: United States, 2007



* Estimates are considered unreliable. Data shown with an asterisk have a relative standard error of 20%–30%.
 † Totals include percentage with unknown length of time uninsured.

SOURCE: CDC/NCHS, National Health Interview Survey.

NOTES: Persons of Hispanic origin may be of any race. Asian only race includes persons of Hispanic and non-Hispanic origin. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See [data table for Figure 20](#).

Personal Health Care Expenditures

In 2007, personal health care expenditures totaled \$1.9 trillion.

In 2007, the United States spent \$2.2 trillion (more than \$7,400 per person) on health care, which accounted for 16% (up from 14% in 2000) of its gross domestic product (GDP)—a greater share than in any other developed country for which data are collected by the Organisation for Economic Co-operation and Development ([Tables 122](#) and [123](#)).

Personal health care expenditures—a component of national health expenditures that includes spending for hospital care, physician services, prescription drugs, nursing home care, dental care, and home health and other types of medical care—totaled \$1.9 trillion in 2007 and accounted for 84% of national health expenditures. The remaining 16% was spent on program administration, government public health activities, noncommercial research, and structures and equipment ([1](#)) ([Table 126](#)).

Personal health care expenditures vary sharply by age. In 2004, estimates of per capita personal health care expenditures ranged from \$2,700 among children under 19 years of age to \$25,700 among persons 85 years of age and over ([Table 128](#)). Among persons 85 years of age and over, per capita expenditures were highest for nursing home and hospital care, at \$8,700 and \$7,900, respectively.

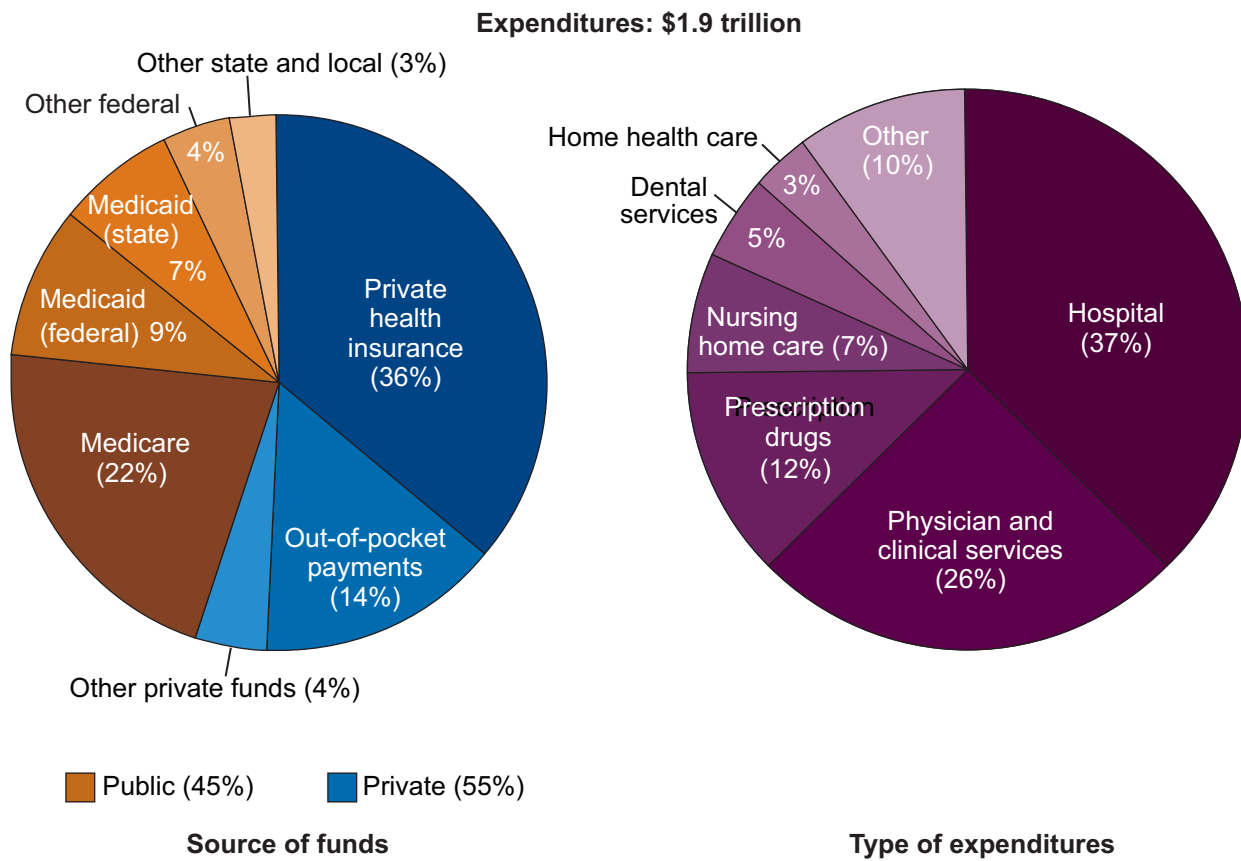
Private funds paid for slightly more than one-half (55%) of personal health care expenditures in 2007, with private health insurance accounting for 36% of total personal health expenditures in 2007 and out-of-pocket payments accounting for 14% ([Figure 21](#)). Public (government) funds paid for 45% of personal health care expenditures. Medicare paid for 22%, federal Medicaid and CHIP 9%, and state Medicaid and CHIP 7% of personal health care expenditures. Between 1990 and 2007, the share of personal health care expenditures paid out of pocket decreased from 22% to 14%, while the shares paid by private insurance and Medicare increased ([Table 127](#) and also see [Figure 22](#)).

In 2007, 37% of personal health care expenditures were for hospital care, 26% for physician services, 12% for prescription drugs, 7% for nursing home care, 5% for dental care, 3% for home health care, and the remaining 10% for other personal health care, including visits to nonphysician medical providers, medical supplies, and other health services ([Figure 21](#)). The share of total personal health care expenditures devoted to hospital care decreased from 41% in 1990 to 37% in 2007, while the share for prescription drug expenditures nearly doubled, from 7% to 12%, over the same period ([Table 127](#)).

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Figure 21. Personal health care expenditures, by source of funds and type of expenditures: United States, 2007



NOTES: Expenditures for Children's Health Insurance Program (CHIP) and CHIP expansion are included with Medicaid. See [data table for Figure 21](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts.

Personal Health Care Expenditures by Source of Funds

Personal health care expenditures paid by Medicaid have increased on average 9% per year, Medicare 8% per year, private health insurance 7% per year, and out-of-pocket payments 4% per year since 1990.

Personal health care expenditures include all spending for health services and supplies except program administration, the net cost of private insurance, and government public health activities. Between 1990 and 2007, total personal health expenditures tripled, increasing from \$600 billion to \$1.9 trillion (data table for Figure 22). During this period, per capita personal health care expenditures increased from about \$2,400 to \$6,200 (Table 127). If spending growth continues at the current rate, the Congressional Budget Office (CBO) estimates that total spending on health care (including nonpersonal expenditures such as construction and research) will rise from 16% of gross domestic product (GDP) in 2007 to 25% in 2025, 37% in 2050, and 49% in 2082 (1).

In 2007, slightly over one-half (\$1 trillion) of personal health care expenditures were paid by private sources, including private health insurance, out-of-pocket payments by consumers, and philanthropy or other privately provided care. Public sources paid the remaining \$850 billion, with the bulk being paid by the Medicare and Medicaid programs (Figure 21).

Although the percentage of people under age 65 years with private health insurance coverage has decreased from 76% in 1989 to 67% in 2007 (Figure 19), personal health care expenditures have increased rapidly in the private sector, particularly expenditures paid by private health insurance (Figure 22). Between 1990 and 1999, private health insurance expenditures increased, on average, 6.8% per year and increased at a faster rate from 2000 to 2007 (on average, 7.8% per year) (data table for Figure 22). The bulk of private expenditures are paid by private health insurance and increased from 55% in 1990 to 66% in 2007 (data table for Figure 22).

Aggregate out-of-pocket expenditures increased at a slower rate than private health insurance, increasing on average 3.4% per year between 1990 and 1999 (data table for Figure 22). Out-of-pocket expenditures grew more rapidly between 2000 and 2007, when the average annual increase in out-of-pocket expenditures was 4.9% (data table for Figure 22). The share of total personal health care expenditures paid out of pocket declined from 22% in 1990 to 14% in 2007 (data table for Figure 22).

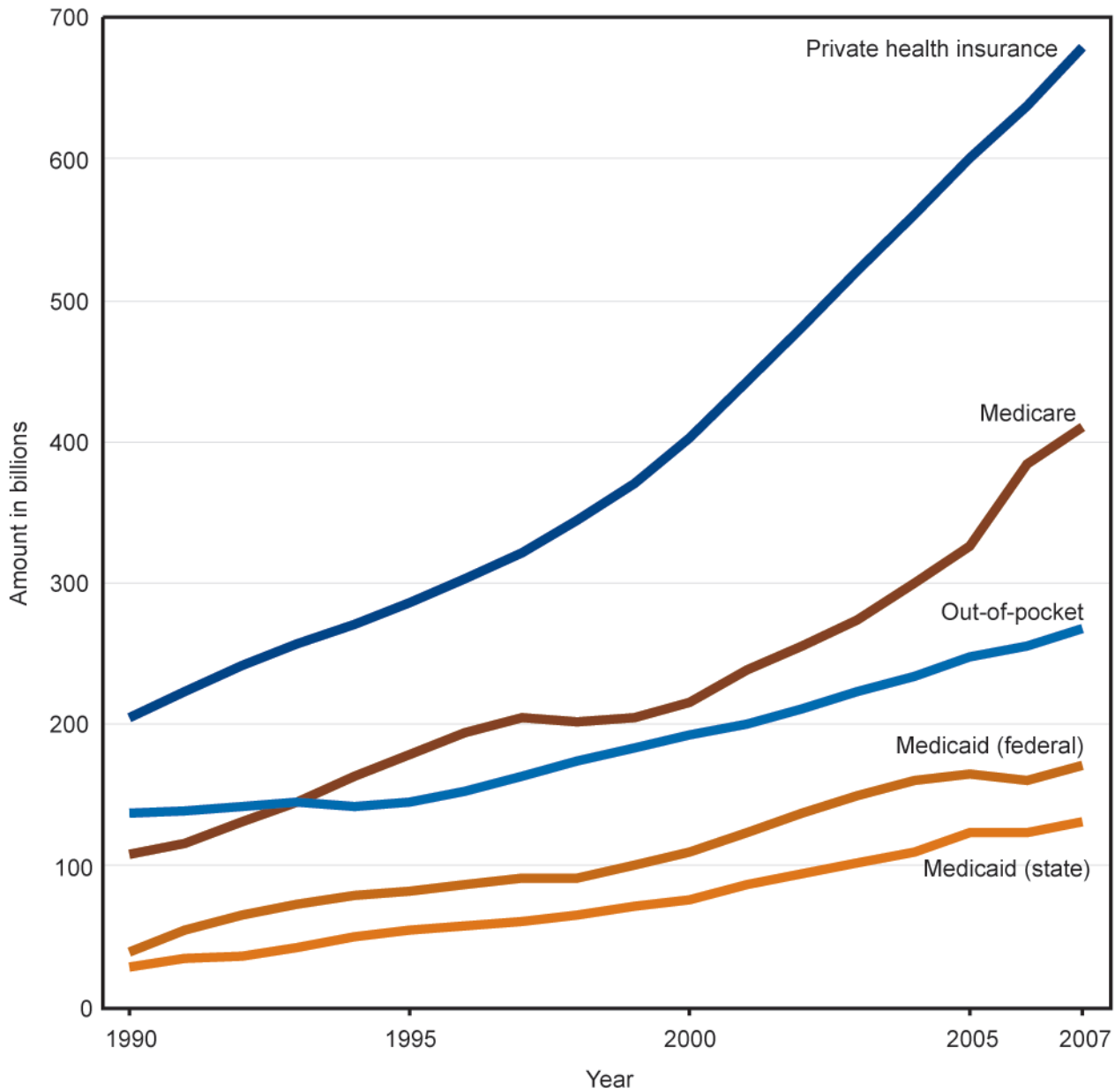
Medicare and Medicaid expenditures have been increasing at a rapid rate, and the increase is a subject of much concern because CBO estimated that federal spending on Medicare (excluding beneficiaries' premiums) and Medicaid will rise from 4% of GDP in 2007 to 7% in 2025, 12% in 2050, and 19% in 2082 (1). Between 1990 and 1999, Medicare expenditures increased on average 7.6% per year, (Figure 22 and Table 127). The Balanced Budget Act of 1997 included several provisions to control Medicare spending growth, which temporarily reduced Medicare expenditure growth. However, since 2000, Medicare expenditures have increased an average of 9.6% per year (data table for Figure 22). Recent growth in Medicare spending is attributable in part to Part D prescription drug coverage, which started in 2006, and to increased enrollment in Medicare Advantage plans since 2004 (2). Between 1990 and 2007, the share of personal health care expenditures paid by Medicare grew from 18% to 22% (data table for Figure 22).

Medicaid expenditures are shared by the federal and state governments, and the federal contribution varies by state (3). The Omnibus Reconciliation Act of 1987 (OBRA 87) expanded Medicaid coverage, including giving states the option of covering infants under the age of 1 and pregnant women in families with income up to 185% of the federal poverty level. The Children's Health Insurance Program (CHIP), begun in 1998, extends public health care coverage to eligible uninsured low-income children. CHIP remains a small percentage (less than 1%) of total personal health care expenditures (Table 127). State Medicaid and CHIP expenditures increased, on average, 10.3% per year from 1990 to 1999 (data table for Figure 22). Growth in state Medicaid and CHIP expenditures has slowed somewhat since 2000, with an 8.0% average annual increase (data table for Figure 22). Federal Medicaid and CHIP expenditures increased an average of 10.8% per year from 1990 to 1999 and slowed to 6.6% from 2000 to 2007 (data table for Figure 22). Between 1990 and 2007, the share of personal health care expenditures paid by Medicaid (both state and federal programs) increased from 11% to 16% (data table for Figure 22).

Personal health expenditure increases are a product of the number of people in different public and private programs and plans, the volume of services provided, and the expenditure per service provided. Much of the increase in the Medicare and Medicaid program expenditures is due to increased enrollment and use of services, rather than increases in the amount paid per service, because these programs have regulated fee schedules or budgets that help control price increases (4). In contrast, enrollment in private health insurance plans has declined in recent years, yet expenditures continue to rise (2).

(Continued)

Figure 22. Personal health care expenditures, by source of funds: United States, 1990–2007



NOTE: See [data table for Figure 22](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts.

Personal Health Care Expenditures by Source of Funds *(Continued)*

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Special Feature: Medical Technology

Introduction and Timeline

Technology continues to transform the medical care system and to improve length and quality of life—but at substantial cost.

It is almost inconceivable to think about providing health care in today's world without medical devices, machinery, tests, computers, prosthetics, or drugs. Medical technology can be defined as the application of science to develop solutions to health problems or issues such as the prevention or delay of onset of diseases or the promotion and monitoring of good health (1,2). Examples of medical technology include medical and surgical procedures (angioplasty, joint replacements, organ transplants), diagnostic tests (laboratory tests, biopsies, imaging), drugs (biologic agents, pharmaceuticals, vaccines), medical devices (implantable defibrillators, stents), prosthetics (artificial body parts), and new support systems (electronic medical records, e-prescribing, and telemedicine).

Figure 23 provides examples of selected key health care technologies developed in the past two centuries that have greatly influenced medical practice and health care outcomes. New vaccines may eliminate or greatly reduce the incidence and prevalence of many diseases, and antibiotics and other drugs can treat previously untreatable pathogens. Genetic typing offers the opportunity for early diagnosis and individualized therapies. New technologies can also improve on existing ones, such as new drugs that have fewer side effects and surgical advances such as laparoscopic techniques, which are less invasive and have a quicker recovery time than traditional surgery. New indications for existing therapies are common, such as fluoxetine, originally used for depression and now also used for premenstrual dysphoria, and atomoxetine, originally used for Parkinson disease and now also used for attention-deficit/hyperactivity disorder (3). Combinations of technologies can be more effective than individual ones, such as the combination “cocktail” now used to treat HIV/AIDS, combination chemotherapy for many types of cancers, and the recent creation of scanning machines that combine positron emission tomography and computed tomography (PET/CT) or PET and magnetic resonance imaging (PET/MRI).

As some technologies become easier to use and less expensive, as equipment becomes more transportable, and as recovery times for procedures are reduced, even complex technologies can diffuse out of hospitals and institutional

settings and into ambulatory surgery centers, provider offices, outpatient facilities, imaging centers, and patients' homes, making the technologies more accessible. Technologies have shifted out of institutional settings and into ambulatory surgery centers (Figure 29) and from hospitals into the home. Telemedicine, or the use of technology to remotely diagnose and treat conditions through electronic envisioning and data transfer, can provide services to remote or underserved areas (4).

New types of medical equipment, procedures, and devices have created the need for personnel with specialized training in their use, in some cases creating entirely new professions. Medical specialists such as radiation oncologists, medical geneticists, and surgical subspecialists, as well as allied and support professions such as medical sonographers, radiation technologists, and laboratory technicians, have all been created to use specific types of technology (Table 111).

The infrastructure necessary to support more complex technologies is also considered to be a part of medical technology. Use of electronic medical records and electronic prescribing are methods for coordinating the increasingly complex array of services provided, as well as allowing for electronic checks of quality to reduce medical errors (for example, drug interactions). The percentage of private office-based physicians who work in offices with fully functional electronic medical records remains low (4% in 2008) (5).

Because technologies have diffused into standard medical practice, there are concerns about whether they are consistently being used properly and about the quality of the information provided by tests, imaging, and other technological outputs (6,7). To address these concerns, several laws and regulations have been enacted. These include the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and the Mammography Quality Standards Act (MQSA, 1992). In July 2008 Congress passed the Medicare Improvements for Patients and Providers Act (MIPPA). Beginning January 1, 2012, MIPPA requires that “advanced diagnostic imaging services” (diagnostic MRI, CT, and nuclear medicine, including PET) be reimbursed by Medicare only if performed by accredited facilities (7) (also see Figure 26).

Technologies applied to new populations and conditions generally come at a cost to individuals and to society as a whole. Technologies can be very expensive (e.g., heart transplants, chemotherapy) or very inexpensive (e.g., the Band Aid). Total expenditures for a given technology, however, are determined by both use and cost; consequently, widely used inexpensive technologies can often have higher aggregate expenditures than rarely used expensive ones. Some new technologies can be cost-saving—for example

annual influenza vaccinations in high-risk children (8). Many technologies, however, contribute to increases in overall health care expenditures because they increase utilization (e.g., more doctor visits may be needed to monitor new drug therapies); they may be used on a larger number of patients; they may be more expensive than technologies they replace; or they may increase life expectancy in populations and thus their lifetime health care costs (9). Therefore, although there is general agreement that new technologies and new uses for existing technologies are a major component of increases in health care expenditures, the cumulative contribution of all new technologies to rising medical expenditures, and how technology can be used in the most cost-effective manner, is a subject of much debate (10,11).

Medical technology expenditures are determined in large part by how technologies are used by practitioners and patients, and, for new technologies, how they diffuse into medical practice. In addition to the potential benefit of using technologies, use is also influenced by provider preferences, patient preferences, legal and regulatory constraints, and costs to both insurers and consumers (9,12). Use may be increased relative to what may be considered most cost effective because of overuse, errors in data interpretation, overestimation of the benefits of technology or underestimation of its risks, and defensive medicine. Patient demand may be influenced by advertising or information obtained from friends, the Internet, or other sources, and low tolerance of ambiguity by provider or patient (more information is always better) (13). Negative effects of technologies can include unnecessary expenditures, false positives that can spur additional testing or anxiety, and the inefficient use of resources. Some providers may be inclined to use the more profitable technologies, particularly when these technologies are less invasive or better accepted by patients than alternatives, such as counseling about lifestyle changes, that patients may not accept or implement and over which the provider has less control (9,14).

Once diffused into practice, it is often difficult to reduce the use of technologies, even in situations where they have been shown to be ineffective or not superior to less complex or less expensive alternatives. Widespread use of electronic fetal monitoring in low-risk deliveries continues, although there has been evidence for many years that it is unnecessary, perhaps even harmful (15). Diuretics have been shown to be more successful than newer, more expensive drugs in controlling hypertension for some patients (16).

In general, Americans—both providers and consumers—appear to be more willing and eager to adopt and use new technologies than people in other countries (17). More rapid acceptance of new technologies can be beneficial when they are effective, but in some cases harmful effects can be discovered only after widespread use. For example, use of nonsteroidal anti-inflammatory drugs (NSAIDs) increased substantially during the early 2000s, and it was not until reports of complications were reported to the FDA that studies showing adverse effects were publicized and use of these drugs decreased (18,19).

Technology diffusion can differ by population group (e.g., by income, race/ethnicity, gender, urbanization, or age), producing inequalities in treatment (overuse or underuse) (20). Women and black persons are significantly underrepresented among Medicare patients with ischemic cardiomyopathy who receive implantable cardioverter-defibrillators (21). Among patients who had an initial consultation for rectal cancer, black patients were 23% less likely to have chemotherapy and 12% less likely to have radiation than white patients, controlling for other factors (22). Higher spending is not necessarily associated with higher quality, so it is often difficult to determine whether some populations are overusing or underusing specific technologies relative to others (9,10,23).

The remainder of this Chartbook examines trends in, and use of, important medical technologies, including use of new types of imaging machinery; medical procedures that rely on devices, machines, or highly technical processes; and pharmaceuticals (Figures 25–30 and 32–35). Data are also presented on the association between regulation and growth in types of laboratories (Figure 24) and on differences in the use of intensive care services by geographic location (Figure 31). Figure 36 shows expenditures for selected hospital stays with highly technological procedures.

Technology provides an increasing ability to monitor, prevent, diagnose, control, and cure a growing number of health conditions and to improve quality and length of life. Questions remain, however, about how much innovation and improvement in new and existing technologies is possible when resources are constrained and health care expenditures are rising to unacceptable levels, about the opportunity costs of using one technology versus another (or neither), and whether target populations are appropriately and equitably served (11).

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Figure 23. History of medical technology: Selected milestones, 1816–2008

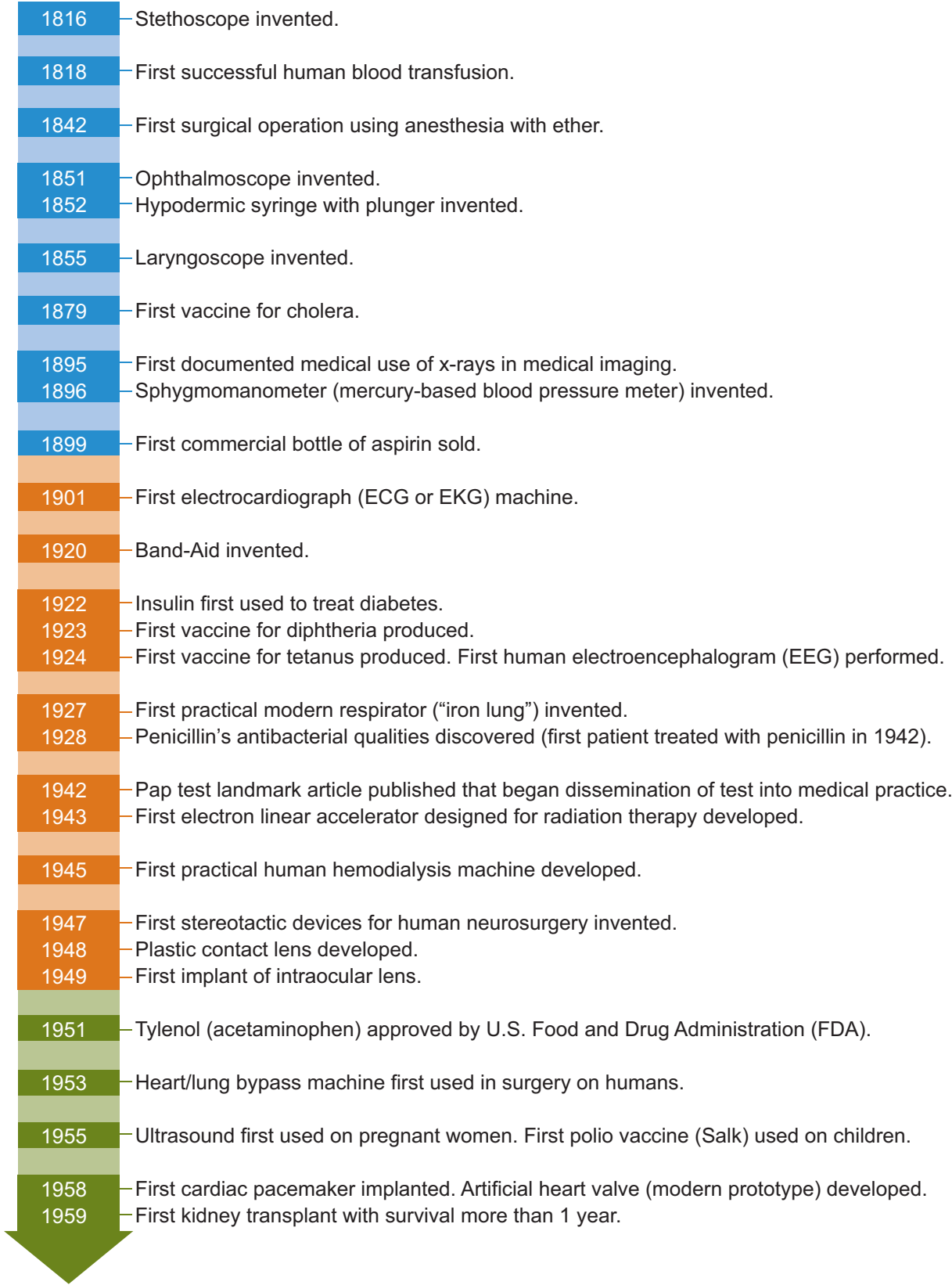
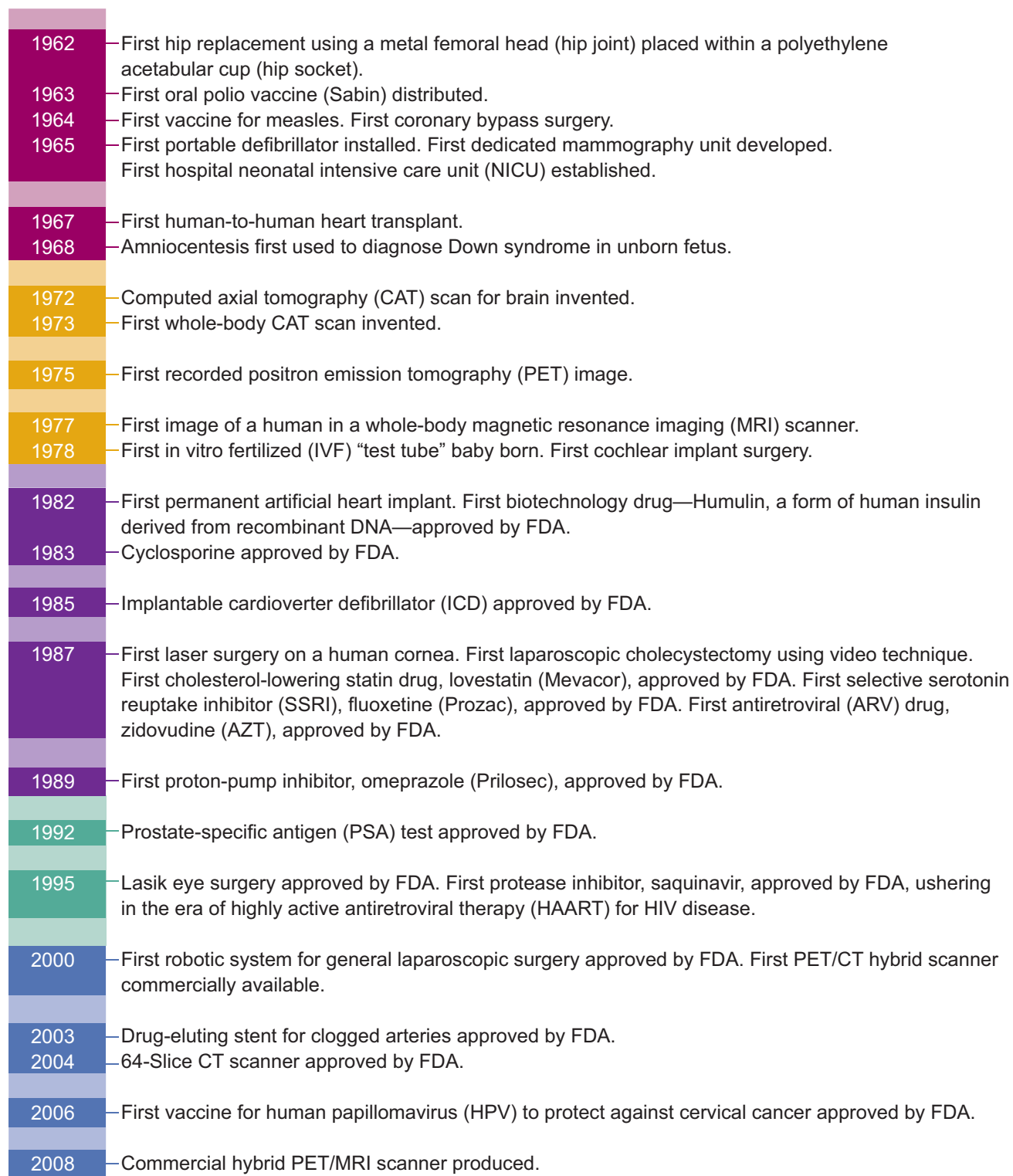


Figure 23. History of medical technology: Selected milestones, 1816–2008—Con.



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History of medical technology: Selected milestones, 1816–2008

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Federally Regulated (CLIA) Laboratories

The number of federally regulated (CLIA) laboratories has grown substantially, fueled by an increase in laboratories or other sites that obtain Certificates of Waiver to perform only tests that are simple with low risk of an erroneous result.

Clinical laboratories perform testing on materials derived from the human body (including blood, urine, and tissues) (1). An estimated 7–10 billion medical tests are performed each year. Test results play a critical role in health assessment, influencing the majority of medical decisions (2).

Technological advances have increased the simplicity of some types of laboratory tests, while at the same time introducing sophisticated tests that may require complex equipment and highly trained staff (2).

Since 1992, the majority of facilities in the United States that perform laboratory testing on human specimens are regulated under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) (2). CLIA was enacted following reports of inaccurate Pap test results, which spurred an effort to regulate laboratory quality (3). The CLIA regulatory program is run cooperatively by the Centers for Medicare & Medicaid Services, CDC, and the Food and Drug Administration.

CLIA extended regulations to all nonexempt and nonexcepted laboratories that conduct testing on human specimens (3). The regulatory requirements are keyed to the type of testing a laboratory performs, with laboratories conducting more complicated tests subject to more stringent requirements. The three categories of testing under CLIA are as follows: waived (simple tests with little chance of erroneous result), moderate complexity, and high complexity. Laboratories performing only waived tests are not subject to routine CLIA oversight and must only acquire a certificate of waiver, pay fees, and follow manufacturer test instructions. Laboratories performing moderately or highly complex tests are subject to regulations setting minimum qualifications for all persons performing or supervising tests, must participate in approved proficiency testing programs, and must have systems and processes in place to ensure proper test performance and accurate results, and an overall plan to monitor the quality of all aspects of the laboratory's operations (3). Laboratories in New York and Washington are exempt from CLIA regulations because those states have their own state-law-based laboratory oversight regulations that meet or exceed the CLIA requirements.

In 2008, approximately 209,000 laboratories were certified under CLIA (including in the two exempt states), an increase from 155,000 laboratories in 1993 (Figure 24). The number of

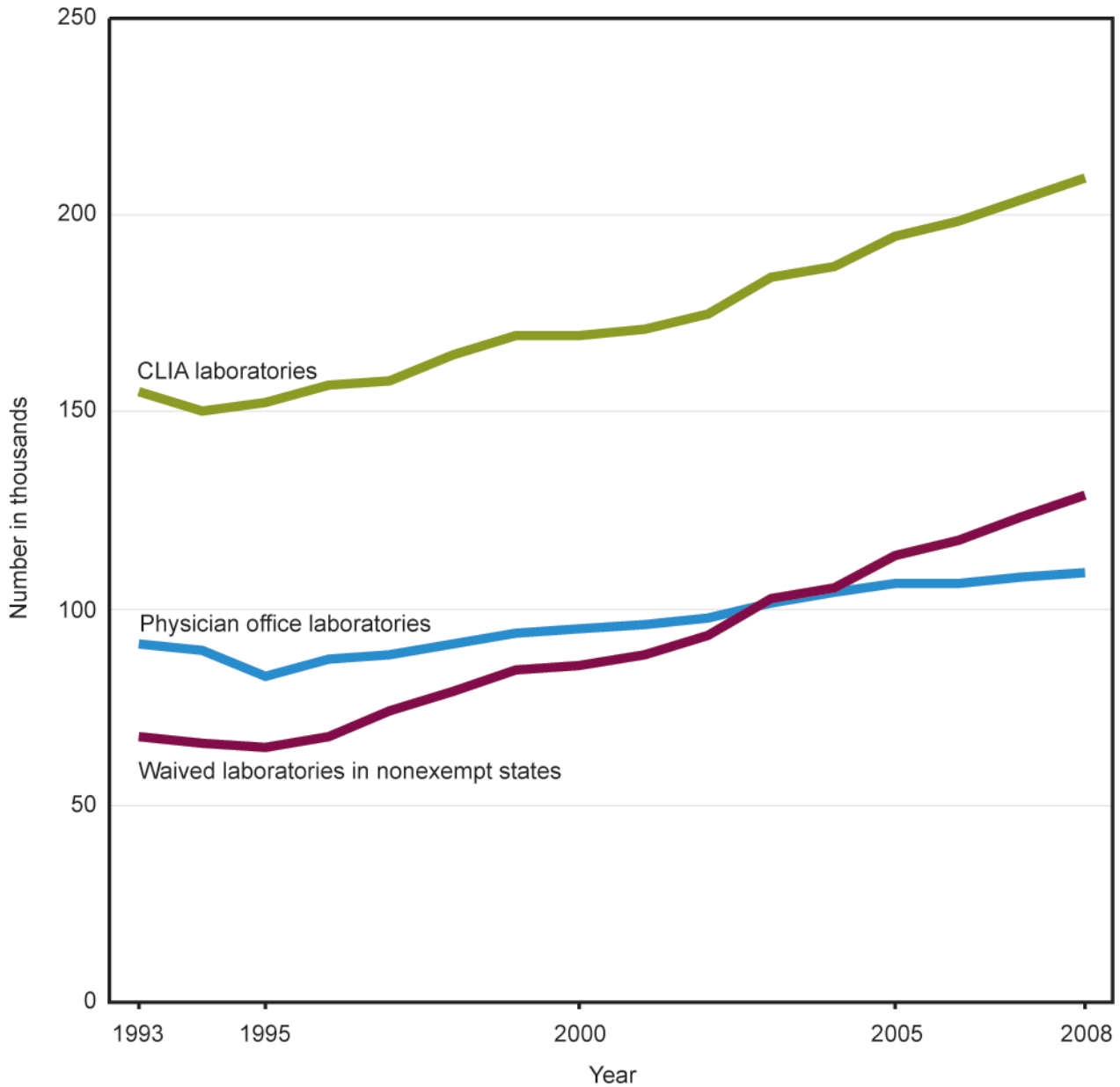
waived laboratories in the 48 nonexempt states and the District of Columbia almost doubled between 1993 and 2008, increasing from 67,000 to 129,000 (Figure 24). In 2008, waived laboratories comprised 64% of all laboratories, up from 44% in 1993 (data table for Figure 24). The diffusion of testing to physician offices and other point-of-care sites increases the speed with which test results can be obtained and makes testing more convenient for providers and patients (2). The number of physician office laboratories (POLs) increased from about 91,000 in 1993 to about 109,000 in 2008, although the total number for all laboratories increased at a faster rate (data table for Figure 24). During this period, the percentage of CLIA laboratories located in physician offices decreased from 59% to 52% (data table for Figure 24).

Although some studies indicate that waived laboratories generally take measures to perform tests according to manufacturers' specifications, the lack of oversight has raised some concerns about the quality of the testing performed in POLs (2,4). Concerns also have been raised about the standards enforcement required by the CLIA regulations in nonwaiver laboratories that perform more complex testing, and whether this oversight is sufficient to ensure quality (5).

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Figure 24. Federally regulated (CLIA) laboratories: United States, 1993–2008



NOTES: CLIA is Clinical Laboratory Improvement Amendments of 1988. New York state and Washington state are exempt from CLIA because they have their own regulatory requirements. Waived laboratories perform only tests that have been classified as waived, which are very simple tests with low risk of erroneous results. See [data table for Figure 24](#).

SOURCE: Centers for Medicare & Medicaid Services, CLIA Database.

Selected Imaging Technologies

The use of MRI/CT/PET scans in physician offices and hospital outpatient and emergency department settings has increased dramatically over the past decade.

Advanced imaging technologies offer the physician sophisticated tools for diagnosing and monitoring the status of a wide array of medical conditions (1). Advanced diagnostic medical imaging includes such technologies as computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography (PET). CT provides multidimensional and higher resolution information than x-ray. Hence, CT is preferable for imaging intracranial, head and neck, thoracic, and abdominal structures (2). The magnetic field aspect of MRI makes it better than CT for viewing soft tissue; therefore, it is often used to evaluate intracranial or spinal cord abnormalities, musculoskeletal tumors, or trauma (2). PET is often used for cancer, coronary, and neurologic evaluations (2). These technologies may be combined in hybrid machines to provide more diagnostic information.

Despite the significant costs of acquiring advanced imaging capability, the availability and use of imaging technologies in the United States has substantially increased since their introduction in the early 1980s (3). In 2006, there were more than 7,000 sites offering MRI, with an estimated 27 million MRI procedures performed (4) (also see Table 121). In 2007, more than 10,000 CT units were in operation at more than 7,600 hospital and nonhospital sites, and the availability of PET and other imaging modalities has been steadily increasing (5). The site of imaging services has diffused from hospital inpatient and outpatient settings to nonhospital settings such as physician offices or radiology centers (6). During the past decade, the number of freestanding diagnostic imaging centers owned by radiologists, other specialists, private investors, or for-profit companies has more than doubled (1).

Data from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey were analyzed for 1996–2007 to examine trends in advanced imaging (CT, MRI, and PET scans), although the types of imaging procedures captured by the surveys varied during the period. Part of the increase in advanced imaging scanning may be due to improved survey questions and editing procedures (see Technical Notes). A visit with an advanced imaging scan is defined as a visit with a scan ordered or provided during the visit. Use of advanced imaging scans has increased substantially during physician office and hospital outpatient department (OPD) and emergency department (ED) visits since 1996 (Figure 25). Advanced imaging scan rates

during visits to physician offices and OPDs more than tripled from 1996 to 2007 among persons under 65 years of age and among persons 65 years of age and over (Figure 25). In 2007, 3%–4% of physician office and OPD visits included advanced imaging scans ordered or provided during the visit (data table for Figure 25).

Between 1996 and 2007, the use of advanced imaging during ED visits increased fivefold among adults under 65 years of age and quadrupled among adults 65 years of age and over (Figure 25). In 2007, 12% of ED visits among persons under 65 years of age and 26% of ED visits among persons 65 years of age and over included advanced imaging scans ordered or provided during the visit (data table for Figure 25).

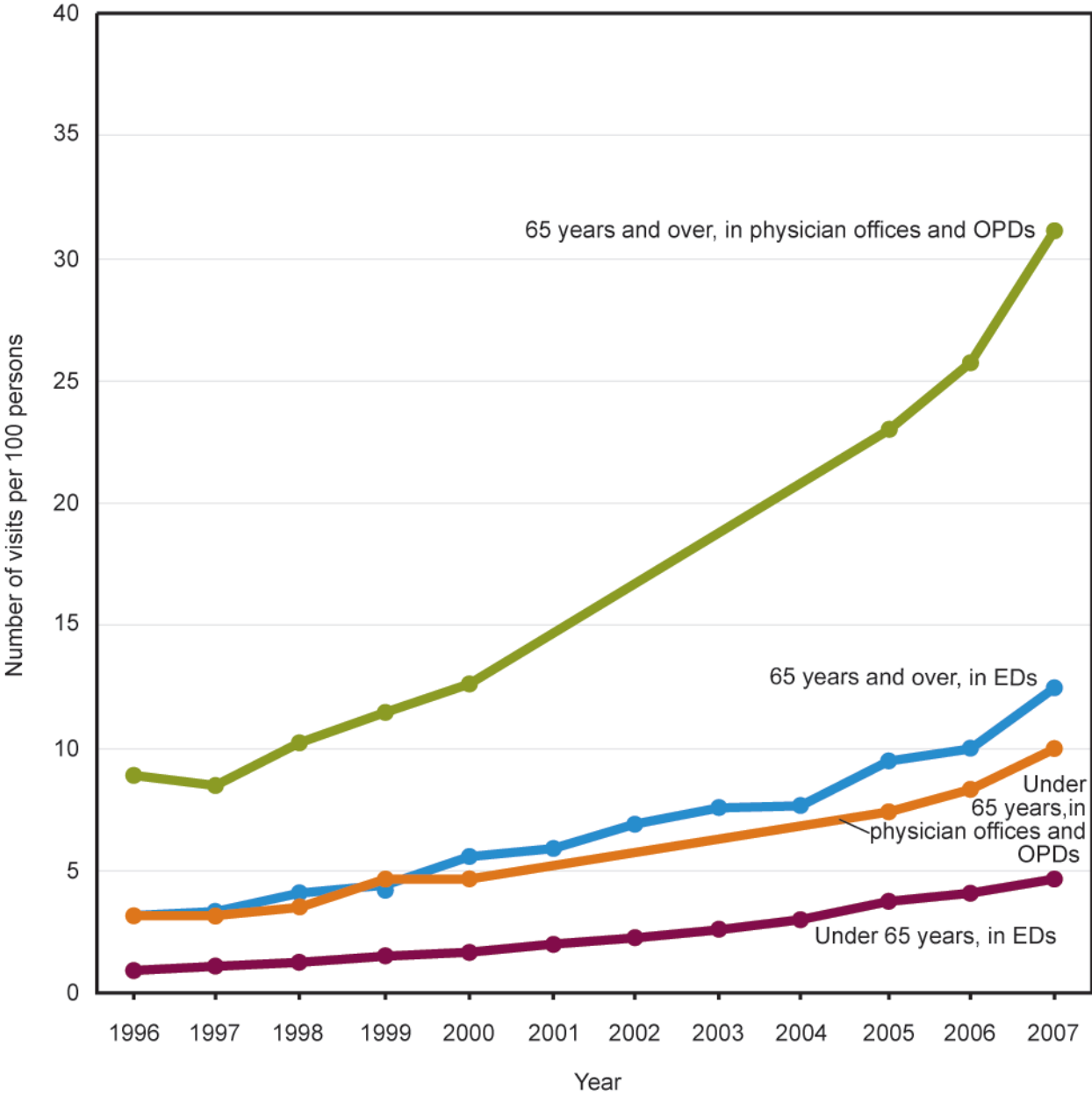
Although use of these technologies in ambulatory settings has increased, hospitals continue to perform them on an inpatient basis. The rate of use of at least one MRI during a given hospital stay among adults has remained relatively stable since 1990, but the rate of hospitalizations with at least one CT scan declined by 63% over this period (Table 103).

Most medical imaging is considered to be low risk; however, it is not without risk. The National Academy of Sciences' Biologic Effects of Ionizing Radiation VII (BEIR VII) report on the effect of low-level ionizing radiation concludes that for any exposure to radiation, a linear relationship exists between the dose of radiation and an increased risk of cancer (7,8). Concerns have also been raised about standards for image quality and interpretation. A recent report by the Government Accountability Office concluded that the increase in imaging in physician offices, which have less oversight than more institutional settings, may be problematic (9). These and concerns about possible unnecessary use of imaging spurred provisions in the Medicare Improvements for Patients and Providers Act (MIPPA). Beginning January 1, 2012, MIPPA requires that advanced diagnostic imaging services (diagnostic MRI, CT, and nuclear medicine, including PET) be reimbursed by Medicare only if performed by accredited facilities (10).

Rapid growth in these relatively expensive imaging procedures has been the subject of several recent studies that attempt to examine the reasons for this growth and have raised concerns that some imaging may be unnecessary (11). Medicare Part B spending for imaging services under the physician fee schedule more than doubled between 2000 and 2006, from \$6.9 billion to \$14.1 billion (9). Between 2000 and 2006, the percentage of Medicare Part B spending for imaging performed in hospital settings decreased from 35% to 25%, while the share of imaging spending increased in physician offices from 58% to 64% and in independent diagnostic testing facilities from 7% to 11% (9).

(Continued)

Figure 25. Ambulatory care visits with MRI/CT/PET scans ordered or provided during the visit, by age and location of care: United States, 1996–2007



NOTES: OPD is hospital outpatient department. ED is hospital emergency department. See [data table for Figure 25](#).

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

Selected Imaging Technologies *(Continued)*

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Mammography

Between 1987 and 1999, recent mammography use among women 40 years of age and over more than doubled but decreased slightly between 1999 and 2008.

Mammography technology has advanced over the past 35 years, progressively becoming more accurate (1). Since the 1960s, technical developments in mammography have resulted in greater sensitivity and specificity in cancer detection and decreases in radiation exposure (1,2). Without mammography screening, many breast cancers would not be diagnosed until at least 1 year later (1). Newer forms of breast cancer screening are emerging, and some, like digital mammography, have been tested against current technologies and shown to have potential advantages for some groups, whereas others, like thermography, have not been proven equivalent to date (3–5). New technologies that complement traditional mammography include ductal lavage, MRI (magnetic resonance imaging technology), and ultrasound, and these are also evolving (6). New breast cancer treatments and drug regimens (including tamoxifen and herceptin), and earlier diagnoses—advanced by the invention of the modern-day mammogram machine, the development of quality standards for mammography machines and radiologists, and the promotion of regular mammography screening—have all contributed to declining mortality rates and reduced deaths due to breast cancer (1,2,6) (also see Tables 36 and 50).

Breast cancer ranks second as a cause of cancer death in women and is the most frequently diagnosed cancer in women after cancers of the skin (7,8) (also see Tables 36 and 49). In 2005, 186,000 women in the United States were diagnosed with breast cancer and 41,000 died from the disease (8).

The percentage of women 40 and over who had a mammogram in the past 2 years more than doubled, increasing from 29% in 1987 to 70% in 1999 (data table for Figure 26). Between 1999 and 2008, the percentage of women 40 years of age and over who had a mammogram within the past 2 years decreased slightly, from 70% to 68% (9) (data table for Figure 26; Table 86).

Over time, mammography screening rates have improved among women in all racial and ethnic groups, but disparities persist (Figure 26). Between 1987 and 1991, compared with other racial and ethnic groups, non-Hispanic white women had the highest recent mammography rates. Starting in 1993, mammography rates among non-Hispanic black and

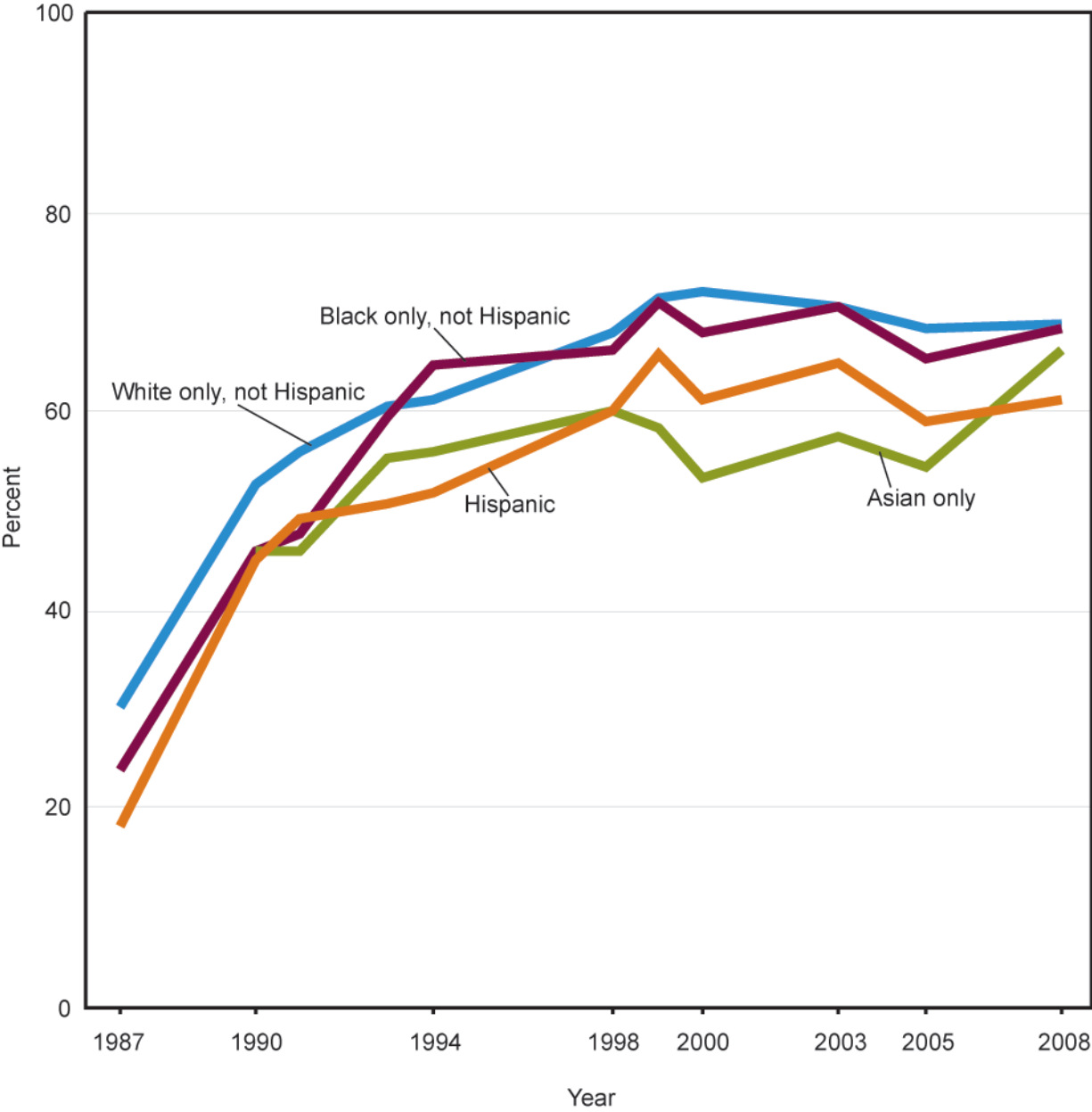
non-Hispanic white women have been similar. In 2008, the percentage of non-Hispanic black and non-Hispanic white women with recent mammograms was higher than for Hispanic women (Figure 26). Low-income and uninsured women also experience disparities in mammography screening, having consistently lower screening rates compared with insured and higher-income women (10). Recent increases in screening among uninsured, low-income women, and improvements in disparities for some racial and ethnic populations, may be attributable in part to programs promoting screening in underserved populations, such as the National Breast Cancer and Early Detection Program (NBCCEDP) (10). Not all women are using mammography technology equally, and adequate access, provider prescription, English proficiency, and health literacy, as well as knowledge, attitudes, and cultural beliefs, may serve as barriers to mammography access and use (11). Despite gains in the use of mammography across racial and ethnic subgroups, there are persistent mortality differences by race that remain unexplained because, although mammography use is equivalent, mortality rates are not (5).

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Figure 26. Use of mammography within the past 2 years among women 40 years of age and over, by race and Hispanic origin: United States, 1987–2008



NOTE: See [data table for Figure 26](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Mammography *(Continued)*

References *(Continued)*

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Joint Replacement Procedures

The hospital discharge rate for total hip replacement increased by one-third, and the discharge rate for knee replacement increased by 70%, from 1996 to 2006.

Hip and knee joint replacements are among the most commonly performed and clinically successful surgical procedures in the United States (1–3). The most common reasons for knee and hip replacement procedures are pain and decreased quality of life from osteoarthritis (2,4). With one-third of Americans obese (Table 72) and an aging population (Figure 1), the prevalence of osteoarthritis is expected to increase, contributing to a growing demand for joint replacement procedures (2,3). According to one analysis, by 2030 the demand for total hip replacements is estimated to increase by about 175% and the demand for total knee replacements is projected to grow sixfold (5).

Modern hip and knee replacement techniques using prosthetic devices were developed in the 1960s (4). Since then, better prosthetic materials have increased the functioning and life span of joint replacements. Advances in surgical techniques, including minimally invasive methods and the use of computer-assisted surgical systems, aim to reduce post-operative pain and recovery time and improve surgical accuracy (6,7).

Although the majority of joint replacement procedures are among older patients, longer-lasting joints make these procedures a viable option for younger and more active patients (6,7).

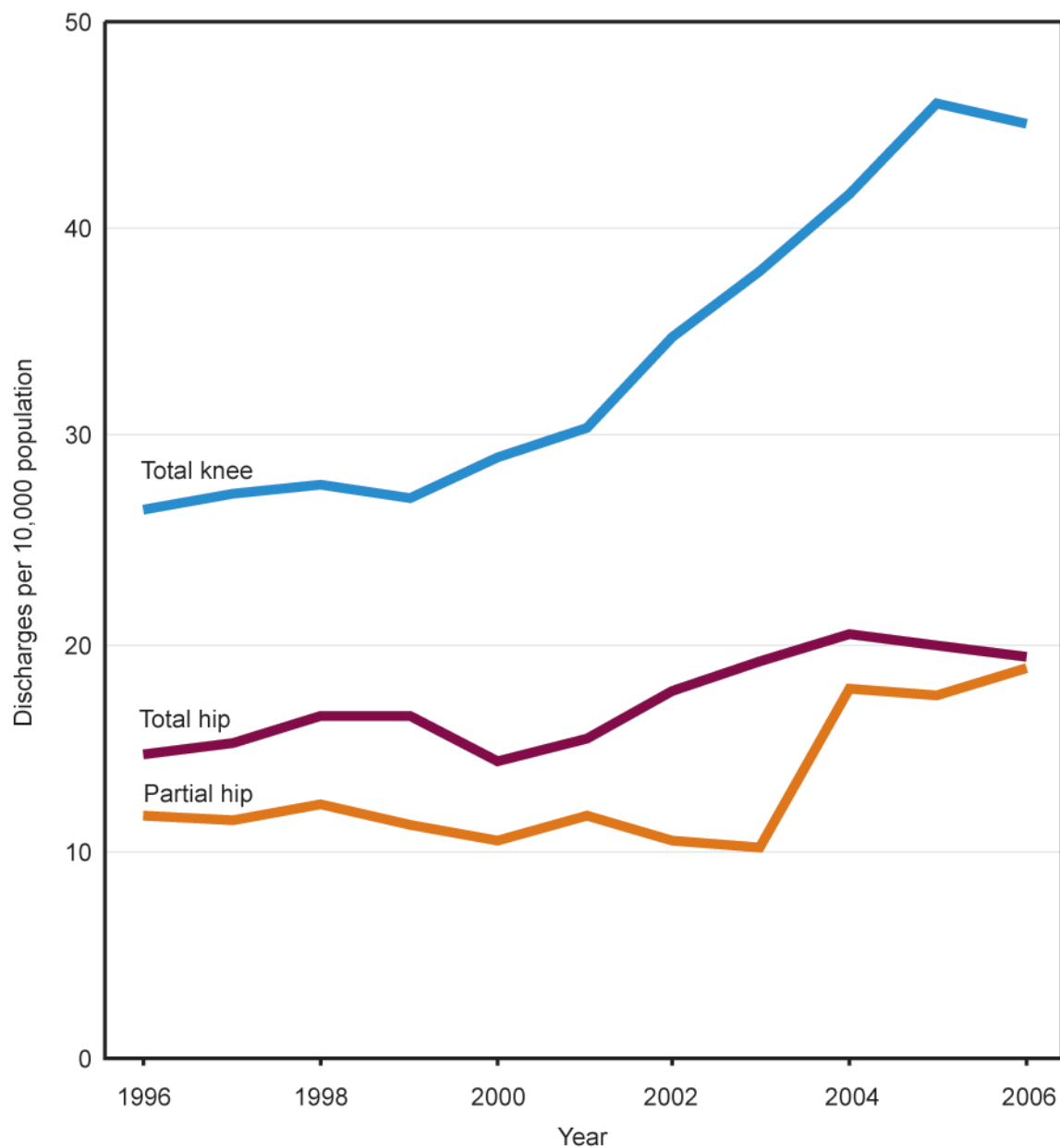
Hospital discharges with at least one knee or hip replacement procedure among adults 45 years of age and over increased from 1996 to 2006 (Figure 27). Total hip replacement discharges increased by one-third, partial hip replacements increased by 60%, and total knee replacement discharges increased by 70% over that time period. In 2006, total hip replacement rates were similar among men (18.1 discharges per 10,000 population) and women (20.5) and increased with age (data table for Figure 27). Discharges for partial hip procedures were about twice as common among women (23.9 per 10,000 for age 45 years and over) as men (13.0 per 10,000). Partial hip procedures, which are often used to treat fractures, were also more common among older persons.

In 2006, knee replacement discharges were more common among women 45 years of age and over (54.0 per 10,000) than men (34.9). As with hip replacement procedures, knee replacement discharges were more than three times as high for those 65 years of age and over (84.1), compared with those 45–64 years of age (25.7). Although total hip and knee replacement discharges were more common among adults 65 years and over compared with adults 45–64 years of age, they increased at a faster rate among the younger group (data table for Figure 27).

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Figure 27. Discharges with at least one knee or hip replacement procedure in nonfederal short-stay hospitals among adults 45 years of age and over, by type of procedure: United States, 1996–2006



NOTE: See [data table for Figure 27](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Angioplasty and Coronary Stenting Procedures

Since their introduction in 2003, drug-eluting stents have rapidly displaced non-drug-eluting stents and are used in three-quarters of angioplasty discharges.

Many technological advances have been directed at preventing, diagnosing, and treating heart disease, the leading cause of death in the United States (Table 28). Examples include drugs (statins), imaging (computed tomography, CT), procedures (angioplasty), and devices (stents). For many people with coronary artery disease (CAD), a common form of heart disease, coronary artery revascularization may be needed. One procedure to treat CAD is percutaneous transluminal coronary angioplasty (PTCA), more commonly called angioplasty. In PTCA, narrowed (or stenotic) arteries are treated to improve blood flow and reduce blockage (1). Compared with coronary artery bypass surgery, another widespread treatment for CAD, PTCA is relatively noninvasive and reduces length-of-stay in the hospital, recovery time, and expense (also see Figure 36 and Table 103). Therefore, PTCA is generally preferable in patients for whom both procedures are an option (1).

PTCA was first introduced about 30 years ago. Since then, additional modifications, including the introduction of stents, have improved the procedure. First introduced in the 1980s, stents are mesh-like devices that are inserted into the artery during PTCA to expand the artery and prevent restenosis (recurrent plaque development). One complication of early stents was clotting (thrombosis) at the site of the stent. To address this complication, drug-eluting stents were approved in 2003. Drug-eluting stents release short-term medication to reduce the risk of clotting and have been found to be better than bare stents at preventing restenosis and, consequently, the need for revascularization (2).

Data from the National Hospital Discharge Survey were used to examine changes that have occurred in PTCA procedures since the introduction of stents, and in particular, the introduction of bare (non-drug-eluting) stents. Discharges with PTCA procedures were separated into those including a drug-eluting stent (starting with 2003 data), those including a bare stent, and those with no stent (data table for Figure 28). Between 1996 and 2006, the rate of discharges with any PTCA procedure among persons 45 years of age and over was fairly steady, while the rate for PTCA discharges without a stent declined by 84% (data table for Figure 28). The diffusion of stent insertion was fairly rapid. In 1996, almost two-thirds of PTCA discharges among persons 45 years of age and over did not include stent insertion, but by 2006 less than one-tenth of discharges had no type of stent. Further,

there was swift adoption of the drug-eluting stent, replacing the insertion of a bare stent. In 2002, the year before the first drug-eluting stent was approved, 82% of PTCA discharges among person 45 years of age and over had a bare stent inserted. In 2004, the year after drug-eluting stents were approved, 69% of PTCA discharges had a drug-eluting stent inserted, and by 2006, 77% of PTCA discharges included a drug-eluting stent (data table for Figure 28).

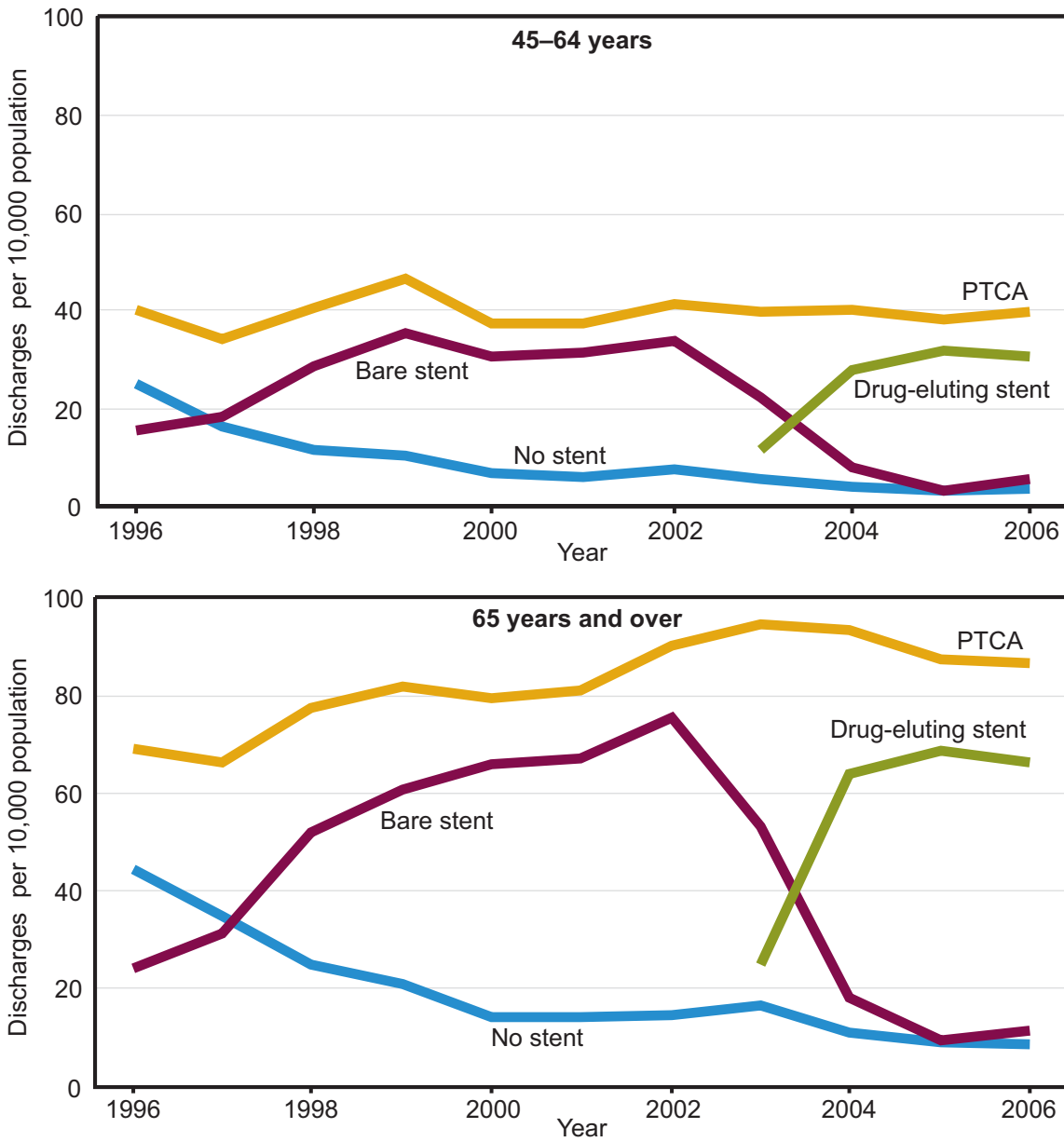
The rate of discharges with PTCA, and consequently the rate of PTCA with stent insertion, varied by age and sex. In 2006, the rate of PTCA discharges among those 65 years of age and over (86.2 per 10,000 persons) was double that for patients 45–64 years of age (39.7 per 10,000 persons; Figure 28). PTCA discharges were about twice as likely among men 65 years of age and over compared with women in that age group, and about two-and-a-half times as likely among men 45–64 years of age than women (data table for Figure 28). The likelihood of receiving a drug-eluting stent among PTCA discharges did not vary by age or sex.

The series of events accompanying the use of drug-eluting coronary artery stents—their introduction, adoption, rapid diffusion, and subsequent reconsideration—is an example of the complexities of technological advancement in medicine. The dilemma is how to best target new technologies, given that they are often more expensive than older options and their impact on broader and more diverse population subgroups is not fully known until they are more widely used and studied over longer periods. Initial studies of the use of drug-eluting stents indicated they were better than bare stents at preventing restenosis. On the basis of this evidence, drug-eluting stents were quickly adopted and used in place of bare stents, regardless of patient characteristics. More recent studies, after the diffusion of drug-eluting stents, suggest that patients receiving drug-eluting stents may be at risk for developing thrombosis, often up to a year after their PTCA (3,4). As more data are obtained, evidence suggests that drug-eluting stents may be best targeted at certain population subgroups with coronary artery disease, such as older patients and those with diabetes.

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Figure 28. Hospital discharges with a PTCA procedure among persons 45 years of age and over, by type of procedure and age: United States, 1996–2006



NOTES: PTCA is percutaneous transluminal coronary angioplasty. See [data table for Figure 28](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Cholecystectomy Procedures

In 2006, laparoscopic procedures accounted for almost all ambulatory surgery visits for cholecystectomy and about three-quarters of hospital discharges for cholecystectomy.

Cholecystectomy—removal of the gallbladder—is one of the most commonly performed procedures in the United States (1). Cholecystectomy may be performed because of cancer of the gallbladder or, more commonly, because of symptoms from gallstones. Gallstones are more common among women, persons who are obese, and during pregnancy, and prevalence increases with age (2).

Laparoscopic cholecystectomy was introduced in the late 1980s and quickly became the standard of care for patients with symptomatic gallstones (2,3). In the laparoscopic procedure, the gallbladder is removed through small incisions in the abdomen, rather than the larger incision used in traditional, or open, cholecystectomy. This technological advance means a reduction in pain, in risk of postoperative infection, in recovery time, and in health care costs (1,2,4,5). The success of laparoscopic cholecystectomy is widely believed to account for the increased number of laparoscopic procedures performed by making the procedure more available to high-risk, reluctant, or mildly symptomatic patients (2). As the safety and effectiveness of laparoscopic cholecystectomy has been demonstrated, there has been a shift in cholecystectomy procedures from inpatient to outpatient settings (5,6). The improvement in patient outcomes measures and reduction in health care costs associated with laparoscopic cholecystectomy, compared with open cholecystectomy, have led to the use of laparoscopic techniques in other abdominal surgical procedures, including bariatric surgery, esophageal procedures (including those for gastroesophageal reflux disorder), and appendectomy (3,7).

Data on hospital discharges from the National Hospital Discharge Survey, and on ambulatory surgery visits from the National Survey of Ambulatory Surgery, were examined to identify cholecystectomy discharges and visits. Between 1996 and 2006, there was a shift in cholecystectomy procedures from the inpatient to outpatient settings. The hospital discharge rate among adults 18 years of age and over with cholecystectomy procedures in hospitals declined about 20% from 1996 (22.3 discharges per 10,000 population) to 2006 (18.1), while ambulatory surgery procedure visits increased more than 30%, from 16.1 visits per 10,000 population in 1996 to 21.2 in 2006 (Figure 29). In both 1996 and 2006, almost all cholecystectomy visits in ambulatory surgery centers were for laparoscopic procedures. The proportion of

adult hospital discharges that were laparoscopic increased from about 70% of discharges in 1996 to 77% in 2006.

Consistent with the rates of underlying gallbladder disease, hospital cholecystectomy discharge and ambulatory surgery visit rates are higher among women than men and among older men compared with younger men. Focusing on ambulatory surgery visits in 2006, the rate of laparoscopic cholecystectomies among women 18 years of age and over (34.2 visits per 10,000 population) was more than four times higher than among men (7.3) (data table for Figure 29). The rate of laparoscopic cholecystectomy visits among men 45 years of age and over (9.8 visits per 10,000 population) was double that of younger men (5.1 visits). The visit rate was similar for younger (34.1 visits) and older (34.2 visits) women.

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Figure 29A. Cholecystectomy procedures among adults 18 years of age and over, by location of care: United States, 1996 and 2006

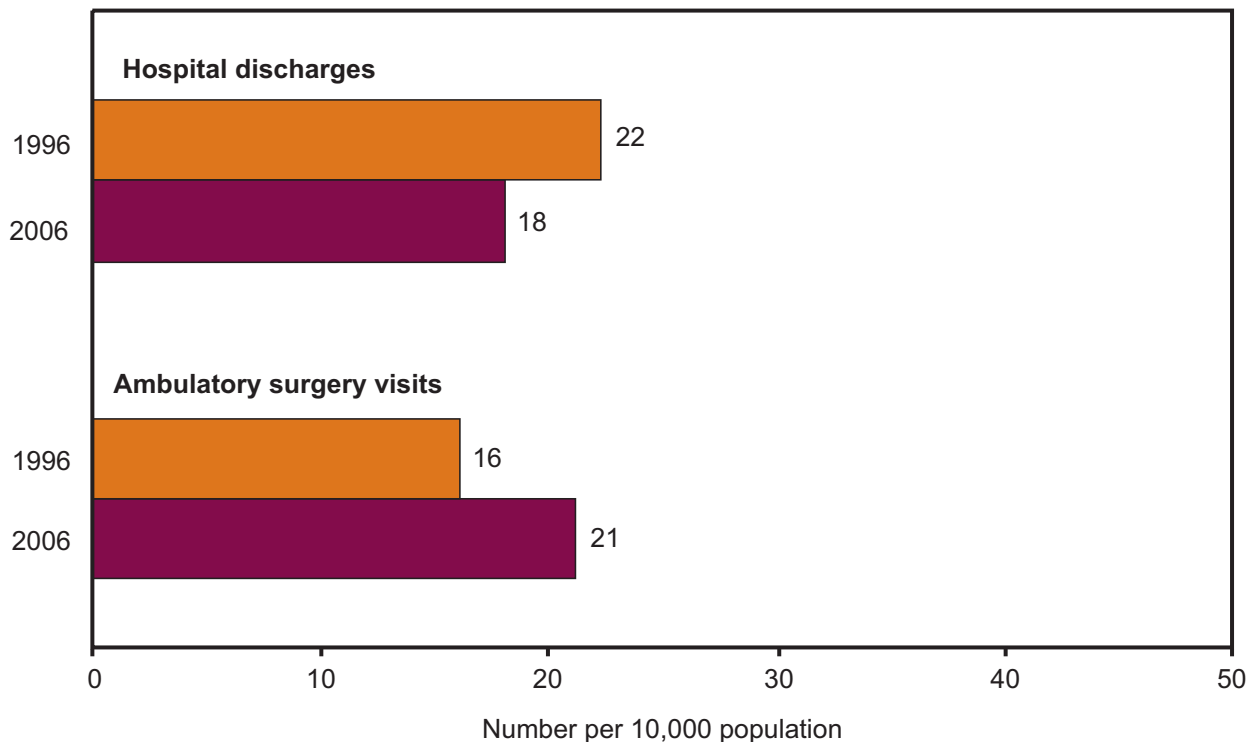
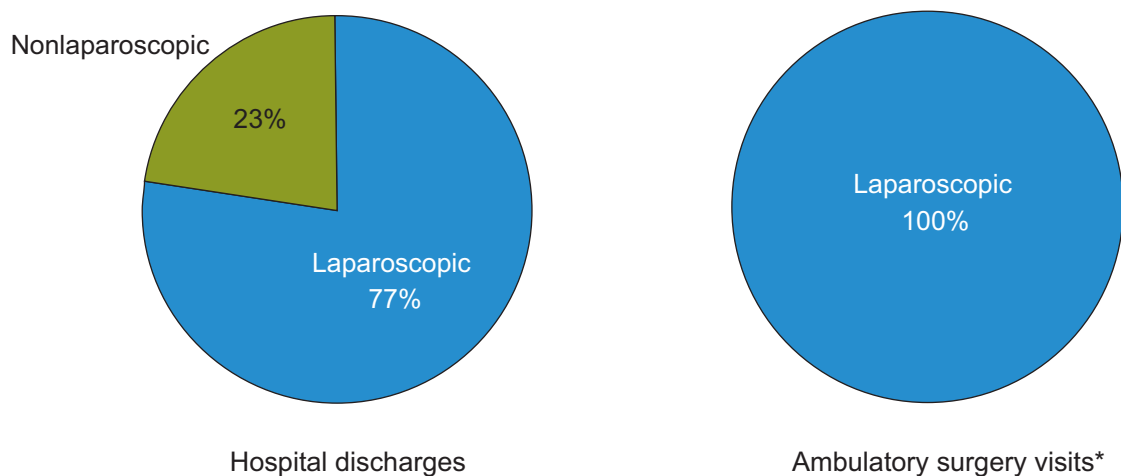


Figure 29B. Type of cholecystectomy procedure among adults 18 years of age and over, by location of care: United States, 2006



* Nearly all ambulatory surgery visits that did not result in hospital admission were laparoscopic procedures.

NOTES: Cholecystectomy is gallbladder removal. See [data table for Figure 29](#).

SOURCES: CDC/NCHS, National Hospital Discharge Survey and National Survey of Ambulatory Surgery.

Upper Endoscopy and Colonoscopy

Between 1996 and 2006, outpatient upper endoscopy and colonoscopy rates increased substantially, while inpatient rates remained unchanged.

Medical technology has affected the diagnosis and treatment of a wide variety of gastrointestinal (GI) diseases and conditions through the development of endoscopic procedures (1). Because endoscopic technology allows the direct visual inspection of the interior of organs, tissue sampling and minimally invasive diagnostic and therapeutic interventions are possible. Previously, these types of diagnostic and therapeutic interventions would have required major invasive surgery. As endoscopic technology has progressed, there have been improvements in the clarity of the images and in the types of scopes (thinner, more flexible, and more comfortable), in addition to the development of additional uses for the scopes. Examples of current endoscopic interventions include cauterization of gastric bleeding, application of clips to stop gastric bleeding, insertion of high-frequency ultrasound devices that produce highly detailed images, removal of stones (e.g., gallstones), and insertion of stents, often as a palliative cancer therapy (1). In addition to clinical uses, endoscopic technology has influenced medical training by providing higher quality static images for textbooks and journals and online collections of endoscopy video clips (2).

During an upper endoscopy (or esophagogastroduodenoscopy (EGD)) procedure, an image of the esophagus, stomach, and duodenum (the first part of the small intestine) is transmitted through a thin, flexible, lighted tube called an endoscope (3). The procedure can be used to diagnose upper gastrointestinal conditions such as gastroesophageal reflux disease (GERD) and Barrett's esophagus (a rarely premalignant condition of the esophagus). Colonoscopy is a lower endoscopy procedure used to see inside the colon and rectum (4). Colonoscopy can be used to diagnose lower GI conditions and diseases, in addition to screening for colon cancer. The U.S. Preventive Services Task Force strongly recommends (for individuals without high-risk intestinal conditions) colorectal cancer screening for men and women 50–75 years of age, and colonoscopy is one of the recommended screening methods (5).

Data from the National Hospital Discharge Survey (NHDS) and the National Survey of Ambulatory Surgery (NSAS) were examined for EGD and colonoscopy procedures (see [Technical Notes](#) for codes used). Between 1996 and 2006, outpatient EGD visit rates per 10,000 population increased substantially among all age groups of adults 18–84 years of age and remained stable among adults 85 years of age and over (Figure 30). In 2006, outpatient EGD visit rates among adults increased with age until age 65–74 and declined

sharply among those 85 and over. In contrast to the growth in outpatient visit rates for EGD from 1996 to 2006, inpatient EGD rates among adults in all age groups generally remained similar to 1996 levels (data table for Figure 30).

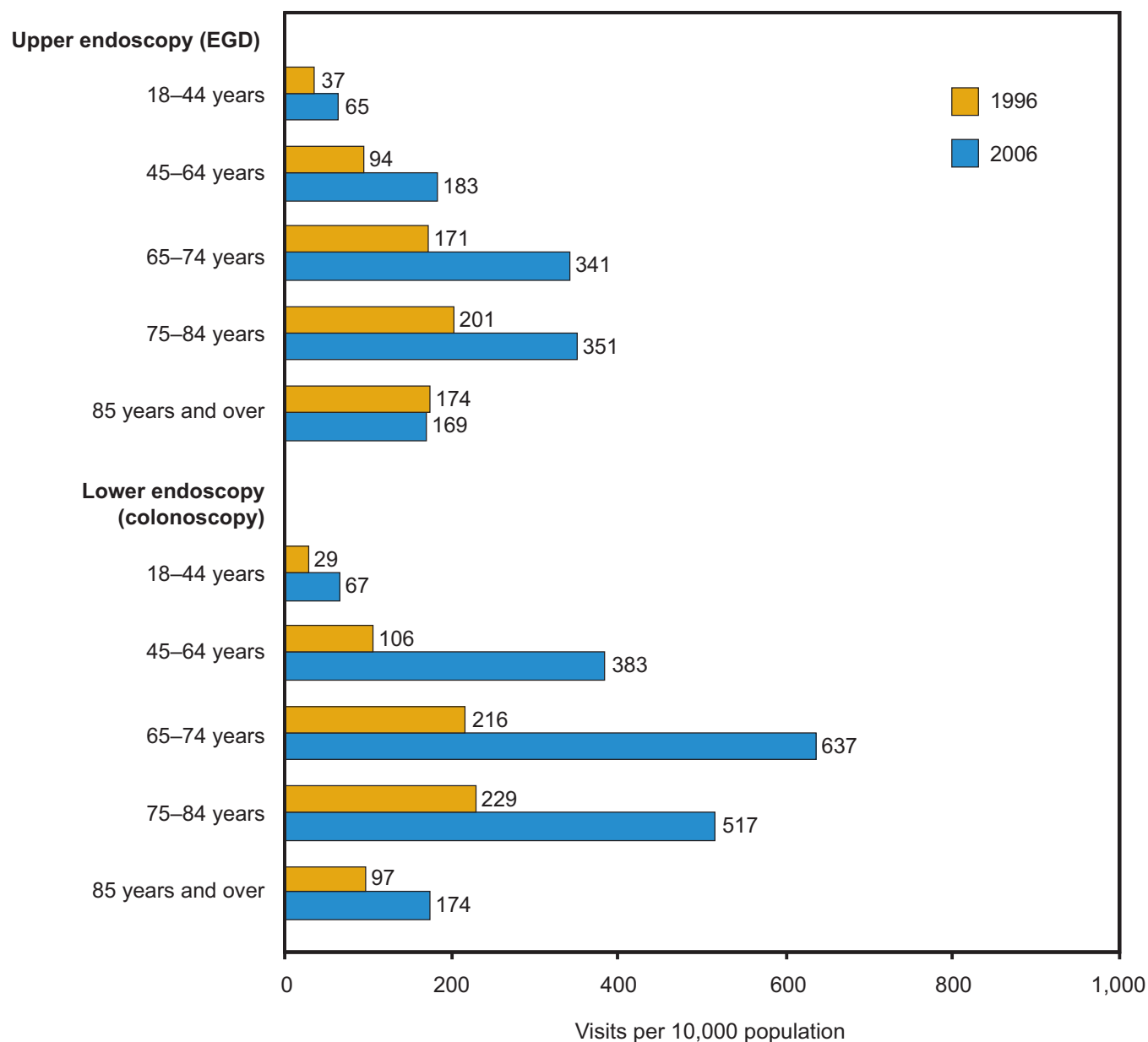
Between 1996 and 2006, outpatient colonoscopy visit rates tripled overall among adults 18 years of age and over and increased substantially in each age group (Figure 30). In 2006, outpatient colonoscopy procedure rates among adults increased with age until age 65–74 and then declined. As was the case with EGD, inpatient colonoscopy rates in all age groups remained basically unchanged from 1996 levels (data table for Figure 30).

Factors associated with the growth in EGD include the availability of new medications to treat GERD (proton pump inhibitors (“the purple pill”)); factors for colonoscopy include increased use for cancer screening, a change in Medicare reimbursement policy in 2001 for screening asymptomatic adults, and increases for cancer surveillance following the removal of polyps or cancers (6–10).

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Figure 30. Ambulatory surgery visits for upper endoscopy or colonoscopy procedures among adults 18 years of age and over, by age: United States, 1996 and 2006



NOTES: EGD is esophagogastroduodenoscopy. See [data table for Figure 30](#).

SOURCE: CDC/NCHS, National Survey of Ambulatory Surgery.

Geographic Variation in Use of Intensive Care Units in the Last 6 Months of Life

In 2005, use of intensive care units in the last 6 months of life among Medicare decedents ranged from 23% of Medicare decedents in Vermont and North Dakota to 49% in New Jersey and Florida.

Intensive care units (ICUs), which include specialized units such as medical, surgical, or coronary care units, are defined by the American Hospital Association as separate units of a hospital that provide services of a more intensive nature than usual medical and surgical care, on the basis of physicians' orders and approved nursing care plans. Units are staffed with specially trained personnel and contain monitoring and specialized support equipment for patients who require intensified comprehensive observation and care (1). The first dedicated ICU was established at Baltimore City Hospital in 1958 (2).

Because ICUs are technology- and resource-intensive, they are more costly than routine hospital care (3). In 2000, critical care medicine provided in ICUs and other types of critical care units made up an estimated 13% of all hospital costs and 4% of national health expenditures (4). Guidelines issued by the Society of Critical Care Medicine and the American Thoracic Society state that "Because of the utilization of expensive resources, ICUs should, in general, be reserved for those patients with reversible medical conditions who have a 'reasonable prospect of substantial recovery'" (5).

Between 1994 and 2004, ICU use per 1,000 Medicare beneficiaries increased 16%, from 59 to 69 discharges per 1,000 beneficiaries (3). By 2004, one-third of all Medicare hospitalizations included ICU or coronary care unit (CCU) care at some time during the hospital stay. An estimated one in five Americans dies during hospitalizations that include ICU or CCU care (6).

The Dartmouth Atlas Group has created a database that allows examination of geographic variation in the use of ICU/CCU services in the last 6 months of life among Medicare decedents. This analysis was limited to those 65–99 years of age. ICU/CCU care includes care provided in medical, surgical, trauma, burn, or other types of critical care units. Nationwide, 39% of older Medicare decedents had an ICU/CCU stay in the last 6 months of life. The percentage of older Medicare decedents admitted to an ICU/CCU in their last 6 months of life varied widely, from 23% in Vermont and North Dakota to 49% in New Jersey and Florida (6) (Figure 31).

It is not evident what drives this variation in use of ICU/CCU care across the country. In general, states with higher ICU use also had higher Medicare state per capita expenditures and higher overall utilization (7). Most variation in health care spending cannot be explained by prices, health status of the population, demographics, or treatment preferences. However, the supply of physicians and other health care resources, including the number of ICU beds, appears to be correlated with spending (7,8).

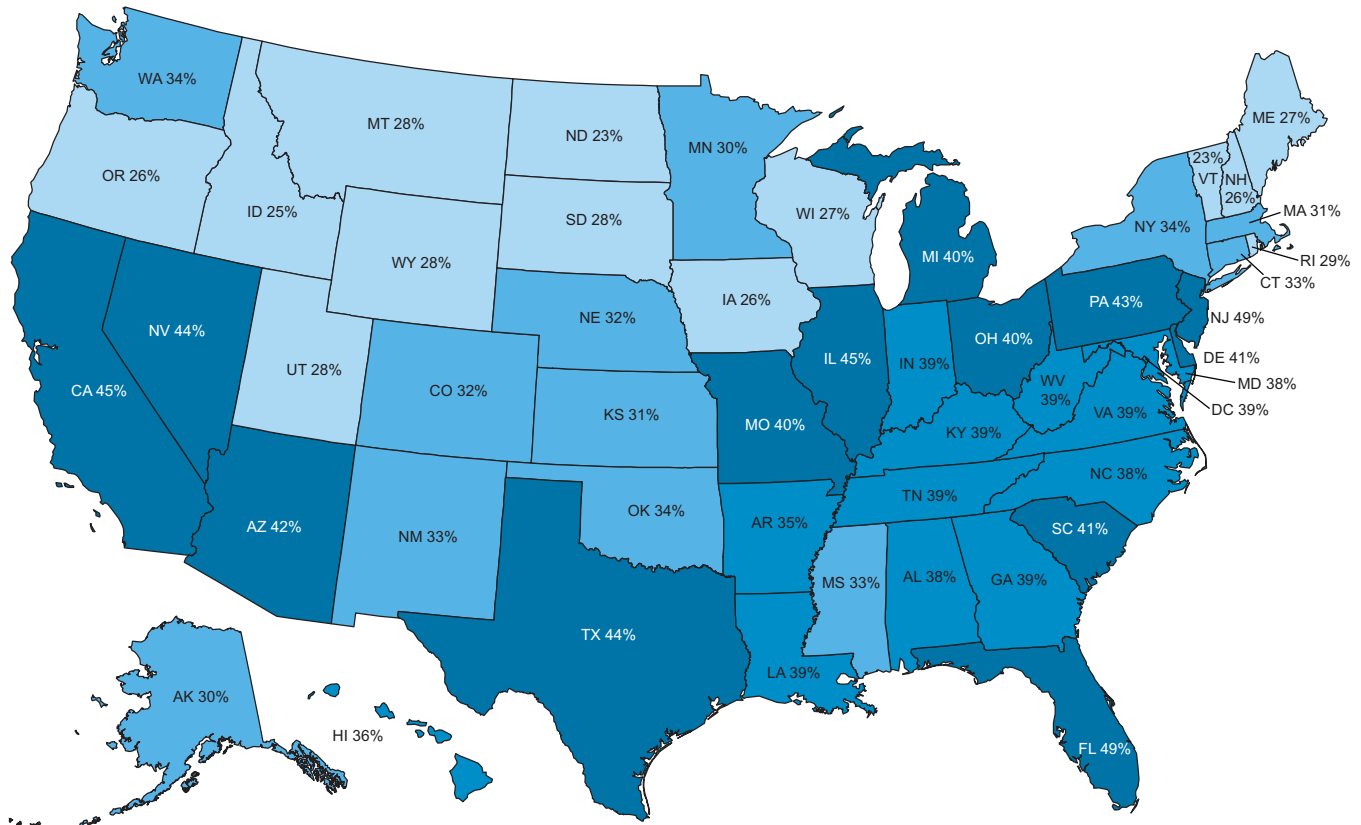
Use of ICU/CCU care is determined by supply, provider practice patterns and preferences, patient preferences, and case mix or "need" (7,8). It is difficult to define the population in need of ICU/CCU care by using claims data and to determine how much of the geographic variation is based on patient needs or patient or provider preferences. Physicians use their judgment as to whether critically ill patients would benefit from ICU services, and patients and their families should also participate in this decision (8,9). Patients with ultimately or rapidly fatal preexisting chronic disease are often admitted to the ICU before death, and research indicates that many patients and their families do not have informed discussions with physicians about palliative or end-of-life care, which may include alternatives to ICU/CCU care (8–10). Some research has indicated that the majority of academic medical ICUs in the United States do not strictly employ ICU admission and restriction guidelines, as recommended by the Society of Critical Care Medicine and the American Thoracic Society (11). Debate continues about the ethical and economic tradeoffs in deciding who should be treated in ICUs/CCUs and how to reduce unnecessary use, both to improve quality of care and to reduce overall health care expenditures (5,7,9).

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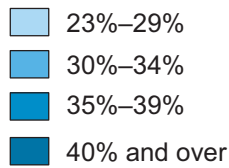
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Figure 31. Medicare decedents 65 years of age and over with an ICU/CCU stay in the last 6 months of life, by state: United States, 2005



Percent of Medicare decedents



NOTE: See [data table for Figure 31](#).

SOURCE: Dartmouth Atlas of Health Care.

Geographic Variation in Use of Intensive Care Units in the Last 6 Months of Life *(Continued)*

References *(Continued)*

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Solid Organ Transplantation

Between 1997 and 2006, the number of new kidney and liver transplantations per 1 million population increased, while heart transplantations decreased.

Solid organ transplantation is the epitome of highly technological care: replacing failing organs with organs from living and deceased donors. Although many attempts were made to transplant tissues and organs prior to the 1980s (Figure 23), success was limited because in most cases the recipient's immune system rejected incompatible donor organs and tissues. It was not until advances in the science of tissue typing and matching, and suppression of the host's immune system to reduce transplant rejection, that transplantation became more common and successful (1).

In 1983, the U.S. Food and Drug Administration approved the first highly effective immunosuppressant, cyclosporine, a calcineurin inhibitor (1). Following the addition of cyclosporine to recipient's drug regimens, 1-year graft survival rates for kidney transplantation exceeded 89%, and 1-year graft survival rates for heart and liver transplantations exceeded 70%. Prior to cyclosporine introduction, 1-year graft survival rates for all organ transplantations were significantly lower (1). For more than two decades, the core immunosuppression regimen for most organs has been based on the two-drug combination of a calcineurin inhibitor and a steroid, with the optional addition of an antiproliferative agent (traditionally azathioprine). In recent years, there has been a clear transition from cyclosporine to a newer calcineurin inhibitor, tacrolimus, for most organ recipients (with the exception of intestine and heart recipients). Similarly, azathioprine has been almost universally replaced by one of the newer antiproliferative versions of mycophenolate. The most common discharge regimen now is a triple-drug protocol of tacrolimus, mycophenolate mofetil, and steroid, providing even further improvement in graft survival rates. In addition, many programs have begun protocols aimed at reducing or eliminating steroids, in hopes of minimizing the well-recognized, debilitating long-term complications of this powerful drug (2).

Numerous technological advances have occurred in the field of organ transplantation. Advances in tissue and organ procurement include improved methods of obtaining multiple organs from a single donor and improved technologies allowing organs to be shared among previously incompatible recipients (3). Organ preservation and transportation have evolved to provide more high-quality organs that are less likely to be immediately rejected (3). Immunosuppressant drugs have become more effective and less toxic (3). Some types of organs can now be donated by both living and

deceased donors (4). Technological innovations in surgical techniques have included new types of procedures and laparoscopic retrieval of organs or partial organs, which facilitates the donation process with a safer operation and more rapid recovery for the living donor. Despite these advances, the gap between the limited supply of donated organs and the burgeoning waiting list continues to widen every year, so more patients are dying while waiting for a transplant (4).

The U.S. Organ Procurement and Transplantation Network and the Scientific Registry of Transplant Recipients contain data regarding every solid organ donation and transplant event occurring in the United States since 1987. Solid organs include the heart, kidney, liver, pancreas, lung, and intestine. In 2006, there were approximately 28,000 solid organ transplantations in the United States, an increase from 20,000 in 1997 (data table for Figure 32). In 2006, 7% of transplant recipients were under 18 years of age, 39% were age 18–49 years, 42% were age 50–64 years, and 12% were 65 years of age and over (4).

Between 1997 and 2006, the rate of kidney transplantation increased 31% (Figure 32). In 2006, there were 16,600 new kidney transplantations, accounting for 59% of all solid organ transplantations (data table for Figure 32). Nearly 40% of kidney transplantations were from living donors in 2006 (4).

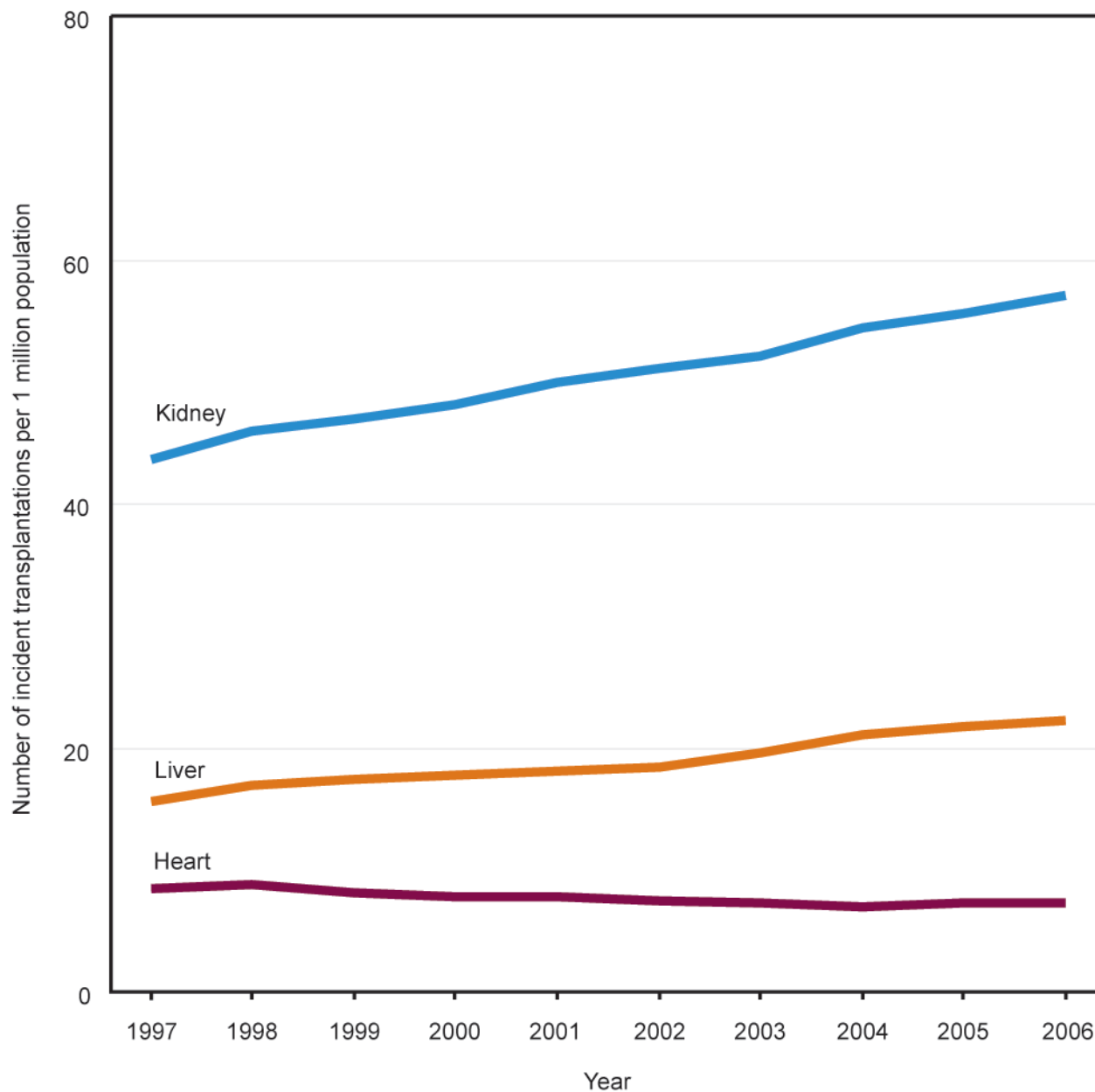
The rate of liver transplantation increased 42% during this same period (Figure 32). Liver transplantation was the second most common form of solid organ transplantation in 2006 (6,100), accounting for 22% of all solid organ transplantations (data table for Figure 32). In 2006, 5% of liver transplantations were from living donors (4).

Between 1997 and 2004, the rate of heart transplantation declined 20% and then increased slightly in the next 2 years (Figure 32). In 2006, heart transplantation was the third most common form of solid organ transplantation, accounting for 8% (2,100) of all solid organ transplantations (data table for Figure 32). The number of patients awaiting a heart transplantation has decreased steeply since 2000, likely reflecting improvements in medical therapy that have reduced the need for transplantation (4).

Organ transplantation and immunosuppressant drugs are extremely costly. Estimates from the Healthcare Cost & Utilization Project database show that the average cost of a hospital stay for a heart transplant in 2006 was about \$114,000; for a kidney transplant about \$44,000; and for a liver transplant about \$92,000. These estimates do not include any pre- or postoperative visits or treatments (5). The average annual cost of immunosuppression drugs has been estimated at \$11,000 and can reach over \$20,000 (6).

(Continued)

Figure 32. Selected solid organ transplantation, by type of organ: United States, 1997–2006



NOTES: Transplantation rates are shown for the three most common types of organ transplantations. See [data table for Figure 32](#).

SOURCE: Organ Procurement and Transplantation Network, Scientific Registry of Transplant Recipients (OPTN/SRTR). Data as of May 1, 2007.

Solid Organ Transplantation *(Continued)*

Organ transplantation has also raised ethical, legal, and resource-allocation issues. It has raised questions about the clinical definition of death and when organs can ethically be removed from donors (1). Another issue is eligibility for transplanted organs; for example, whether people with comorbid conditions or a poor prognosis should receive scarce organs. Other ethical issues include prioritization of organ allocation, living donor transplantation, and quality of life for living donors (7–10).

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Assisted Reproductive Technology (ART)

Between 1996 and 2006, the number of assisted reproductive technology (ART) cycles more than doubled and increased at the fastest rate among women over age 40.

Since 1978, assisted reproductive technology (ART) procedures have been used in the United States to overcome infertility. The first U.S. infant conceived using ART was born in 1981, and pregnancy rates using ART have shown continuous improvement with each year (1,2). In 2002, 12% of women of childbearing age (15–44 years) reported having an infertility-associated health care visit at some time in their lives, and according to birth certificate data, more than 1% of infants born in the United States were conceived using ART in 2006 (1,3,4). Although there is some controversy about whether the proportion of the population with self-reported infertility is increasing, stable, or decreasing, the utilization of ART has been increasing (5) (Figure 33).

The CDC definition of ART includes fertility treatments in which both eggs and sperm are handled in the laboratory for the purpose of establishing a pregnancy and excludes artificial (intrauterine) insemination or the use of fertility drugs without egg retrieval. ART involves surgically removing eggs from a woman's ovaries, combining them with sperm in the laboratory, and returning them to the woman's body or donating them to another woman. ART procedures are described in terms of cycles because ART services are performed in a series of several steps, over an interval of 2 weeks (4). A woman may have multiple cycles of treatment in 1 year. Types of ART treatment include in vitro fertilization, gamete intrafallopian transfer, and zygote intrafallopian transfer. In 2006, over 99% of all ART procedure cycles were in vitro fertilization treatments (4). ART procedures include fresh or frozen and nondonor or donor eggs or embryos.

The Fertility Clinic Success Rate and Certification Act of 1992 requires that fertility clinics publish their success rates and patient and treatment characteristics. Two of the ART success rates reported by CDC include the percentage of pregnancies per ART cycle and the percentage of live births (singleton only or singleton/multiple) per ART cycles initiated each year (4). In 2006, 30% of ART cycles resulted in a live-birth delivery (4).

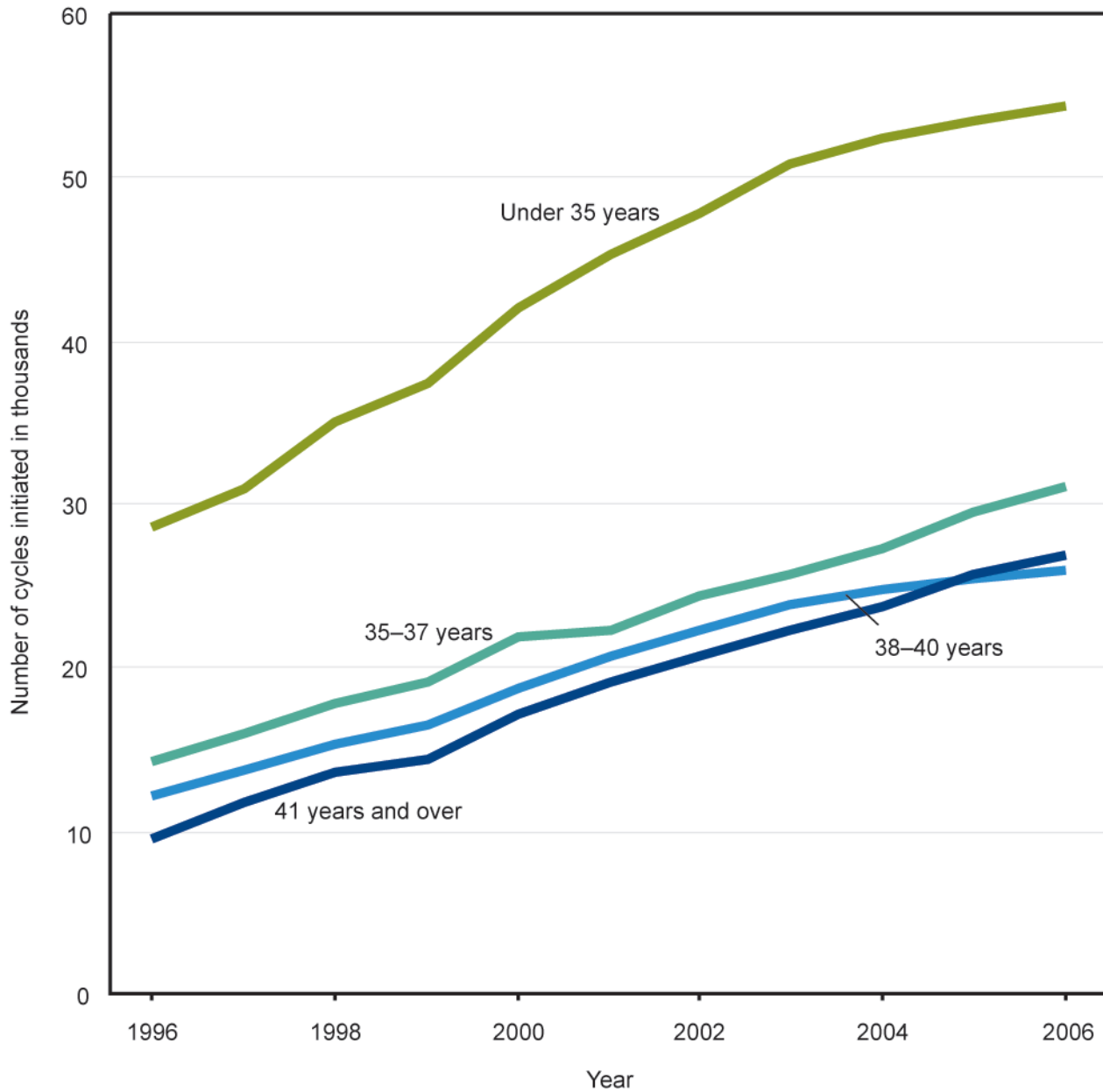
The total number of ART cycles initiated doubled from 1996 to 2006 (data table for Figure 33). In 2006, 39% of ART cycles were initiated among women under 35 years of age, another 41% among women 35–40 years, and 19% among women 41 years of age and over (data table for Figure 33).

A woman's age is an important factor associated with the chances of a live birth after ART (2,4). In 2006, 39% of ART cycles initiated in women under 35 years of age using fresh nondonor eggs or embryos resulted in a live birth, compared with 4% for women over 42 years (4). The growth in the number of ART cycles in women over age 40 has increased at a faster rate on average (11% per year) between 1996 and 2006 than the number of cycles in women 35–40 years of age (8% per year) and those under 35 years (7% per year) (Figure 33). This greater growth in the number of ART cycles among women over 40 may reflect in part a societal shift toward older motherhood (also see Table 4).

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Figure 33. Assisted reproductive technology (ART) cycles initiated among women, by age: United States, 1996–2006



NOTE: See [data table for Figure 33](#).

SOURCE: CDC/National Center for Chronic Disease Prevention and Health Promotion, National ART Surveillance System.

Prescription Drugs

The use of statin drugs increased almost 10-fold from 1988–1994 to 2003–2006; during the same time period, the use of antidiabetic drugs increased by 50%.

Some of the most important medical advances have been the development and introduction of pharmacological treatments. These include the introduction of aspirin (1899), insulin (1922), penicillin (1942), and acetaminophen (1951) (Figure 23). Two important classes of drugs—antidiabetic and cholesterol-lowering statins—have continued this pattern of technological advancement.

Diabetes is a group of conditions in which insulin is not adequately secreted or utilized. Long-term complications of high glucose levels and diabetes include cardiovascular disease, renal failure, nerve damage, and retinal damage (1,2). The two most common forms of diabetes are Type 1 and Type 2. Type 1 diabetes, affecting an estimated 1 million Americans, is an autoimmune disorder in which insulin-producing cells in the pancreas are destroyed and, therefore, adequate insulin is not produced. Type 2 diabetes—which affects about 16 million Americans—is characterized by the body's resistance to the effects of insulin (1,2). Diabetes may affect persons of all ages, although prevalence increases with age. Typically, Type 1 diabetes is diagnosed among children and young adults. In the past two decades, Type 2 diabetes has been reported among U.S. children and adolescents with increasing frequency. It is estimated that almost 200,000 persons 20 years of age and younger have been diagnosed with Type 1 or Type 2 diabetes (3). In 2003–2006, 2.5% of persons 20–39 years of age had diagnosed or undiagnosed diabetes, compared with 22.9% of adults 60 years and over (Table 51). Treatment guidelines for diabetes recommend dietary modifications, physical activity, weight loss (if overweight), and the use of needed medications (2,4).

New and emerging technologies have made it easier for people with diabetes to manage their disease. For years, people could only check their glucose levels by testing urine—a method that recognized high, but not dangerously low, glucose levels and reflected past, not current, glucose levels (5). In the 1960s, the first meter to measure glucose in the blood was invented (6). By the 1980s, blood glucose meters were widely used and, with further improvements, remain so today. Improved technology came in the form of a continuous glucose monitor, which was first approved by the FDA in 1999 (7). The new technology enables people with diabetes to monitor their blood glucose levels continuously, rather than just a few times per day.

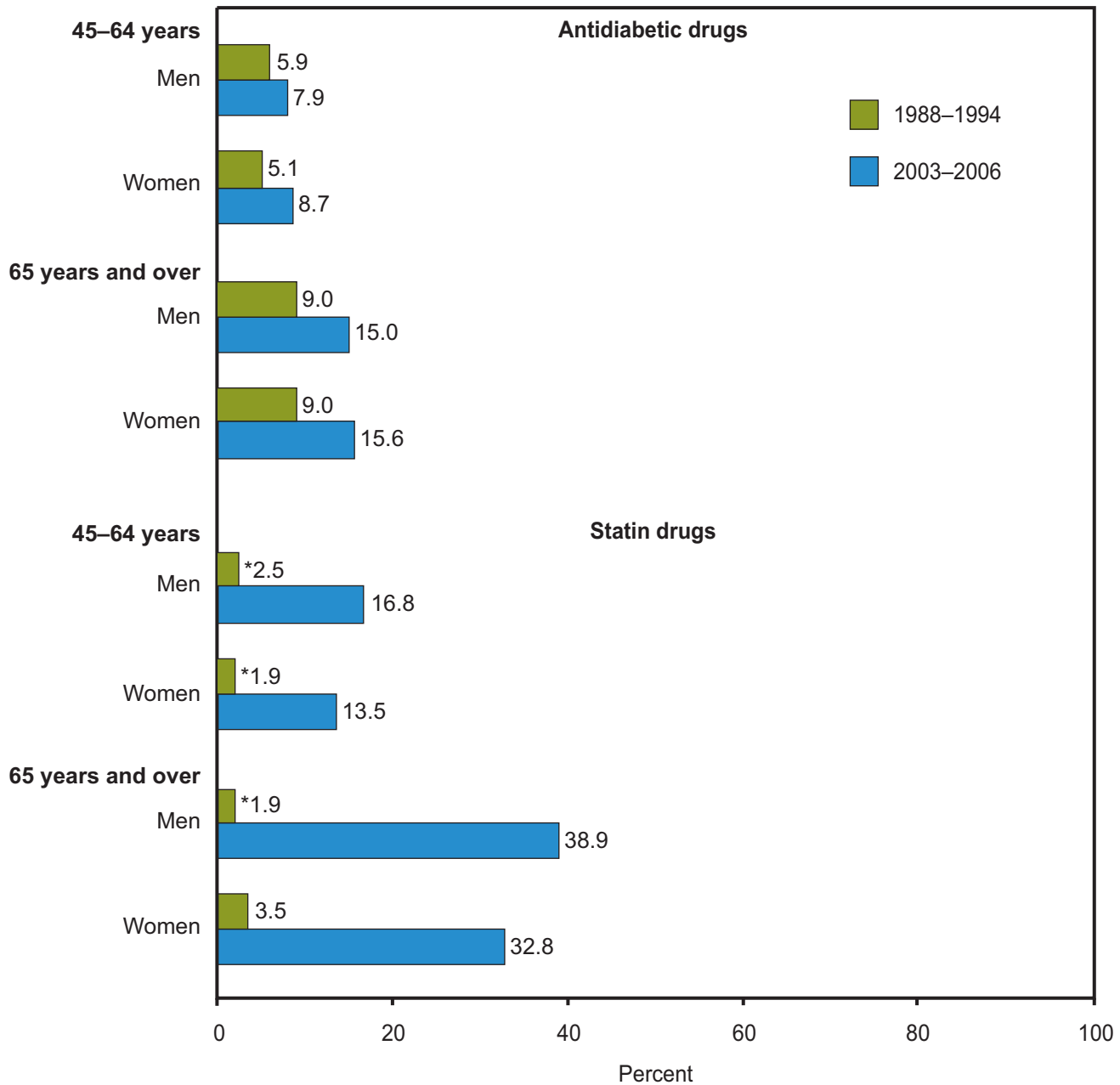
The key drug treatment for Type 1 diabetes is the use of insulin (2,4). In the 1970s, the invention of the insulin pump gave people another way to administer insulin besides self-injection. Insulin pumps are small, pager-sized machines that can deliver insulin to patients continuously in a small basal amount and provide larger boluses when needed, such as at mealtime. In addition, for many decades people had to use insulin derived from animals. The biotechnology revolution led to the production of biosynthetic human insulin (8). Since that time, other improved forms of insulin have been developed, such as long-lasting insulin for treating both forms of diabetes (9). Persons with Type 2 diabetes are often treated with oral antidiabetic medications and, in some cases, with insulin (4). The first oral antidiabetic medication was introduced in 1956, providing Type 2 diabetics with an alternative to insulin (10).

The increase in the use of antidiabetic drugs over time mirrors the increase in diagnosed diabetes. In 1988–1994, 10% of adults 45 years of age and over had been diagnosed by their physician with diabetes. By 2003–2006, this had grown to 13% (11) (also see Table 51). The use of antidiabetic drugs by adults 45 years and over increased about 50%, from 7% in 1988–1994 to 11% in 2003–2006 (data table for Figure 34). In 2003–2006, adults 65 and over were significantly more likely to take antidiabetic drugs than adults 45–64 years, reflecting differences in diabetes rates by age (also see Table 51). Consistent with the prevalence of diagnosed diabetes, there were no differences in the use of antidiabetic drugs by sex (11) (Figure 34).

High cholesterol—particularly elevated levels of low density lipoprotein (LDL) cholesterol—is a risk factor for heart disease. Cholesterol levels may be reduced by dietary modifications, increased physical activity, and the use of medications (12). Studies in the 1980s demonstrated that some drugs were effective at lowering cholesterol (13,14), but there was no widespread acceptance of the value of drug therapy to lower cholesterol, and questions lingered about whether lowering cholesterol reduced mortality from heart disease (14,15). In 1987, the first statin drug (also known as HMG-CoA reductase inhibitor) to lower cholesterol was marketed in the United States (16) (Figure 23). Other statin drugs soon followed. Statin drugs lowered cholesterol levels significantly, and studies demonstrated that statin therapy reduced the incidence of coronary artery disease and deaths from heart disease (13,14). These findings helped gain acceptance for the use of cholesterol-lowering drugs. Although there are four classes of cholesterol-lowering drugs (14,15), statins have become the drug class of choice to lower cholesterol levels because of their demonstrated efficacy and safety (14,17).

(Continued)

Figure 34. Adults 45 years of age and over reporting prescription drug use in the past month for selected drug categories, by age and sex: United States, 1988–1994 and 2003–2006



* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.
 NOTES: See [data table for Figure 34](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Prescription Drugs (Continued)

From 1988–1994 to 2003–2006, the use of statin drugs by adults 45 years of age and over increased almost 10-fold, from 2% to 22% (data table for Figure 34; see Technical Notes for the specific drugs included in this analysis). There was a concurrent decline in the percentage of Americans with high cholesterol over this time period, largely attributable to increased use of cholesterol-lowering medications, especially statins (11,18) (also see Table 69). Regardless of age category, both men and women 45 years and over saw increases in statin drug use and declines in high cholesterol. However, women 65 years and over were more likely to have high cholesterol in 2003–2006 (22%) than older men (10%) (11) but had lower use of statin drugs (33% of women compared with 39% of men; Figure 34). The higher cholesterol levels among older women may be due to hormonal changes after menopause and because women often have higher levels of high-density lipoprotein (HDL), a component of total cholesterol (18,19).

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Highly Active Antiretroviral Therapy (HAART)

The introduction of highly active antiretroviral therapy (HAART) led to substantial declines in mortality from HIV disease, including a 65% decline in HIV disease mortality among males from 1995 to 1997.

During the late 1980s, human immunodeficiency virus (HIV) disease, as well as the associated acquired immunodeficiency syndrome (AIDS), emerged as a leading cause of death among adults 25–44 years of age in the United States (1). Although rates for most other leading causes of death for adults 25–44 years of age declined or remained stable during the 1980s and early 1990s, the death rate for HIV disease among this age group steadily increased (2). During the early years of HIV, there were few treatment options for those living with HIV other than palliative care and the management of opportunistic infections, and mortality was high (3,4). Soon the virus was identified, and a blood test to detect the virus was developed (3,5). The first medication to treat HIV disease—zidovudine (AZT)—was approved in 1987 (4) (Figure 23). AZT was followed by the introduction of other antiretroviral drugs. About 20 drugs, in four classes, have been developed to control HIV disease (4–7).

Initially, researchers and clinicians thought that HIV disease could be controlled with the use of one or two antiretroviral drugs (4,5,8), but mortality and morbidity rates remained high with this treatment approach. The health of individuals living with HIV improved dramatically when clinicians began to treat individuals with a combination of three or more antiretroviral drugs that act at different stages of the HIV life cycle (4,5,8,9). These regimens of proven combinations of drugs are known as highly active antiretroviral therapy (HAART). HAART allows clinicians the flexibility to change the regimen for each patient as the course of their disease and the complex nature of HIV warrant (9,10). After HAART became the standard of care in 1996 (5–7,11), there were marked reductions in morbidity and mortality associated with HIV disease (3,5,10,12). HAART has significantly improved the prognosis of those with HIV disease (Table 48) by reducing the severity and range of opportunistic infections, thereby reducing hospital admissions (9) (Table 101). For many with access to HAART, HIV is now regarded as a chronic manageable disease (6,9).

The success of HAART is demonstrated by the sharp decline in death rates from HIV disease after HAART's adoption as the standard of care in 1996. From 1987 to 1995 (pre-HAART), HIV mortality increased sharply (Figure 35). From 1995 (pre-HAART) to 1997 (widespread HAART use), the death rate from HIV disease among males declined by two-thirds, from 27.3 deaths per 100,000 population in 1995 to 9.6 in 1997 (data table for Figure 35). Declines in HIV death rates were also observed for females and all racial and ethnic groups. The rate of decline from 1995 to 1997 ranged from 44% for black females to 73% for non-Hispanic white males (data table for Figure 35). These differences in mortality declines by racial and ethnic group and sex reflect differences in access to and use of HAART (10,12). After 1997, the rate of decline for HIV mortality slowed across all groups (Figure 35).

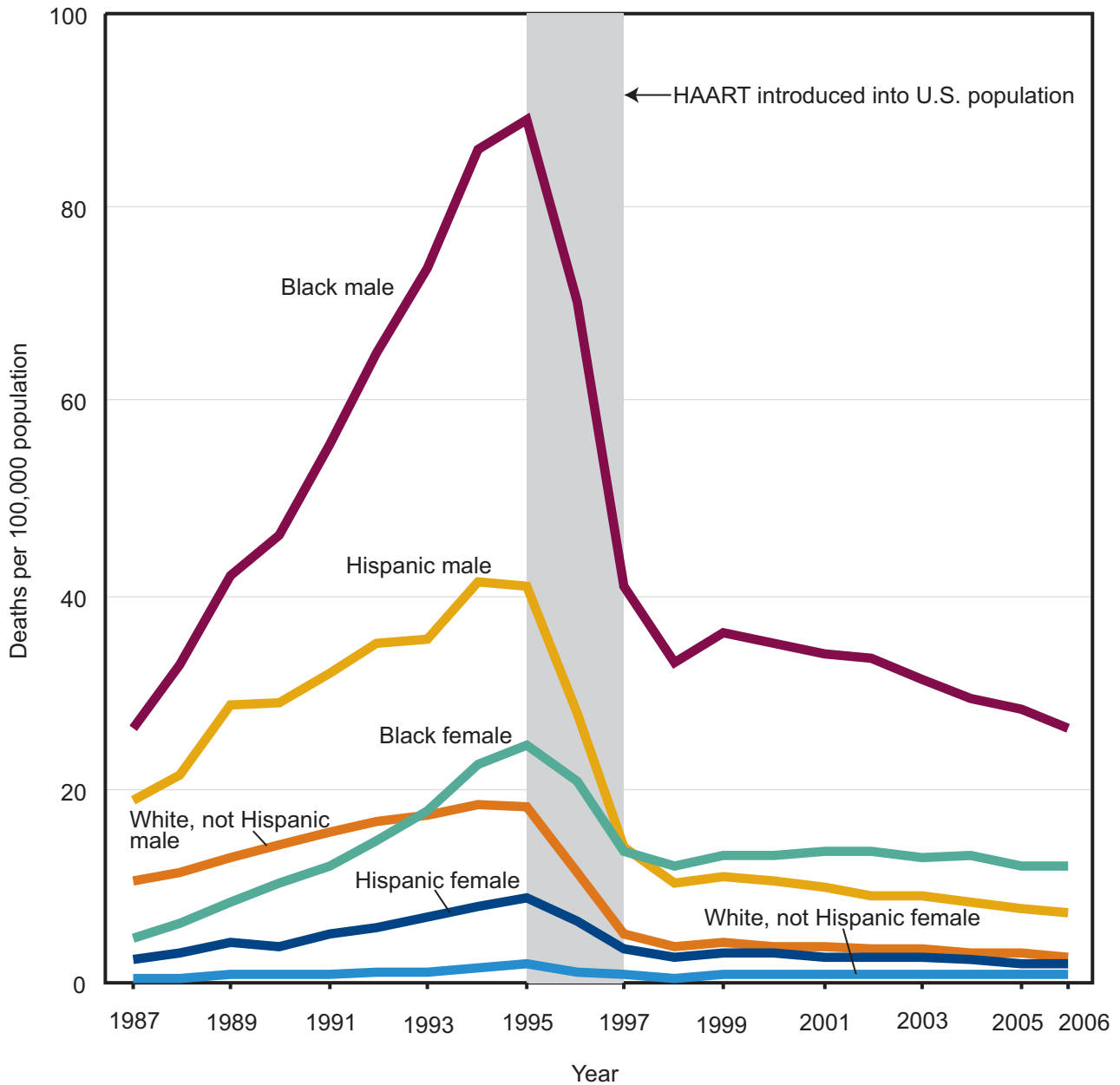
In 2006, gender and racial and ethnic differences in HIV mortality persisted (Figure 35). Some research focusing on access to HAART therapy suggests that Hispanic and black persons are less likely to have access to and utilize HAART treatment than non-Hispanic white persons, and women are less likely to have access to and utilize HAART treatment compared with men (10,13,14).

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(Continued)

Figure 35. Death rates for human immunodeficiency virus (HIV) disease for all ages, by sex and race and Hispanic origin: United States, 1987–2006



NOTES: Data are age-adjusted. HAART is highly active antiretroviral therapy. See [data table for Figure 35](#).

SOURCE: CDC/NCHS, National Vital Statistics System.

Highly Active Antiretroviral Therapy (HAART) *(Continued)*

References *(Continued)*

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Costs for Hospitalizations With Procedures

Aggregate national costs adjusted for inflation for hospitalizations with five out of the six most costly hospital procedures have increased substantially since 1999.

Advances in technology contribute to overall health care costs and expenditures. In 2007, \$697 billion was spent for care in hospitals—where the most complex procedures are performed and the most complex technologies used—representing 37% of personal health care expenditures in that year (data table for Figure 21). In 2006, almost two-thirds of hospital discharges among adults had at least one procedure performed during the stay (Table 103), and almost all procedures require some type of medical technology.

Using data from the Healthcare Cost & Utilization Project, Nationwide Inpatient Sample, Figure 36 shows the costs for hospital discharges with the six principal procedures that contributed the most to aggregate national hospital costs in 2006. The costs shown were for the entire hospital stay, not just the cost of performing the principal procedure (see Technical Notes for information on how costs are derived). Principal procedures were identified using Clinical Classification Software, which combines relevant *International Classification of Diseases, ninth revision, Clinical Modification (ICD-9-CM)* procedure codes into meaningful groups (1) (see Technical Notes).

The principal procedure contributing the most to national hospital costs in 2006 was respiratory intubation and mechanical ventilation (Figure 36). This technology provides machinery that breathes for patients when they cannot breathe on their own for a variety of medical reasons, or for administering anesthesia during surgery (2). Virtually all (98%) hospital discharges in 2006 with a principal procedure of respiratory intubation and mechanical ventilation were for medical reasons and were not associated with an operating room procedure (3). The number of hospital discharges in which respiratory intubation and mechanical ventilation was the principal procedure increased from 548,000 in 1999 to 712,000 in 2006 (data table for Figure 36). Hospital discharges with this principal procedure were estimated to have hospital costs of approximately \$15.7 billion dollars in 2006, an increase of almost 50% since 1999 (in 2006 dollars) (Figure 36). Respiratory intubation and mechanical ventilation have been estimated to contribute an extra \$1,500 per day (in 2002) to the cost for an intensive care unit stay (4).

In 2006, the patient died during 26% of the stays with a principal procedure of respiratory intubation and mechanical ventilation (5).

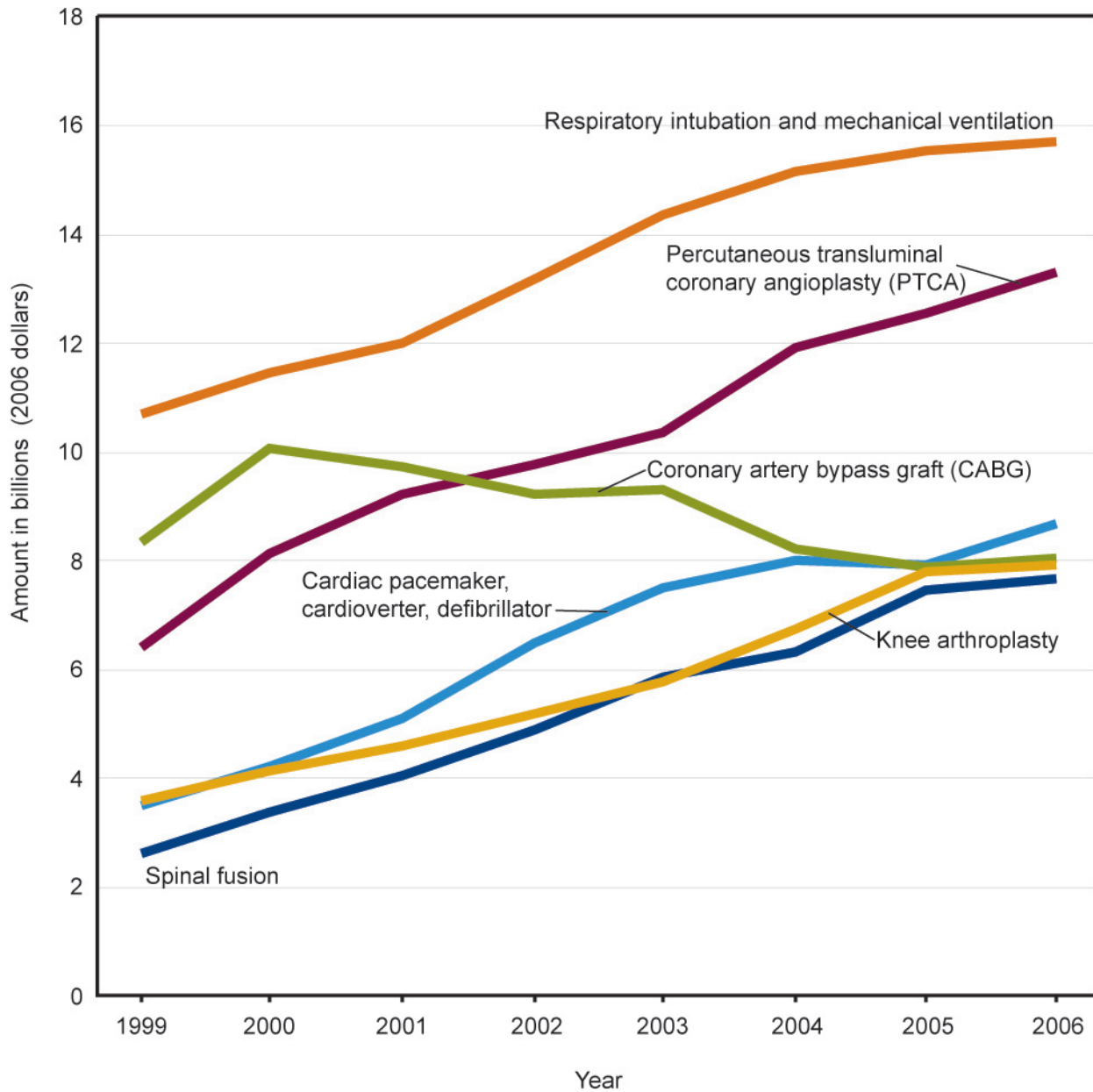
Heart disease is the leading cause of death in the United States (Table 28), and the next three most expensive principal procedures are all cardiac-related. During percutaneous transluminal coronary angioplasty (PTCA) procedures, narrowed (or stenotic) arteries are treated by means of a catheter with a balloon tip, to reduce blockages and improve blood flow. Stents are inserted during most PTCA procedures (6) (also see Figure 28). Cardiac pacemakers, cardioverters, and defibrillators are medical devices inserted to regulate heart rate or rhythm (7). Coronary artery bypass graft (CABG) procedures are used when less invasive PTCA cannot be performed or is not medically indicated and involve bypassing a blocked artery or arteries with a blood vessel taken from another part of the body (6).

The number of hospital discharges with PTCA as the principal procedure increased steadily since 1999, from 502,000 to 828,000 in 2006 (a 65% increase), and inflation-adjusted national hospital costs associated with PTCA discharges increased 108% (Figure 36). Hospitalizations with cardiac pacemaker, cardioverter, or defibrillator as the principal procedure increased 64% during the period, while inflation-adjusted aggregate costs increased 147%. In contrast to PTCA hospitalizations, which increased substantially during the period, hospitalizations with CABG as the principal procedure decreased by 24%. However, aggregate costs for CABG hospitalizations declined only by 3%, and hospitalizations with these procedures ranked as the fourth most expensive in terms of aggregate hospital costs in 2006.

The next two principal procedures with the highest contribution to national hospital costs in 2006 were orthopedic in nature: knee arthroplasty (or knee replacement) (also see Figure 27) and spinal fusion. During knee arthroplasty procedures, part of or the entire knee joint is replaced by a prosthesis (8). Technologies associated with knee replacement procedures have evolved over time through improved prosthetic materials and surgical techniques (8). The number of hospital discharges with knee arthroplasty procedures increased 76% from 311,000 in 1999 to 547,000 in 2006, and inflation-adjusted national hospital costs associated with knee replacement discharges have increased 122% since 1999 (Figure 36).

(Continued)

Figure 36. Costs for hospital stays with the six most expensive principal procedures: United States, 1999–2006



NOTES: The six most expensive principal procedures were selected based on aggregate national hospital costs in 2006. Costs were for the entire hospital stay, not just the cost of performing the principal procedure. See [data table for Figure 36](#).

SOURCE: Agency for Healthcare Research and Quality, Healthcare Cost & Utilization Project.

Costs for Hospitalizations With Procedures *(Continued)*

Spinal fusion surgery uses bone grafts, with or without screws, plates, cages, or other devices, to stabilize the back by joining together vertebrae or spinal bones (9). This surgery is commonly performed in conjunction with removal of a herniated disk. The efficacy of spinal fusion for the most common indication (degenerative disk disease) remains unclear, and there is concern that rising procedure rates are being driven by technological advances (improved anesthesia, imaging, types of prosthetics and devices) and financial incentives (10). Hospital discharges with spinal fusion as the principal procedure increased 82% during the period, while aggregate costs increased 189% in 2006 dollars (Figure 36).

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Technical Notes

Data Sources and Comparability

Data for the Chartbook come from many surveys and data systems and cover a broad range of years. Detailed descriptions of data sources are provided in [Appendix I](#).

Data Presentation

Many measures in the Chartbook section are shown for people in specific age groups because of the strong effect age has on most health outcomes. Some estimates are age-adjusted using the age distribution of the 2000 standard population, and this is noted in the data tables that accompany each figure (see [Appendix II, Age adjustment](#)). Age-adjusted rates are computed to eliminate differences in observed rates that result from age differences in population composition. For some figures, data years are combined to increase sample size and reliability of the estimates. Some charts present time trends and others focus on differences in estimates among population subgroups for the most recent time point available.

Graphic Presentation

Most trends are shown on a linear scale to emphasize absolute differences over time. The linear scale is the scale most frequently used and recognized, and it emphasizes the absolute changes between data points over time (1). The time trends for overall mortality measures are shown on a logarithmic (log) scale to emphasize the rate of change and to enable measures with large differences in magnitude to be shown on the same chart. Log scales emphasize the relative or percentage change between data points. Readers are cautioned that one potential disadvantage to the log scale is that the absolute magnitude of changes may appear smaller than the untransformed statistics would indicate (2). When interpreting data on a log scale, the following points should be kept in mind:

- A sloping straight line indicates a constant rate (not amount) of increase or decrease in the values.
- A horizontal line indicates no change.
- The slope of the line indicates the rate of increase or decrease.
- Parallel lines, regardless of their magnitude, depict similar rates of change (1).

Tabular Presentation

Following the Technical Notes are data tables that present the data points graphed in each figure. Some data tables contain additional data that were not graphed because of space considerations. Standard errors for data points are provided for many measures. Additional information clarifying and qualifying the data are included in table notes and in [Appendixes I and II](#) where indicated.

Survey Questions and Coding

Additional information on the data used in the Chartbook and Special Feature, including the exact wording of questions and coding schemes, is detailed below.

National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS)

Figure 25: The trend shown in this figure should be interpreted with caution because the type of information available on imaging scans differed by health care setting and years shown.

For physician office visits and hospital outpatient department visits: In 1996–2000, the questionnaire forms contained check boxes for MRI or CT scans ordered or provided during the visit. There was no check box for PET scans, but there was a field for other procedures ordered or performed during the visit. In 2001–2004, the questionnaire forms did not include check boxes for MRI, CT, or PET scans; thus, these data years are not shown in [Figure 25](#). For 2005 and 2006, the questionnaire forms contained a check box for MRI, CT, or PET scans and fields for other types of procedures ordered or performed. In 2005–2006, the fields for other types of procedures ordered or performed during the visit were reviewed by NCHS during the file editing process and, if they contained the following set of procedure codes, the check box for MRI, CT, or PET scans was edited by NCHS to include information from the other procedure fields if it was not already present. The *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM) procedure codes used by NCHS to identify advanced imaging scans included: 00.31, 00.32, 87.03, 87.41, 87.71, 88.01, 88.38, 92.01–92.05, 92.09, 92.11–92.19, 95.16, and 88.91–88.97. To make the analysis for [Figure 25](#) more comparable over time, the write-in fields from the 1996–2000 questionnaires were searched for the above list of procedures and included in the estimates. Thus, estimates published in this analysis for physician offices and hospital outpatient department imaging

visits may differ slightly from those previously published elsewhere that did not include data on advanced imaging scans in the write-in fields.

In 1996–2006, the NHAMCS emergency department questionnaire included check boxes for MRI or CT scans ordered or provided during the visit. There is no check box for PET scans because these scans are rarely ordered or performed in an emergency department. There were no write-in fields for other procedures on this questionnaire.

National Health and Nutrition Examination Survey (NHANES)

Figure 8: In 2005 and 2006, the sleep questionnaire was administered to persons 16 years of age and over. Proxies were permitted to answer the sleep questions, but typically people answer these questions for themselves. Persons who responded “often” (5–15 times in the past month) or “almost always” (16–30 times in the past month) to any of the following three questions were considered to have had trouble sleeping through the night in the past month. “In the past month, how often did you/[sample person] have trouble falling asleep?” “In the past month, how often did you/[sample person] wake up during the night and have trouble getting back to sleep?” “In the past month, how often did you/[sample person] wake up too early in the morning and were unable to get back to sleep?”

Respondents were also asked: “In the past month, how often did you/[sample person] take sleeping pills or other medication to help you/[sample person] sleep?” Persons who replied “often” (5–15 times in the past month) or “almost always” (16–30 times in the past month) were considered as often or almost always taking sleeping pills in the past month.

Figure 12: Depression is a self-reported assessment using the Patient Health Questionnaire (PHQ–9), a nine-item screening instrument that asks questions about the frequency of symptoms of depression over the past 2 weeks. The survey questions were:

Over the last 2 weeks, how often have you been bothered by the following problems:

- Little interest or pleasure in doing things?
- Feeling down, depressed, or hopeless?
- Trouble falling or staying asleep, or sleeping too much?
- Feeling tired or having little energy?
- Poor appetite or overeating?
- Feeling bad about yourself—or that you are a failure or have let yourself or your family down?
- Trouble concentrating on things, such as reading the newspaper or watching TV?

- Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual?
- Thoughts that you would be better off dead or of hurting yourself in some way?

Respondents selected a response category based on the frequency of their symptoms over the last 2 weeks. The response categories were given a score from 0 to 3. A total score was calculated ranging from 0 to 27. Depression was defined as a PHQ–9 score of 10 or higher.

<i>Response</i>	<i>Score</i>
Not at all	0
Several days	1
More than half the days	2
Nearly every day	3

For more information, see the NHANES survey documentation for this screener, available from: http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/dpq_d.pdf.

Limitations to the prevalence estimates include the possibility that severely depressed persons disproportionately chose not to participate in the survey or health examination, which included administration of the PHQ–9. Therefore, the prevalence estimates based on these data may slightly underestimate the actual prevalence of depression. In addition, people who were being successfully treated for depression would not be identified as depressed by the PHQ–9. For more information see: Pratt LA, Brody DJ. Depression in the United States household population, 2005–2006. NCHS data brief; no 7. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/databriefs/db07.htm>.

Figure 34: The questionnaire administered to all participants included a question on whether they had taken a prescription drug in the past month. Those who answered “yes” were asked to show the interviewer the medication containers for all the prescriptions. For each drug reported, the interviewer entered the product’s complete name from the container. If no container was available, the interviewer asked the participant to verbally report the name of the drug. More information on prescription drug data collection and coding in NHANES is available from: http://www.cdc.gov/nchs/data/nhanes/frequency/rxq_rxdoc.pdf. Also see [Appendix I, National Health and Nutrition Examination Survey](#). Respondents reporting use of a prescription drug containing any of the following ingredients: atorvastatin, cerivastatin, fluvastatin, lovastatin, pravastatin, simvastatin were classified as taking a statin drug.

Antidiabetic drugs were identified using the following drug categories: for 1988–1994 data, drugs in NDC class 1036–blood glucose regulators, were included; for 2003–2006 data, drugs in the Multum Lexicon Therapeutic Classification Scheme, second category, 99–antidiabetic agents, were included.

U. S. Department of Labor, Bureau of Labor Statistics (BLS), Survey of Occupational Injuries and Illnesses (SOII)

Figure 11: In the SOII, an occupational injury is any injury, such as a cut, fracture, sprain, or amputation, that results from a work-related event or from a single instantaneous exposure in the work environment. An occupational illness is any abnormal condition or disorder other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. To determine whether an injury or illness is recordable, employers use a decision framework developed by the Occupational Safety and Health Administration (OSHA). For more information on this framework, see: <http://www.osha.gov/recordkeeping/entryfaq.html>. The SOII data represent persons employed in private industry establishments in the United States. The survey excludes the self-employed, farms with fewer than 11 employees, private households, federal government agencies, and state and local government agencies. For more information, see [Appendix I, Survey of Occupational Injuries and Illnesses](#), and see: Occupational safety and health statistics. In: BLS handbook of methods [online]. U.S. Bureau of Labor Statistics. 2008. Available from: <http://www.bls.gov/opub/hom/pdf/homch9.pdf>.

Three major data collection changes—in 1992, 1995, and 2002—affect the interpretation of SOII data. In 1992, the survey was redesigned, and detailed characteristics about workplace injury and illness cases began to be collected. In addition, a separate program to track workplace fatalities—the Census of Fatal Occupational Injuries—was introduced. Starting with 1995 data, employers were required to submit annual summaries of occupational injuries and illnesses.

Effective January 1, 2002, OSHA revised its requirement and forms for recording occupational injuries and illnesses. Prior to 2002, injury and illness cases involved days away from work, days of restricted work activity, or both (lost workday cases). Starting in 2002, injury and illness cases may involve days away from work, job transfer, or restricted work activity. Restriction may involve shortened hours, a temporary job change, or temporary restrictions on certain duties (for example, no heavy lifting) of a worker's regular job. Other

changes include increasing the types of events exempt from reporting. See: <http://www.osha.gov/recordkeeping/index.html> for details about the revised recordkeeping requirements.

Because of the revised recordkeeping rule, the estimates from the 2002 survey and beyond are not comparable with those from previous years. According to a BLS analysis, changes to the program prior to 2002 affected the type and amount of data available but did not change the basic definition of recordable cases of injuries and illnesses. Thus, data on the number and rate of occupational injuries and illnesses are consistent from 1972 through 2001. For more information, see: Wiatrowski WJ. Occupational injury and illnesses: New recordkeeping requirements. *Mon Labor Rev* 2004;127(12):10–24. Available from: <http://www.bls.gov/opub/mlr/2004/12/art2full.pdf>.

U.S. Department of Veterans Affairs

Figure 3: Veterans data include information about living veterans from the 50 states, the District of Columbia, Puerto Rico, and outlying U.S. areas. Data only include persons who served on active duty. Service-connected disability (SCD) data used for this analysis are from the U.S. Census Bureau, based on data from the Department of Veterans Affairs. SCD status data for 1970 and 1980 are from tables 618 and 620 of the 1981 *Statistical Abstract of the United States*. Disability data for 1990 and 2000 are from table 506 of the 2009 *Statistical Abstract of the United States*. SCD data for 2007 are based on unpublished data from the Department of Veterans Affairs. SCD status is based on the number of living veterans qualified as having an SCD incurred or aggravated while on active duty and receiving financial compensation for that SCD. Data are as of September 30 for 1980 to present. Data are as of June 30 for 1970. Percentages are based on numbers in thousands. The total number of living veterans for 2007 is from the Veterans Administration. Veterans are classified in their earliest period of service. For example, a living veteran who served in the Vietnam era, the Korean conflict, and World War II, is classified as a World War II veteran for this analysis. Data do not include living veterans who served prior to World War II. It is estimated that there are only about 300 living veterans from World War I. Gulf War service is from August 2, 1990, to present and does not reflect deployment or service location.

The *Statistical Abstract of the United States* is available from: <http://www.census.gov/compendia/statab/>. Veterans Administration data are available from: <http://www1.va.gov/vetdata/page.cfm?pg=15>.

Healthcare Cost & Utilization Project, Nationwide Inpatient Sample

Figure 36: The costs shown are for the entire hospital stay, not just the cost of performing the principal procedure. Costs were derived from total hospital charges (the amount the hospital billed for the hospital stay) by using cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare & Medicaid Services (CMS). For each hospital, a hospital-wide cost-to-charge ratio was used to transform charges into costs. Costs will tend to reflect the actual costs to produce hospital services, whereas charges represent what the hospital billed for the care. Hospital costs do not include professional billing (physician fees). Hospital costs were adjusted to 2006 dollars by using the gross domestic product price index.

Principal procedures were identified by using Clinical Classifications Software (CCS), which combines relevant *International Classification of Diseases, ninth revision, Clinical Modification* (ICD-9-CM) procedure codes into meaningful groups. The principal procedure is the procedure that was performed for definitive treatment, rather than one performed for diagnostic or exploratory purposes or the procedure that was necessary to take care of a complication. If two procedures appear to meet this definition, the one most related to the principal diagnosis is selected as the principal procedure. CCS codes were as follows: 216, respiratory intubation and mechanical ventilation; 45, percutaneous transluminal coronary angioplasty (PTCA); 44, coronary artery bypass graft; 48, cardiac pacemaker, cardioverter, defibrillator; 158, spinal fusion; and 152, knee arthroplasty.

References

1. Page RM, Cole GE, Timmreck TC. Basic epidemiological methods and biostatistics: A practical guidebook. Sudbury, MA: Jones & Bartlett; 1995.
2. Jekel JF, Elmore JG, Katz DL. Epidemiology biostatistics and preventive medicine. Philadelphia, PA: W.B. Saunders; 1996.

Data Tables for Figures 1–36

Data table for Figures 1A and 1B. Total population, by age: United States, 1980–2050

Year	All ages	Under 18 years	18–44 years	45–64 years	65–74 years	75 years and over
Number						
1980	226,545,805	63,754,960	92,738,756	44,502,662	15,580,605	9,968,822
1990	248,709,873	63,923,717	107,537,959	46,169,302	18,045,495	13,033,400
2000	281,421,906	72,293,812	112,183,705	61,952,636	18,390,986	16,600,767
2007	301,621,157	73,901,733	113,244,630	76,586,836	19,352,149	18,535,809
2010	310,232,863	75,217,106	113,807,468	80,979,577	21,462,599	18,766,113
2020	341,386,665	81,685,129	120,540,869	84,356,197	32,312,186	22,492,284
2030	373,503,674	87,815,218	129,300,761	84,295,780	38,784,325	33,307,590
2040	405,655,295	93,986,401	138,430,208	92,000,295	36,895,223	44,343,168
2050	439,010,253	101,573,687	150,399,841	98,489,752	40,112,637	48,434,336
Percent distribution						
1980	100.0	28.1	40.9	19.6	6.9	4.4
1990	100.0	25.7	43.2	18.6	7.3	5.2
2000	100.0	25.7	39.9	22.0	6.5	5.9
2007	100.0	24.5	37.5	25.4	6.4	6.1
2010	100.0	24.2	36.7	26.1	6.9	6.0
2020	100.0	23.9	35.3	24.7	9.5	6.6
2030	100.0	23.5	34.6	22.6	10.4	8.9
2040	100.0	23.2	34.1	22.7	9.1	10.9
2050	100.0	23.1	34.3	22.4	9.1	11.0

NOTES: Data are for the resident population. Data for 1950 exclude Alaska and Hawaii. Data for 2010–2050 are projected. (See [Appendix II, Population.](#))

SOURCES: U.S. Bureau of the Census: 1950 Nonwhite population by race. Special report P–E, No. 3B. Washington, DC: U.S. Government Printing Office, 1951 [data for 1950]; U.S. Census of Population: 1960, Number of inhabitants, PC(1)–A1, United States Summary, 1964 [data for 1960]; Number of inhabitants, final report PC(1)–A1, United States Summary, 1971 [data for 1970]; 1980 Census of Population, General population characteristics, United States Summary (PC80–1–B1) [data for 1980]; 1990 Census of Population, General population characteristics, United States Summary (CP–1–1) [data for 1990]. U.S. Census Bureau: Annual estimates of the population by sex and five-year age groups for the United States: April 1, 2000, to July 1, 2007 (NC–EST2007–01), available from: <http://www.census.gov/popest/national/asrh/NC-EST2007-sa.html> [data for 2000 and 2007]; National population projections by single year of age, sex, race, and Hispanic origin, 2008. Detail file available from: <http://www.census.gov/population/www/projections/downloadablefiles.html> [data for projections].

Data table for Figure 2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2008

Race and Hispanic origin	All ages				Under 18 years			
	1980	1990	2000	2008	1980	1990	2000	2008
	Percent distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanic or Latino	6.4	9.0	12.5	15.4	8.8	12.2	17.1	21.4
Not Hispanic or Latino:								
White	79.9	75.7	69.5	65.5	74.2	68.9	61.3	56.4
Black or African American	11.5	11.8	12.2	12.3	14.5	14.7	14.9	14.5
American Indian or Alaska Native	0.6	0.7	0.7	0.8	0.8	1.0	1.0	0.9
Asian	1.6	2.8	3.7	4.4	1.7	3.1	3.5	4.1
Native Hawaiian or Other Pacific Islander . . . . .	...	...	0.1	0.1	...	...	0.2	0.1
2 or more races . . . . .	...	...	1.2	1.4	...	...	2.2	2.6

Race and Hispanic origin	18 years and over			
	1980	1990	2000	2008
	Percent distribution			
Total	100.0	100.0	100.0	100.0
Hispanic or Latino	5.5	7.9	11.0	13.5
Not Hispanic or Latino:				
White	82.1	78.0	72.3	68.5
Black or African American	10.4	10.8	11.3	11.6
American Indian or Alaska Native	0.5	0.6	0.7	0.7
Asian	1.5	2.7	3.8	4.5
Native Hawaiian or Other Pacific Islander . . . . .	...	...	0.1	0.1
2 or more races . . . . .	...	...	0.9	1.0

Race and Hispanic origin	18–44 years				45–64 years			
	1980	1990	2000	2008	1980	1990	2000	2008
	Percent distribution							
Total . . . . .	...	100.0	100.0	100.0	...	100.0	100.0	100.0
Hispanic or Latino	6.8	9.8	14.6	18.2	4.4	6.2	7.8	10.1
Not Hispanic or Latino:								
White	79.2	74.2	66.2	61.2	84.6	81.1	76.8	73.2
Black or African American	11.5	12.1	12.8	13.2	9.3	9.7	10.3	10.9
American Indian or Alaska Native . . . . .	...	0.7	0.8	0.8	...	0.6	0.6	0.7
Asian . . . . .	...	3.2	4.3	5.2	...	2.5	3.5	4.2
Native Hawaiian or Other Pacific Islander . . . . .	...	...	0.2	0.2	...	...	0.1	0.1
2 or more races . . . . .	...	...	1.1	1.3	...	...	0.8	0.8

See footnotes at end of table.

Data table for Figure 2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2008—Con.

Race and Hispanic origin	65–74 years				75 years and over			
	1980	1990	2000	2008	1980	1990	2000	2008
	Percent distribution							
Total . . . . .	...	100.0	100.0	100.0	...	100.0	100.0	100.0
Hispanic or Latino	2.9	4.0	5.9	7.5	2.5	3.3	4.0	6.1
Not Hispanic or Latino:								
White	87.4	85.9	81.7	78.5	89.1	87.8	86.2	82.4
Black or African American	8.5	8.1	8.7	9.0	7.5	7.5	7.2	7.5
American Indian or Alaska Native . . . . .	...	0.4	0.4	0.6	...	0.3	0.3	0.4
Asian . . . . .	...	1.6	2.7	3.7	...	1.1	1.9	3.0
Native Hawaiian or Other Pacific Islander . . . . .	...	...	0.1	0.1	...	...	0.0	0.1
2 or more races . . . . .	...	...	0.5	0.7	...	...	0.4	0.5

0.0 Quantity more than zero but less than 0.05.

... Category not applicable.

NOTES: Populations for age groups may not sum to 100% due to rounding. Data are for the resident population. Persons of Hispanic origin may be of any race. Race data for 2000 and beyond are not directly comparable with data for 1980 and 1990. Individuals could report only one race in 1980 and 1990 and more than one race in 2000 and beyond. Persons who selected only one race in 2000 and beyond are in single-race categories; persons who selected more than one race in 2000 and beyond are shown as having 2 or more races and are not included in single-race categories. In 1980 and 1990, the Asian category included Asian and Native Hawaiian or Other Pacific Islander; in 2000 and beyond, this category includes only Asian. Data not available for American Indian or Alaska Native and Asian populations by selected age groups in 1980. (See [Appendix II, Hispanic origin; Race.](#))

SOURCES: U.S. Census Bureau: 1980 census of population and housing county population, by age, sex, race, and Spanish origin (Preliminary OMB-consistent modified race) Technical Documentation. D1–D80–CTYP–14–TECHP. Washington, DC: U.S. Government Printing Office, 1982; Monthly postcensal resident populations, from April 1, 1990, to July 1, 2000, by age, sex, race, and Hispanic origin. Available from: http://www.census.gov/popest/archives/1990s/nat_monthly_resident.html [for April 1, 1990, and November 1, 2000]; Monthly postcensal resident populations, from July 1, 2000, to July 1, 2008, by age, sex, race, and Hispanic origin. Available from: <http://www.census.gov/popest/national/asrh/2007-nat-res.html> [for April 1, 2000 and July 1, 2008].

Data table for Figure 3. Population of living veterans, by service-connected disability status and period of service: United States, selected years, 1970–2007

<i>Service-connected disability (SCD) status</i>	<i>1970</i>	<i>1980</i>	<i>1990</i>	<i>2000</i>	<i>2007</i>
	Number in millions				
Receiving compensation for SCD	2.1	2.3	2.2	2.3	2.8
Not receiving compensation for SCD	25.6	27.8	25.3	24.1	21.0
	Percent				
Receiving compensation for SCD	7.6	7.6	8.0	8.7	11.8

<i>Earliest period of service</i>	<i>2007</i>
	Number in millions
Total	23.8
Period of service:	
World War II	2.9
Korean conflict	2.7
Vietnam era	7.6
Gulf War (service from 8/2/1990 to present)	4.6
Peacetime	6.1

NOTES: Includes data on living veterans from the 50 states, the District of Columbia, Puerto Rico, and outlying U.S. areas. Data only include persons who served on active duty. Data do not include living veterans who served prior to World War II. Period-of-service data are based on data from U.S. Department of Veterans Affairs. Veterans are classified by their earliest period of service. Gulf War service is from August 2, 1990, to present and does not reflect deployment or service location. SCD status is based on the number of living veterans qualified as having an SCD incurred or aggravated while on active duty and receiving financial compensation for that SCD. SCD status data are from the *Statistical Abstracts of the United States*, U.S. Census Bureau, based on data from U.S. Department of Veterans Affairs. Data as of September 30 for 1980 to present. Data as of June 30 for 1970. Percents are based on numbers in thousands. For more information on data sources, see the [Technical Notes](#).

SOURCES: U.S. Department of Veterans Affairs and U.S. Census Bureau.

Data table for Figure 4. Poverty by age: United States, 1966–2007

Year	All ages	Under 18 years	18–64 years	65 years and over
Percent of persons with family income below the poverty level				
1966	14.7	17.6	10.5	28.5
1967	14.2	16.6	10.0	29.5
1968	12.8	15.6	9.0	25.0
1969	12.1	14.0	8.7	25.3
1970	12.6	15.1	9.0	24.6
1971	12.5	15.3	9.3	21.6
1972	11.9	15.1	8.8	18.6
1973	11.1	14.4	8.3	16.3
1974	11.2	15.4	8.3	14.6
1975	12.3	17.1	9.2	15.3
1976	11.8	16.0	9.0	15.0
1977	11.6	16.2	8.8	14.1
1978	11.4	15.9	8.7	14.0
1979	11.7	16.4	8.9	15.2
1980	13.0	18.3	10.1	15.7
1981	14.0	20.0	11.1	15.3
1982	15.0	21.9	12.0	14.6
1983	15.2	22.3	12.4	13.8
1984	14.4	21.5	11.7	12.4
1985	14.0	20.7	11.3	12.6
1986	13.6	20.5	10.8	12.4
1987	13.4	20.3	10.6	12.5
1988	13.0	19.5	10.5	12.0
1989	12.8	19.6	10.2	11.4
1990	13.5	20.6	10.7	12.2
1991	14.2	21.8	11.4	12.4
1992	14.8	22.3	11.9	12.9
1993	15.1	22.7	12.4	12.2
1994	14.5	21.8	11.9	11.7
1995	13.8	20.8	11.4	10.5
1996	13.7	20.5	11.4	10.8
1997	13.3	19.9	10.9	10.5
1998	12.7	18.9	10.5	10.5
1999	11.9	17.1	10.1	9.7
2000	11.3	16.2	9.6	9.9
2001	11.7	16.3	10.1	10.1
2002	12.1	16.7	10.6	10.4
2003	12.5	17.6	10.8	10.2
2004	12.7	17.8	11.3	9.8
2005	12.6	17.6	11.1	10.1
2006	12.3	17.4	10.8	9.4
2007	12.5	18.0	10.9	9.7

NOTES: Data are for the civilian noninstitutionalized population. Poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. (See [Appendix II, Poverty](#). Also see [Table 3](#).)

SOURCES: U.S. Census Bureau, Current Population Survey, 1967–2008 Annual Social and Economic Supplements. DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance coverage in the United States: 2007. U.S. Census Bureau, Current Population Reports, P60–235. Washington, DC: U.S. Government Printing Office; 2008. Available from: <http://www.census.gov/prod/2008pubs/p60-235.pdf>.

Data table for Figure 5. Low income by age, race and Hispanic origin: United States, 2007

Characteristic	Percent of poverty level			
	Below 100%	100%– less than 200%	Below 100%	100%– less than 200%
	Percent		Number in millions	
All ages				
All races and origins	12.5	18.0	37.3	53.8
Hispanic or Latino	21.5	29.1	9.9	13.4
Black or African American only.	24.5	23.0	9.2	8.6
Asian only	10.2	14.8	1.3	2.0
White only, not Hispanic or Latino	8.2	14.7	16.0	28.8
Under 18 years				
All races and origins	18.0	21.2	13.3	15.7
Hispanic or Latino	28.6	32.2	4.5	5.0
Black or African American only.	34.5	26.1	3.9	2.9
Asian only	12.5	16.7	0.4	0.5
White only, not Hispanic or Latino	10.1	16.0	4.3	6.7
18–64 years				
All races and origins	10.9	15.1	20.4	28.4
Hispanic or Latino	17.9	26.9	5.0	7.5
Black or African American only.	19.8	20.4	4.6	4.7
Asian only	9.2	13.3	0.8	1.2
White only, not Hispanic or Latino	7.7	11.7	9.6	14.6
65 years and over				
All races and origins	9.7	26.4	3.6	9.7
Hispanic or Latino	17.1	34.2	0.4	0.9
Black or African American only.	23.2	30.8	0.7	1.0
Asian only	11.3	20.9	0.1	0.3
White only, not Hispanic or Latino	7.4	25.4	2.2	7.5

NOTES: Data are for the civilian noninstitutionalized population. Persons of Hispanic origin may be of any race. Black and Asian races include persons of both Hispanic and non-Hispanic origin. Populations for age groups may not sum to the total due to rounding. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. (See [Appendix II, Hispanic origin; Poverty; Race](#). Also see [Table 3](#).)

SOURCES: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements 1967–2008. DeNavas-Walt C, Proctor BD, and Smith JC. Income, poverty, and health insurance coverage in the United States: 2007. U.S. Census Bureau, Current Population Reports, P60–235. Washington, DC: U.S. Government Printing Office; 2008. Available from: <http://www.census.gov/prod/2008pubs/p60-235.pdf>. Age and sex of all people, family members, and unrelated individuals iterated by income-to-poverty ratio and race: 2007. Available from: http://pubdb3.census.gov/macro/032008/pov/new01_200_01.htm.

Data table for Figure 6. Cigarette smoking among men, women, and high school students: United States, 1965–2007

Year	Current smoker				Former smoker				Never smoker				High school students	
	Men		Women		Men		Women		Men		Women		Percent	SE
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE		
1965	51.2	0.3	33.7	0.3	20.2	0.2	8.0	0.2	28.6	0.3	58.3	0.4	---	---
1974	42.8	0.5	32.2	0.4	29.1	0.5	13.0	0.3	28.1	0.5	54.8	0.5	---	---
1979	37.0	0.5	30.1	0.5	30.6	0.5	15.4	0.4	32.4	0.5	54.5	0.5	---	---
1983	34.8	0.6	29.4	0.4	30.9	0.5	16.3	0.4	34.4	0.5	54.2	0.5	---	---
1985	32.2	0.5	27.9	0.4	33.5	0.5	18.6	0.4	34.3	0.5	53.5	0.5	---	---
1987	30.9	0.4	26.5	0.4	31.3	0.4	17.8	0.3	37.8	0.4	55.6	0.4	---	---
1988	30.3	0.4	25.7	0.3	32.0	0.4	19.0	0.3	37.7	0.4	55.3	0.4	---	---
1989	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1990	28.0	0.4	22.9	0.3	32.4	0.4	19.9	0.3	39.6	0.4	57.3	0.4	---	---
1991	27.6	0.4	23.5	0.3	31.9	0.4	19.3	0.3	40.5	0.4	57.1	0.4	27.5	1.4
1992	28.1	0.5	24.6	0.5	30.9	0.5	18.8	0.4	41.0	0.5	56.6	0.6	---	---
1993	27.3	0.6	22.6	0.4	31.6	0.5	19.9	0.4	41.1	0.6	57.5	0.5	30.5	1.0
1994	27.6	0.5	23.1	0.5	31.5	0.5	20.3	0.4	40.9	0.6	56.6	0.5	---	---
1995	26.5	0.6	22.7	0.5	29.2	0.6	19.6	0.5	44.3	0.7	57.7	0.6	34.8	1.2
1996	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1997	27.1	0.4	22.2	0.4	28.5	0.4	19.1	0.3	44.5	0.5	58.7	0.4	36.4	1.1
1998	25.9	0.4	22.1	0.4	28.8	0.4	18.8	0.3	45.3	0.5	59.2	0.5	---	---
1999	25.2	0.5	21.6	0.4	28.5	0.4	19.1	0.4	46.3	0.5	59.3	0.4	34.8	1.3
2000	25.2	0.4	21.1	0.4	26.9	0.4	18.8	0.4	48.0	0.5	60.1	0.4	---	---
2001	24.6	0.4	20.7	0.4	27.4	0.4	18.1	0.3	48.0	0.5	61.2	0.5	28.5	1.0
2002	24.6	0.4	20.0	0.4	27.3	0.4	18.9	0.4	48.0	0.5	61.1	0.5	---	---
2003	23.7	0.4	19.4	0.4	26.0	0.4	18.4	0.3	50.3	0.5	62.2	0.5	21.9	1.1
2004	23.0	0.4	18.7	0.4	25.5	0.4	17.9	0.3	51.5	0.5	63.4	0.5	---	---
2005	23.4	0.5	18.3	0.4	25.5	0.4	18.1	0.3	51.1	0.5	63.6	0.4	23.0	1.2
2006	23.6	0.5	18.1	0.4	24.8	0.5	17.4	0.4	51.6	0.6	64.5	0.6	---	---
2007	22.0	0.5	17.5	0.5	25.6	0.5	17.7	0.4	52.5	0.6	64.8	0.6	20.0	1.2

SE is standard error.

--- Data not available.

NOTES: Data for men and women are for the civilian noninstitutionalized population. Estimates for men and women are age-adjusted to the 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. Cigarette smoking is defined as follows: among men and women 18 years of age and over, those who ever smoked 100 cigarettes in their lifetime and now smoke every day or some days; among high school students in grades 9–12, those who smoked cigarettes on one or more of the 30 days preceding the survey. (See [Appendix II, Age adjustment; Cigarette smoking; Tobacco use](#). Also see [Tables 60–62](#).)

SOURCES: CDC/NCHS, National Health Interview Survey (data for men and women); National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey (data for high school students).

Data table for Figure 7. Overweight and obesity, by age: United States, 1960–2006

Year	Preschool-age children 2–5 years		School-age children 6–11 years		Adolescents 12–19 years		Adults 20–74 years					
			Overweight				Overweight including obese		Overweight but not obese		Obese	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
1960–1962	---	---	---	---	---	---	44.8	1.0	31.5	0.5	13.3	0.6
1963–1965	---	---	4.2	0.4	---	---	---	---	---	---	---	---
1966–1970	---	---	---	---	4.6	0.3	---	---	---	---	---	---
1971–1974	5.0	---	4.0	0.5	6.1	0.6	47.7	0.7	33.1	0.6	14.6	0.5
1976–1980	5.0	---	6.5	0.6	5.0	0.5	47.4	0.8	32.3	0.6	15.1	0.5
1988–1994	7.2	0.7	11.3	1.0	10.5	0.9	56.0	0.9	32.7	0.6	23.3	0.7
1999–2000	10.3	1.7	15.1	1.4	14.8	0.9	64.1	1.9	33.1	1.1	31.0	1.5
2001–2002	10.6	1.8	16.3	1.6	16.7	1.1	65.7	0.9	33.6	1.1	32.1	1.2
2003–2004	13.9	1.6	18.8	1.3	17.4	1.7	67.1	1.3	33.2	1.1	33.9	1.3
2005–2006	11.0	1.2	15.1	2.1	17.8	1.8	67.3	1.3	32.1	0.9	35.2	1.5

SE is standard error.
 --- Data not available.

NOTES: Data are for the civilian noninstitutionalized population. Estimates for adults are age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65–74 years. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. For children and adolescents, overweight is defined as a body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts: United States (See: www.cdc.gov/growthcharts/); obese is not defined for children. For adults, overweight including obese is defined as a BMI greater than or equal to 25; overweight but not obese as a BMI greater than or equal to 25 but less than 30; and obese as a BMI greater than or equal to 30. Data for 1966–1970 are for adolescents 12–17 years, not 12–19 years of age. Pregnant adolescents were excluded beginning in 1971–1974. Pregnant women 20 years of age and over were excluded in all years. (See [Appendix II, Age adjustment; Body mass index](#). Also see [Tables 67, 72, and 73](#).)

SOURCES: CDC/NCHS, National Health Examination Survey and National Health and Nutrition Examination Survey. Estimates of overweight for children 2–5 years of age for 1971–1974 and 1976–1980 from: CDC/NCHS. Prevalence of overweight among children and adolescents: United States, 2003–2004. Health E-stats. Hyattsville, MD: NCHS; 2006.

Data table for Figure 8. Trouble sleeping or sleeping pill use in the past month among adults 18 years of age and over, by sex and age: United States, 2005–2006

Age	Both sexes		Men		Women	
	Percent	SE	Percent	SE	Percent	SE
Adults who often or almost always had trouble sleeping in the past month						
18 years and over	30.3	0.7	25.9	0.8	34.4	1.0
18–44 years	27.8	1.0	23.3	1.2	32.2	1.8
45–64 years	32.8	1.0	27.8	1.5	37.7	1.4
65 years and over	32.7	1.3	30.4	2.2	34.3	1.7
65–74 years	33.6	2.4	28.3	2.8	37.8	3.5
75 years and over	31.5	2.0	33.3	3.1	30.3	2.1
Adults who often or almost always took sleeping pills or medications to help them sleep in the past month						
18 years and over	8.8	0.7	5.3	0.6	12.1	0.8
18–44 years	5.6	0.5	2.8	0.3	8.3	0.9
45–64 years	11.5	1.3	6.6	1.6	16.3	1.6
65 years and over	13.5	1.2	11.3	1.5	15.2	1.4
65–74 years	12.9	1.9	11.0	2.1	14.4	2.6
75 years and over	14.3	1.3	11.7	1.7	16.1	1.8

SE is standard error.

NOTES: For trouble sleeping, respondents reported they often or almost always (5–30 times in the past month) had trouble falling asleep, woke up during the night and had trouble getting back to sleep, or woke up too early in the morning and were unable to get back to sleep. For sleeping pills or medications, often or almost always is defined as 5–30 times in the past month.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Data table for Figure 9. Influenza and pneumococcal vaccination among middle-age and older adults, by age: United States, 1989–2007

Year	Influenza vaccination in the past 12 months							
	50–64 years		65–74 years		75–84 years		85 years and over	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE
1989	10.6	0.3	28.0	0.6	34.8	0.8	32.0	1.9
1991	15.0	0.5	38.7	0.8	46.3	1.2	46.3	2.3
1993	23.0	0.8	50.4	1.1	54.8	1.5	52.1	3.1
1994	25.6	0.9	53.5	1.2	58.6	1.5	55.0	3.0
1995	27.0	0.9	54.9	1.2	64.3	1.7	58.0	3.1
1997	31.9	0.7	60.9	0.9	66.0	1.1	67.4	2.1
1998	33.1	0.7	60.1	1.0	67.3	1.2	67.4	2.1
1999	34.1	0.7	61.9	1.0	70.9	1.2	68.6	2.1
2000	34.6	0.7	61.1	1.0	68.6	1.1	67.7	2.2
2001	32.2	0.7	60.7	1.0	65.7	1.1	66.4	2.1
2002	34.0	0.7	60.9	1.0	71.6	1.1	70.3	2.0
2003	36.8	0.7	60.5	1.0	72.4	1.1	66.6	2.1
2004	35.9	0.7	60.1	1.0	69.3	1.1	71.0	2.0
2005	23.0	0.6	53.7	1.0	65.3	1.2	69.9	1.9
2006	33.2	0.8	60.1	1.3	68.5	1.3	71.2	2.3
2007	36.2	0.9	61.6	1.2	71.9	1.3	74.6	2.4

Year	Pneumococcal vaccination ever							
	65 years and over		65–74 years		75–84 years		85 years and over	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE
1989	14.1	0.4	13.1	0.5	16.5	0.7	12.5	1.1
1991	21.2	0.6	19.7	0.7	23.5	0.9	23.8	2.0
1993	28.2	0.8	26.2	1.0	31.9	1.4	27.1	3.1
1994	29.7	0.8	28.4	1.1	31.8	1.4	30.9	2.7
1995	34.0	0.9	31.4	1.2	39.1	1.8	33.2	2.9
1997	42.4	0.7	40.1	1.0	46.2	1.1	42.1	2.2
1998	46.0	0.8	42.1	1.0	51.7	1.2	47.1	2.3
1999	49.7	0.8	46.6	1.0	54.8	1.3	49.1	2.3
2000	53.1	0.8	48.2	1.0	59.7	1.2	56.6	2.3
2001	54.0	0.8	50.3	1.1	58.5	1.2	58.4	2.3
2002	56.0	0.8	50.2	1.0	62.7	1.2	63.1	2.3
2003	55.6	0.8	49.8	1.1	63.3	1.2	58.1	2.2
2004	56.8	0.8	50.4	1.1	64.3	1.2	64.0	2.3
2005	56.2	0.7	49.4	1.0	64.5	1.1	61.8	2.0
2006	57.1	0.9	52.0	1.3	63.8	1.5	60.6	2.6
2007	57.7	0.9	51.8	1.3	64.9	1.4	62.6	2.6

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Estimates are based on two questions: “During the past 12 months, have you had a flu shot?” A flu shot is usually given in the fall and protects against influenza for the flu season. Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) during the past 12 months, in addition to the question regarding the flu shot. Starting with 2005 data, receipt of nasal spray or flu shot were included in the calculation of influenza vaccination estimates. Respondents were also asked “Have you ever had a pneumonia shot?” This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot. It is also called pneumococcal vaccine. Annual influenza vaccination has been recommended for all adults 50 years of age and over since 2000, and pneumococcal vaccination has been recommended for all adults 65 years of age and over since 1997. Due to the shortfall in the 2000–2001 and 2004–2005 influenza vaccine supplies, CDC recommended vaccine be reserved for priority groups including those 65 years of age and over and those 2–64 years with chronic underlying health conditions. For more information, see: CDC. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(RR-03):1–38. Available from: <http://www.cdc.gov/mmwr/PDF/rr/rr4903.pdf>; CDC. Prevention of pneumococcal disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(RR-08):1–24. Available from: <http://www.cdc.gov/mmwr/PDF/rr/rr4608.pdf>; CDC. Interim influenza vaccination recommendations, 2004–05 influenza season. MMWR 2004; 53(39):923–4. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm>; CDC. Notice to readers: Updated recommendations from the Advisory Committee on Immunization Practices in response to delays in supply of influenza vaccine for the 2000–01 season. MMWR 2000;49(39):888–92. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4927a4.htm>.

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 10. Hypertension, diabetes, and serious heart conditions among adults 45 years of age and over, by age and percent of poverty level: United States, 2007

Age and percent of poverty level	Physician-diagnosed condition					
	Hypertension		Diabetes		Serious heart conditions	
	Percent	SE	Percent	SE	Percent	SE
45–64 years						
Total	32.1	0.6	10.6	0.4	6.7	0.4
Below poverty	46.3	2.3	18.7	1.5	12.0	1.3
100%–less than 200%	37.5	2.2	15.8	1.5	9.8	1.1
200% or more	29.6	0.7	8.9	0.5	5.6	0.4
65–74 years						
Total	50.9	1.2	20.0	0.9	18.6	1.0
Below poverty	59.5	3.8	26.0	3.1	21.4	3.1
100%–less than 200%	56.1	2.4	24.4	2.4	18.2	1.8
200% or more	48.2	1.4	17.8	1.2	18.4	1.2
75 years and over						
Total	57.4	1.3	17.3	1.0	23.6	1.1
Below poverty	56.8	4.4	19.9	3.2	24.3	3.2
100%–less than 200%	57.9	2.4	16.2	1.7	23.4	2.2
200% or more	57.2	1.9	17.3	1.4	23.5	1.5

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Persons who reported more than one condition were counted in each category. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Conditions were determined by asking if a doctor or other health professional ever told the respondent that they had a specified condition. Persons reporting borderline diabetes are recoded to not diabetic. Heart disease includes coronary heart disease, angina or angina pectoris, or heart attack or myocardial infarction. Hypertension is told on two or more different visits. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 37% of adults 45 years of age and over in 2007. (See [Appendix II, Family income; Poverty.](#))

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 11. Nonfatal occupational injuries and illnesses in private industry: United States, 1989–2007

<i>Year</i>	<i>Total injury and illness cases</i>	<i>Injury cases</i>
	Number per 100 full-time workers	
1989	8.6	8.2
1990	8.8	8.3
1991	8.4	7.9
1992 (OSHA recordkeeping change)	8.9	8.3
1993	8.5	7.9
1994	8.4	7.7
1995 (OSHA data initiative)	8.1	7.5
1996	7.4	6.9
1997	7.1	6.6
1998	6.7	6.2
1999	6.3	5.9
2000	6.1	5.8
2001	5.7	5.4
2002 (OSHA recordkeeping change)	5.3	5.0
2003	5.0	4.7
2004	4.8	4.5
2005	4.6	4.4
2006	4.4	4.2
2007	4.2	4.0

OSHA is Occupational Safety and Health Administration.

NOTES: Recordkeeping and data collection changes introduced in 1992, 1995, and 2002 may affect the data; therefore, caution should be used when interpreting trends. For more information, see the [Technical Notes](#). (See [Appendix I, Survey of Occupational Injuries and Illnesses](#). Also see [Tables 44–46](#).)

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses. Available from: <http://www.bls.gov/iif/home.htm>.

Data table for Figure 12. Depression among adults 18 years of age and over, by sex and age: United States, 2005–2006

<i>Characteristic</i>	<i>Percent</i>	<i>SE</i>
Total	5.5	0.5
Sex		
Men	4.4	0.4
Women	6.6	0.7
Age		
18–39 years	4.7	0.6
40–59 years	7.3	0.9
60 years and over	4.0	0.7
Sex and age		
Men:		
18–39 years	3.5	0.6
40–59 years	5.9	0.8
60 years and over	*	*
Women:		
18–39 years	5.9	0.9
40–59 years	8.6	1.3
60 years and over	4.5	0.9

SE is standard error.

* Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

NOTES: Data are for the civilian noninstitutionalized population. The nine-item Patient Health Questionnaire was used to identify persons with depression. Respondents were asked a series of questions about the frequency of symptoms of depression over the past 2 weeks. Response categories were given a score and summed across questions, yielding a total score ranging from 0 to 27. Respondents with a total score of 10 or higher were classified as having depression. For more information, see the [Technical Notes](#), and see: Pratt LA, Brody DJ. Depression in the United States household population, 2005–2006. NCHS data brief no 7; Hyattsville, MD: NCHS; 2008.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Data table for Figure 13. Limitation of activity caused by selected chronic health conditions among children, by age: United States, 2006–2007

<i>Type of chronic health condition</i>	<i>Under 5 years</i>		<i>5–11 years</i>		<i>12–17 years</i>	
	<i>Rate</i>	<i>SE</i>	<i>Rate</i>	<i>SE</i>	<i>Rate</i>	<i>SE</i>
Number of children with limitation of activity caused by selected chronic health conditions per 1,000 population						
Speech problem	15.8	1.5	23.1	1.5	7.7	0.9
Asthma or breathing problem	6.9	0.9	4.4	0.5	5.7	0.7
Mental retardation or other developmental problem	6.5	1.1	10.1	1.0	11.2	1.1
Other mental, emotional, or behavioral problem	3.8	0.7	14.1	1.2	14.9	1.3
Attention-deficit/hyperactivity disorder	*	*	19.0	1.4	24.7	1.8
Learning disability	*2.4	0.6	20.0	1.5	31.6	1.8

SE is standard error.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

NOTES: Data are for noninstitutionalized children. Children with limitation of activity caused by chronic health conditions were identified either by their enrollment in special programs (special education or early intervention services) or by a limitation in their ability to perform activities usual for their age group because of a physical, mental, or emotional problem. Conditions refer to response categories in the National Health Interview Survey. Children with more than one chronic health condition causing activity limitation were counted in each condition category. Starting with 2001 data, the condition list for children was expanded to include categories for attention-deficit/hyperactivity disorder (ADHD or ADD) and learning disability. Thus, comparable data for this figure are not available prior to 2001. (See [Appendix II, Condition; Limitation of activity](#).)

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 14. Limitation of activity caused by selected chronic health conditions among working-age adults, by age: United States, 2006–2007

Type of chronic health condition	18–44 years		45–54 years		55–64 years	
	Rate	SE	Rate	SE	Rate	SE
Number of persons with limitation of activity caused by selected chronic health conditions per 1,000 population						
Mental illness	13.8	0.7	23.4	1.2	28.1	1.7
Fractures or joint injury	5.0	0.4	13.0	0.9	19.0	1.2
Lung	4.2	0.3	11.5	0.9	19.3	1.3
Diabetes	2.8	0.3	14.2	1.0	31.4	1.7
Heart or other circulatory	5.7	0.4	26.5	1.4	60.8	2.5
Arthritis or other musculoskeletal	18.6	0.7	57.8	2.2	98.6	3.0
Mental retardation	5.5	0.4	4.4	0.6	2.6	0.5

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Mental illness includes depression, anxiety or emotional problem, and other mental conditions. Heart or other circulatory includes heart problem, stroke problem, hypertension or high blood pressure, and other circulatory system conditions. Arthritis or other musculoskeletal includes arthritis or rheumatism, back or neck problem, and other musculoskeletal system conditions. Mental retardation includes mental retardation and other developmental problems (e.g., cerebral palsy). Persons with more than one chronic health condition causing activity limitation were counted in each condition category. (See [Appendix II, Condition; Limitation of activity.](#))

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 15. Limitation of activity caused by selected chronic health conditions among older adults, by age: United States, 2006–2007

Type of chronic health condition	65–74 years		75–84 years		85 years and over	
	Rate	SE	Rate	SE	Rate	SE
Number of persons with limitation of activity caused by selected chronic health conditions per 1,000 population						
Senility or dementia	9.2	1.1	33.5	2.9	83.4	7.5
Lung	36.0	2.4	41.9	3.1	37.7	4.9
Diabetes	41.1	2.4	44.1	3.0	49.6	6.3
Vision	17.0	1.7	31.2	2.7	88.5	8.4
Hearing	8.5	1.1	21.7	2.4	72.3	8.3
Heart or other circulatory	96.1	3.8	137.5	5.7	203.6	12.4
Arthritis or other musculoskeletal	121.5	4.3	166.6	6.2	281.3	13.4

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Vision includes vision conditions or problems seeing, and hearing includes hearing problems. Heart or other circulatory includes heart problem, stroke problem, hypertension or high blood pressure, and other circulatory system conditions. Arthritis or other musculoskeletal includes arthritis or rheumatism, back or neck problem, and other musculoskeletal system conditions. Senility is the term offered to respondents on a flashcard, but this category may include Alzheimer’s disease or other types of dementia reported by the respondent. Persons with more than one chronic health condition causing activity limitation were counted in each condition category. (See [Appendix II, Condition; Limitation of activity.](#))

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 16. Life expectancy at birth and at 65 years of age, by race and sex: United States, 1970–2006

Year	Male	Female	White male	Black male	White female	Black female
Life expectancy in years						
At birth						
1970	67.1	74.7	68.0	60.0	75.6	68.3
1980	70.0	77.4	70.7	63.8	78.1	72.5
1990	71.8	78.8	72.7	64.5	79.4	73.6
1997	73.6	79.4	74.3	67.2	79.9	74.7
1998	73.8	79.5	74.5	67.6	80.0	74.8
1999	73.9	79.4	74.6	67.8	79.9	74.7
2000	74.1	79.3	74.7	68.2	79.9	75.1
2001	74.2	79.4	74.8	68.4	79.9	75.2
2002	74.3	79.5	74.9	68.6	79.9	75.4
2003	74.5	79.6	75.0	68.8	80.0	75.6
2004	74.9	79.9	75.4	69.3	80.4	76.0
2005	74.9	79.9	75.4	69.3	80.4	76.1
2006	75.1	80.2	75.7	69.7	80.6	76.5
At 65 years						
1970	13.1	17.0	13.1	12.5	17.1	15.7
1980	14.1	18.3	14.2	13.0	18.4	16.8
1990	15.1	18.9	15.2	13.2	19.1	17.2
1997	15.9	19.2	16.0	14.2	19.3	17.6
1998	16.0	19.2	16.1	14.3	19.3	17.4
1999	16.1	19.1	16.1	14.3	19.2	17.3
2000	16.0	19.0	16.1	14.1	19.1	17.5
2001	16.2	19.0	16.3	14.2	19.1	17.6
2002	16.2	19.1	16.3	14.4	19.2	17.7
2003	16.4	19.2	16.5	14.5	19.3	17.9
2004	16.7	19.5	16.8	14.8	19.5	18.2
2005	16.8	19.5	16.9	14.9	19.5	18.2
2006	17.0	19.7	17.1	15.1	19.8	18.6

NOTES: Death rates used to calculate life expectancies for 1997–1999 are based on postcensal 1990-based population estimates; life expectancies for 2000 and beyond are calculated with death rates based on Census 2000. Data for 2000–2006 are based on a newly revised methodology and may differ from previous editions of *Health, United States*. (See [Appendix I, Population Census and Population Estimates](#).) Deaths to nonresidents were excluded beginning in 1970. (See [Appendix II, Life expectancy](#). Also see [Table 24](#).)

SOURCES: CDC/NCHS. Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Arias E. United States life tables, 1997–2004. National vital statistics reports; Hyattsville, MD: NCHS; 1999–2006 and unpublished data.

Data table for Figure 17. Infant, neonatal, and postneonatal mortality rates: United States, 1950–2006

<i>Year</i>	<i>Infant</i>	<i>Neonatal</i>	<i>Postneonatal</i>
Deaths per 1,000 live births			
1950	29.21	20.50	8.71
1960	26.04	18.73	7.31
1970	20.01	15.08	4.93
1980	12.60	8.48	4.13
1981	11.93	8.02	3.91
1982	11.52	7.70	3.82
1983	11.16	7.28	3.88
1984	10.79	7.00	3.79
1985	10.64	6.96	3.68
1986	10.35	6.71	3.64
1987	10.08	6.46	3.62
1988	9.95	6.32	3.64
1989	9.81	6.23	3.59
1990	9.22	5.85	3.38
1991	8.94	5.59	3.35
1992	8.52	5.37	3.14
1993	8.37	5.29	3.07
1994	8.02	5.12	2.90
1995	7.59	4.91	2.67
1996	7.32	4.77	2.55
1997	7.23	4.77	2.45
1998	7.20	4.80	2.40
1999	7.06	4.73	2.33
2000	6.91	4.63	2.28
2001	6.85	4.54	2.31
2002	6.97	4.66	2.31
2003	6.85	4.62	2.23
2004	6.79	4.52	2.27
2005	6.87	4.54	2.34
2006	6.69	4.45	2.24

NOTES: Infant is defined as under 1 year of age, neonatal as under 28 days of age, and postneonatal as 28 days through 11 months of life. (Also see Table 21.)

SOURCE: CDC/NCHS, National Vital Statistics System: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

Data table for Figure 18. Death rates for leading causes of death for all ages: United States, 1950–2006

Year	All causes	Heart disease	Cancer	Stroke	Chronic lower respiratory diseases	Unintentional injuries	Diabetes
Deaths per 100,000 population							
1950	1,446.0	586.8	193.9	180.7	---	78.0	23.1
1960	1,339.2	559.0	193.9	177.9	---	62.3	22.5
1970	1,222.6	492.7	198.6	147.7	---	60.1	24.3
1980	1,039.1	412.1	207.9	96.2	28.3	46.4	18.1
1981	1,007.1	397.0	206.4	89.5	29.0	43.4	17.6
1982	985.0	389.0	208.3	84.2	29.1	40.1	17.2
1983	990.0	388.9	209.1	81.2	31.6	39.1	17.6
1984	982.5	378.8	210.8	78.7	32.4	38.8	17.2
1985	988.1	375.0	211.3	76.4	34.5	38.5	17.4
1986	978.6	365.1	211.5	73.1	34.8	38.6	17.2
1987	970.0	355.9	211.7	71.6	35.0	38.2	17.4
1988	975.7	352.5	212.5	70.6	36.5	38.9	18.0
1989	950.5	332.0	214.2	66.9	36.6	37.7	20.5
1990	938.7	321.8	216.0	65.3	37.2	36.3	20.7
1991	922.3	312.5	215.2	62.9	37.9	34.7	20.7
1992	905.6	304.0	213.5	61.5	37.7	33.2	20.7
1993	926.1	308.1	213.5	62.7	40.7	34.2	21.9
1994	913.5	297.5	211.7	62.6	40.3	34.2	22.6
1995	909.8	293.4	209.9	63.1	40.1	34.4	23.2
1996	894.1	285.7	206.7	62.5	40.6	34.5	23.8
1997	878.1	277.7	203.4	61.1	41.1	34.2	23.7
1998	870.6	271.3	200.7	59.3	41.8	34.5	24.0
1998 (comparability-modified)	870.6	267.4	202.1	62.8	43.8	35.6	24.2
1999	875.6	266.5	200.8	61.6	45.4	35.3	25.0
2000	869.0	257.6	199.6	60.9	44.2	34.9	25.0
2001	854.5	247.8	196.0	57.9	43.7	35.7	25.3
2002	845.3	240.8	193.5	56.2	43.5	36.9	25.4
2003	832.7	232.3	190.1	53.5	43.3	37.3	25.3
2004	800.8	217.0	185.8	50.0	41.1	37.7	24.5
2005	798.8	211.1	183.8	46.6	43.2	39.1	24.6
2006	776.5	200.2	180.7	43.6	40.5	39.8	23.3

--- Data not available.

NOTES: Estimates are age-adjusted to the year 2000 standard population using the following age groups: under 1 year, 1–4 years, 10-year age groups from 5–14 through 75–84 years, and 85 years and over. Causes of death shown are the six leading causes of death for all ages in 2006. The 1950 death rates are based on the sixth revision of the *International Classification of Diseases* (ICD–6), 1960 death rates on ICD–7, 1970 death rates on ICD–8, and 1980–1998 death rates on ICD–9. The 1998 (comparability-modified) death rates use comparability ratios to adjust the rate to be comparable to records classified according to ICD–10. Starting with 1999 data, death rates are based on ICD–10. Comparability ratios across revisions for selected causes are available from: <http://www.cdc.gov/nchs/data/statab/comp2.pdf>. Death rates for chronic lower respiratory diseases are available from 1980, when a category that included bronchitis, emphysema, asthma, and other chronic lung diseases was introduced in ICD–9. Cancer refers to malignant neoplasms; stroke to cerebrovascular diseases; and unintentional injuries is preferred to accidents in the public health community. Rates for 1981–1989 were computed using intercensal population estimates based on the 1990 census. Rates for 1991–1999 were computed using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. (See [Appendix I, Population Census and Population Estimates](#); [Appendix II, Age adjustment](#); [Cause of death](#); [Comparability ratio](#); [Table V](#). Also see related [Tables 26, 28, 29, and 31–34.](#))

SOURCE: CDC/NCHS, National Vital Statistics System.

Data table for Figure 19. Health insurance coverage at the time of interview among persons under 65 years of age: United States, 1984–2007

Year	Health insurance coverage at the time of interview					
	Private		Medicaid		Uninsured	
	Percent	SE	Percent	SE	Percent	SE
1984	76.8	0.6	6.8	0.3	14.5	0.4
1989	75.9	0.4	7.2	0.2	15.6	0.3
1994	69.9	0.4	11.2	0.3	17.5	0.3
1995	71.3	0.4	11.5	0.2	16.1	0.2
1996	71.2	0.5	11.1	0.3	16.6	0.3
1997	70.7	0.4	9.7	0.2	17.5	0.2
1998	72.1	0.4	8.9	0.2	16.6	0.2
1999	72.8	0.3	9.1	0.2	16.1	0.2
2000	71.5	0.4	9.5	0.2	17.0	0.3
2001	71.2	0.4	10.4	0.2	16.4	0.3
2002	69.4	0.4	11.8	0.2	16.8	0.2
2003	68.9	0.4	12.3	0.2	16.5	0.3
2004	68.8	0.4	12.5	0.2	16.4	0.2
2005	68.2	0.4	12.9	0.2	16.4	0.2
2006	66.3	0.5	14.0	0.3	17.0	0.3
2007	66.8	0.4	13.9	0.3	16.6	0.3

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Medicaid includes other public assistance through 1996; includes state-sponsored health plans starting in 1997; and includes Children’s Health Insurance Program (CHIP) starting in 1999. Uninsured persons are not covered by private insurance, Medicaid, CHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans. Persons with Indian Health Service only are considered to have no coverage. Percents do not add to 100 because the percentage of persons with Medicare, military plans, and other government-sponsored plans is not shown and because persons with both private insurance and Medicaid appear in both categories. Starting with data from the third quarter of 2004, persons under 65 years of age with no reported coverage were asked explicitly about Medicaid coverage. Estimates for Medicaid coverage shown in this table include the additional information. Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates. (See [Appendix II, Health insurance coverage](#). Also see [Tables 137, 139, and 140](#).)

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 20. Uninsured for at least part of the 12 months prior to interview among persons under 65 years of age, by length of time uninsured and selected characteristics: United States, 2007

Characteristic	Length of time uninsured prior to interview					
	Total uninsured prior to interview		More than 12 months		Any period up to 12 months	
	Percent	SE	Percent	SE	Percent	SE
Age						
Under 65 years	20.7	0.3	11.7	0.2	7.8	0.2
Under 18 years	12.7	0.4	5.0	0.3	6.7	0.3
18–24 years	34.6	0.9	18.3	0.7	14.6	0.6
25–34 years	32.5	0.7	19.6	0.5	11.6	0.4
35–44 years	23.2	0.6	14.0	0.4	7.8	0.3
45–54 years	17.5	0.5	11.4	0.4	5.0	0.3
55–64 years	13.3	0.5	9.0	0.4	3.5	0.3
Percent of poverty level						
Below 100%	35.2	1.0	21.1	0.8	12.7	0.6
100%–less than 150%	37.1	1.2	23.7	0.9	11.9	0.7
150%–less than 200%	33.9	1.2	21.0	1.1	11.4	0.8
200% or more	13.7	0.3	6.9	0.2	5.8	0.2
Race and Hispanic origin						
Black or African American only, not Hispanic or Latino	21.0	0.6	10.8	0.4	9.0	0.5
Asian only	17.7	1.1	11.6	0.9	5.1	0.5
White only, not Hispanic or Latino	16.7	0.4	8.4	0.3	7.3	0.2
Hispanic or Latino (total)	36.2	0.7	25.7	0.6	9.5	0.4
Mexican	39.1	0.9	28.5	0.8	9.6	0.5
Cuban	22.0	2.8	17.2	2.5	*4.4	1.2
Puerto Rican	17.7	1.5	7.9	0.9	9.0	1.2

SE is standard error.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Data are for the civilian noninstitutionalized population. Total uninsured prior to interview includes people uninsured more than 12 months, people uninsured any period up to 12 months, and people uninsured for an unknown length of time (1.3% for persons under 65 years of age). Persons of Hispanic origin may be of any race. Total for Hispanic includes groups not shown separately. Asian only race includes persons of Hispanic and non-Hispanic origin. Uninsured persons are not covered by private insurance, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plans, Medicare, or military plans. Persons with Indian Health Service only are considered uninsured. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 31% of persons under 65 years of age in 2007. (See [Appendix II, Family income](#); [Health insurance coverage](#); [Hispanic origin](#); [Poverty](#); [Race](#).)

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 21. Personal health care expenditures, by source of funds and type of expenditures: United States, 2007

<i>Source of funds</i>	<i>Amount in billions</i>	<i>Percent distribution</i>
All personal health care expenditures	\$1,878	100.0
All sources of funds:		
Private	1,028	54.7
Private health insurance	680	36.2
Out-of-pocket payments	269	14.3
Other private funds	79	4.2
Public	851	45.3
Medicare	410	21.8
Medicaid (federal)	177	9.4
Medicaid (state)	135	7.2
Other federal	76	4.1
Other state and local	53	2.8

<i>Type of expenditure</i>	<i>Amount in billions</i>	<i>Percent distribution</i>
All personal health care expenditures	\$1,878	100.0
Hospital care	697	37.1
Physician and clinical services	479	25.5
Prescription drugs	227	12.1
Nursing home care	131	7.0
Dental services	95	5.1
Home health care	59	3.1
Other types of expenditures	190	10.1

NOTES: Percents are calculated using unrounded data. Estimates may not add to total because of rounding. Expenditures for Children's Health Insurance Program (CHIP) and CHIP expansion are included with Medicaid. Other private funds include industrial in-plant and other private revenues, including charity. Other federal funds include workers' compensation, Department of Defense, maternal and child health, Veteran's Administration, vocational rehabilitation, general hospital/medical, Substance Abuse and Mental Health Services Administration, Indian Health Services, and Office of Economic Opportunity. Other state and local funds include temporary disability, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, state and local hospitalization, and school health. Other types of expenditures include other professional services, other nondurable medical products, durable medical equipment, and other personal health care. (See [Appendix I, National Health Expenditure Accounts](#); [Appendix II, Health expenditures, national](#). Also see [Figure 22](#) and [Tables 127](#) and [128](#).)

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts.

Data table for Figure 22. Personal health care expenditures, by source of funds: United States, 1990–2007

<i>Source of funds</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Amount in billions										
Total personal health care expenditures	\$608	\$669	\$726	\$774	\$814	\$863	\$910	\$959	\$1,010	\$1,068
Private funds	371	398	423	441	452	477	501	533	575	612
Out-of-pocket payments	136	140	143	145	143	146	152	162	175	184
Private health insurance	205	225	243	257	270	286	302	320	344	371
Public funds	236	271	303	333	362	387	409	426	435	456
Federal funds	173	200	228	252	274	296	316	329	332	346
Medicare	107	117	132	146	163	180	194	204	202	206
Medicaid including CHIP and CHIP expansion	40	54	65	73	78	82	88	91	93	101
State and local funds	63	70	75	81	88	91	93	97	103	109
Medicaid including CHIP and CHIP expansion	29	35	38	43	49	54	57	60	65	70
Deflator (2000 = 100.0)										
Personal health care implicit price deflator	70.4	74.4	78.3	81.9	84.9	87.8	90.4	92.3	94.3	96.8
Adjusted amount in billions										
Adjusted dollars (2000 base) . . .	\$863	\$899	\$927	\$945	\$959	\$983	\$1,007	\$1,039	\$1,071	\$1,103

<i>Source of funds</i>	2000	2001	2002	2003	2004	2005	2006	2007	<i>Average annual percent change</i>		
									1990–1999	2000–2007	1990–2007
Amount in billions											
Total personal health care expenditures	\$1,139	\$1,238	\$1,340	\$1,448	\$1,550	\$1,655	\$1,765	\$1,878	6.5	7.4	6.9
Private funds	652	697	752	810	860	915	967	1,028	5.7	6.7	6.2
Out-of-pocket payments	193	200	211	225	235	247	255	269	3.4	4.9	4.1
Private health insurance	403	441	482	521	561	599	638	680	6.8	7.8	7.3
Public funds	487	541	589	638	690	740	799	851	7.6	8.3	7.8
Federal funds	370	412	448	486	528	563	621	663	8.0	8.7	8.2
Medicare	216	239	256	274	301	327	383	410	7.6	9.6	8.2
Medicaid including CHIP and CHIP expansion	110	123	137	149	160	165	161	172	10.8	6.6	9.0
State and local funds	117	130	140	151	162	177	178	188	6.2	7.0	6.6
Medicaid including CHIP and CHIP expansion	77	86	94	102	110	124	124	132	10.3	8.0	9.3
Deflator (2000 = 100.0)											
Personal health care implicit price deflator	100.0	103.8	107.8	111.7	116.3	120.5	124.6	128.8	...	...	...
Adjusted amount in billions											
Adjusted dollars (2000 base) . . .	\$1,139	\$1,193	\$1,243	\$1,296	\$1,333	\$1,374	\$1,417	\$1,458	2.8	3.6	3.1

... Category not applicable.

CHIP is Children's Health Insurance Program.

NOTES: CHIP expenditures started in 1998. The personal health care implicit price deflator was constructed from the Producer Price Index for hospital care, Nursing Home Input Price Index for nursing home care, and Consumer Price Indices specific to each of the remaining personal health care components. Expenditures by funder are not adjusted for inflation because there is no price deflator that is appropriate for this adjustment. Personal health care expenditures include all expenditures for specified health services and supplies other than expenses for government administration, net cost of private health insurance, and government public health activities.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts. National health expenditures, 2007. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>; and unpublished data.

Data table for Figure 24. Federally regulated (CLIA) laboratories: United States, 1993–2008

Year	Total laboratories (Nonexempt and exempt states)			Laboratories in nonexempt states		
	All laboratories	Laboratories located in physician offices (POLS)	Percent POLS	Total CLIA laboratories	CLIA-waived laboratories	Percent CLIA-waived laboratories
		Number of laboratories				
1993	154,740	90,800	58.7	152,250	67,294	44.2
1994	150,143	89,344	59.5	144,079	66,235	46.0
1995	152,434	82,907	54.4	145,124	65,031	44.8
1996	157,002	87,832	55.9	149,055	68,127	45.7
1997	157,607	88,028	55.9	150,229	74,455	49.6
1998	164,570	91,600	55.7	158,412	78,825	49.8
1999	169,558	93,867	55.4	162,044	84,217	52.0
2000	169,531	95,069	56.1	163,764	85,944	52.5
2001	170,996	95,879	56.1	165,229	88,730	53.7
2002	174,504	97,363	55.8	169,005	93,129	55.1
2003	183,874	101,090	55.0	177,615	102,123	57.5
2004	186,734	104,230	55.8	180,447	105,138	58.3
2005	194,734	105,914	54.4	188,741	113,455	60.1
2006	198,232	106,180	53.6	192,215	117,418	61.1
2007	203,939	107,937	52.9	197,843	122,992	62.2
2008	209,499	108,734	51.9	203,101	129,219	63.6

CLIA is Clinical Laboratory Improvement Amendments of 1988.

NOTES: New York state and Washington state are exempt from CLIA because they have their own regulatory requirements. Waived laboratories perform only tests that have been classified as waived, which are generally simple with low risk of erroneous results.

SOURCE: Centers for Medicare & Medicaid Services, CLIA Database. Available from http://www.cms.hhs.gov/CLIA/17_CLIA_Statistical_Tables_Graphs.asp#TopOfPage.

Data table for Figure 25. Ambulatory care visits with MRI/CT/PET scans ordered or provided during the visit, by age and location of care: United States, 1996–2007

Year	Physician office and hospital outpatient department visits						Emergency department visits					
	All ages		Under 65 years		65 years and over		All ages		Under 65 years		65 years and over	
	Visits per 100 persons	SE	Visits per 100 persons	SE	Visits per 100 persons	SE	Visits per 100 persons	SE	Visits per 100 persons	SE	Visits per 100 persons	SE
1996	3.9	0.4	3.2	0.3	9.0	1.3	1.2	0.1	0.9	0.1	3.2	0.3
1997	3.7	0.3	3.1	0.3	8.4	1.1	1.3	0.1	1.0	0.1	3.3	0.3
1998	4.3	0.4	3.5	0.3	10.3	1.4	1.6	0.1	1.2	0.1	4.1	0.5
1999	5.4	0.6	4.6	0.5	11.4	1.9	1.9	0.1	1.5	0.1	4.3	0.4
2000	5.6	0.5	4.6	0.4	12.7	2.0	2.1	0.1	1.7	0.1	5.5	0.4
2001	---	---	---	---	---	---	2.4	0.1	2.0	0.1	5.8	0.4
2002	---	---	---	---	---	---	2.8	0.2	2.2	0.1	6.9	0.5
2003	---	---	---	---	---	---	3.1	0.1	2.5	0.1	7.5	0.6
2004	---	---	---	---	---	---	3.6	0.2	3.0	0.2	7.7	0.6
2005	9.2	0.8	7.3	0.7	23.0	3.2	4.4	0.2	3.7	0.2	9.5	0.6
2006	10.3	0.7	8.2	0.6	25.7	2.4	4.8	0.3	4.1	0.2	9.9	0.6
2007	12.6	1.1	10.0	0.9	31.1	3.2	5.6	0.4	4.7	0.3	12.5	0.9

Year	Physician office and hospital outpatient department visits						Emergency department visits					
	All ages		Under 65 years		65 years and over		All ages		Under 65 years		65 years and over	
	Percent of visits	SE	Percent of visits	SE	Percent of visits	SE	Percent of visits	SE	Percent of visits	SE	Percent of visits	SE
1996	1.3	0.1	1.2	0.1	1.5	0.2	3.4	0.2	2.7	0.2	7.7	0.6
1997	1.1	0.1	1.1	0.1	1.3	0.2	3.7	0.2	3.1	0.2	7.2	0.5
1998	1.3	0.1	1.2	0.1	1.6	0.2	4.2	0.3	3.4	0.2	8.6	0.8
1999	1.8	0.2	1.7	0.2	1.8	0.3	4.9	0.2	4.2	0.2	9.0	0.6
2000	1.7	0.1	1.6	0.1	2.0	0.3	5.4	0.2	4.4	0.2	11.3	0.7
2001	---	---	---	---	---	---	6.3	0.3	5.3	0.3	12.2	0.7
2002	---	---	---	---	---	---	7.1	0.3	5.9	0.3	14.2	0.7
2003	---	---	---	---	---	---	7.9	0.3	6.6	0.3	14.6	0.8
2004	---	---	---	---	---	---	9.3	0.4	8.1	0.4	16.9	0.8
2005	2.6	0.2	2.4	0.2	3.1	0.4	11.0	0.4	9.5	0.4	20.0	0.9
2006	3.0	0.2	2.8	0.2	3.7	0.4	11.9	0.5	10.5	0.4	20.3	1.0
2007	3.4	0.2	3.2	0.2	4.1	0.4	14.2	0.5	12.2	0.5	25.8	0.8

SE is standard error.
 --- Data not available.

NOTES: The data available for imaging scans differed by the survey location and data year. For emergency department visits: data for all years were collected using a checkbox for MRI or CT scans only, and there was no checkbox for PET scans. For physician office and hospital outpatient department visits: for 1996–2000, data were collected using a checkbox for MRI or CT scans and there was no checkbox for PET scans; for 2001–2004, data for MRI, CT, or PET scans were not collected using a checkbox and were not shown due to lack of comparability with other years; for 2005–2007, data were collected using a checkbox for MRI, CT, or PET scans. In addition to the checkbox for scans, there was a field for including information on other procedures ordered or performed during the visit. In 2005–2007, NCHS coded the information in the other procedure fields if it was for an MRI, CT, or PET scan, and that information was transferred to the checkbox for MRI, CT, or PET scans if it was not already present. To be comparable to the procedure employed in 2005–2007, this analysis included advanced imaging scan information from the write-in fields for 1996–2000. See [Technical Notes](#) for a list of procedure codes that were included in the write-in fields for MRI, CT, or PET scans. Rates for 1996–1999 were computed using 1990-based postcensal estimates of the civilian noninstitutionalized population as of July 1 adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Starting with 2000 data, rates were computed using 2000-based postcensal estimates of the civilian noninstitutionalized population as of July 1.

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

Data table for Figure 26. Use of mammography within the past 2 years among women 40 years of age and over, by race and Hispanic origin: United States, 1987–2008

<i>Characteristic</i>	1987	1990	1991	1993	1994	1998	1999	2000	2003	2005	2008
Percent of women having a mammogram within the past 2 years											
Total women 40 years of age and over, crude	28.7	51.4	54.6	59.7	60.9	66.9	70.3	70.4	69.7	66.8	67.6
Race and Hispanic origin											
40 years and over, crude:											
Hispanic or Latina	18.3	45.2	49.2	50.9	51.9	60.2	65.7	61.2	65.0	58.8	61.2
Asian only	*	46.0	45.9	55.1	55.8	60.2	58.3	53.5	57.6	54.6	66.1
Not Hispanic or Latina:											
White only	30.3	52.7	56.0	60.6	61.3	68.0	71.1	72.2	70.5	68.3	68.7
Black or African American only	23.8	46.0	47.7	59.2	64.4	66.0	71.0	67.9	70.5	65.2	68.3
Standard error											
Total women 40 years of age and over, crude	0.7	0.6	0.5	0.7	0.7	0.5	0.5	0.6	0.5	0.6	0.7
Race and Hispanic origin											
40 years and over, crude:											
Hispanic or Latina	2.3	2.4	2.4	3.2	3.4	1.7	1.8	1.7	1.6	1.7	2.1
Asian only	*	4.5	4.1	5.6	5.5	4.0	4.3	4.3	3.6	3.5	3.0
Not Hispanic or Latina:											
White only	0.7	0.7	0.6	0.8	0.8	0.6	0.6	0.6	0.6	0.7	0.8
Black or African American only	2.0	1.5	1.5	2.1	1.9	1.6	1.5	1.5	1.5	1.6	1.8

*Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

NOTES: Data are for the civilian noninstitutionalized population. Persons of Hispanic origin may be of any race. Asian only race includes persons of Hispanic and non-Hispanic origin. Mammography questions differ slightly over time. (See [Appendix II, Hispanic origin; Mammography; Race](#). Also see [Table 86](#).)

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 27. Hospital discharges with at least one knee or hip replacement procedure in nonfederal short-stay hospitals among adults 45 years of age and over, by type of procedure, sex, and age: United States, 1996–2006

Type of procedure, sex, and age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total hip replacement											
						Discharges per 10,000 population					
Both sexes:											
45 years and over	14.7	15.2	16.5	16.5	14.2	15.4	17.7	19.2	20.4	19.9	19.4
45–64 years	6.4	6.7	8.0	9.0	8.1	8.3	10.0	10.8	11.7	10.9	12.2
65 years and over	28.0	29.0	30.9	29.5	25.2	28.2	32.1	35.3	37.3	37.7	33.8
Men:											
45 years and over	12.7	12.8	14.7	14.8	13.6	13.1	15.8	18.4	18.0	19.3	18.1
45–64 years	7.4	6.9	8.3	9.7	9.1	9.5	10.5	12.7	11.4	12.3	13.1
65 years and over	22.7	24.3	27.3	25.0	23.0	20.7	27.6	31.2	32.9	35.4	29.9
Women:											
45 years and over	16.4	17.1	18.1	18.0	14.8	17.3	19.3	19.9	22.4	20.5	20.5
45–64 years	5.5	6.5	7.7	8.3	7.2	7.2	9.6	9.1	11.9	9.6	11.5
65 years and over	31.7	32.4	33.4	32.7	26.6	33.5	35.3	38.2	40.5	39.4	36.6
Partial hip replacement											
Both sexes:											
45 years and over	11.7	11.5	12.2	11.2	10.5	11.7	10.5	10.2	17.9	17.5	18.8
65 years and over	27.7	28.7	30.4	27.6	27.0	31.6	27.2	28.1	35.3	34.2	37.4
Men:											
45 years and over	6.0	6.1	6.4	6.0	4.7	5.8	6.0	6.2	13.2	13.3	13.0
65 years and over	15.6	16.3	16.8	15.4	13.0	17.3	16.2	18.6	26.1	23.8	21.6
Women:											
45 years and over	16.4	16.1	17.1	15.6	15.5	16.6	14.4	13.6	22.0	21.2	23.9
65 years and over	36.1	37.4	40.0	36.4	36.9	41.6	35.1	34.9	42.0	41.7	48.8
Total knee replacement											
Both sexes:											
45 years and over	26.5	27.3	27.6	27.1	29.0	30.5	34.8	37.9	41.7	46.0	45.2
45–64 years	10.4	13.2	13.5	12.9	12.7	15.1	18.6	21.8	23.5	25.4	25.7
65 years and over	52.1	50.3	51.3	51.6	58.0	58.6	65.0	68.6	77.2	86.7	84.1
Men:											
45 years and over	20.6	20.2	21.8	23.0	24.3	25.0	28.4	30.0	31.0	33.9	34.9
45–64 years	8.4	9.9	11.2	10.4	8.7	11.1	14.3	17.9	14.9	17.7	19.2
65 years and over	43.6	40.0	42.5	48.2	57.0	54.9	59.2	57.0	67.6	71.2	71.5
Women:											
45 years and over	31.4	33.3	32.6	30.7	33.0	35.2	40.3	44.7	51.0	56.4	54.0
45–64 years	12.4	16.3	15.7	15.3	16.4	18.9	22.8	25.5	31.6	32.7	31.9
65 years and over	58.0	57.5	57.5	54.0	58.8	61.2	69.1	76.8	84.1	97.8	93.3
Total hip replacement											
						Standard error					
Both sexes:											
45 years and over	1.2	1.1	1.2	1.3	1.1	1.3	1.3	1.8	1.8	1.8	1.8
45–64 years	0.7	0.8	0.7	0.9	1.0	0.9	1.0	1.2	1.3	1.3	1.4
65 years and over	2.5	2.3	2.7	2.4	2.3	2.7	2.8	3.5	3.5	3.5	3.3
Men:											
45 years and over	1.1	1.2	1.4	1.5	1.2	1.5	1.5	2.0	2.1	2.2	1.9
45–64 years	0.9	1.2	1.1	1.4	1.4	1.5	1.4	1.7	1.5	1.7	1.7
65 years and over	2.5	2.6	3.1	2.7	2.8	2.6	3.1	4.3	4.2	4.5	3.6
Women:											
45 years and over	1.6	1.5	1.4	1.6	1.3	1.5	1.7	1.9	1.9	1.8	2.0
45–64 years	0.8	0.9	0.8	1.2	1.1	0.9	1.1	1.3	1.3	1.1	1.6
65 years and over	3.4	2.9	3.1	3.1	2.6	3.2	3.5	3.9	4.0	3.8	3.7

Data table for Figure 27. Hospital discharges with at least one knee or hip replacement procedure in nonfederal short-stay hospitals among adults 45 years of age and over, by type of procedure, sex, and age: United States, 1996–2006—Con.

Type of procedure, sex, and age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Partial hip replacement						Standard error					
Both sexes:											
45 years and over	0.9	0.9	1.0	0.9	0.9	1.1	0.9	0.9	1.9	1.6	1.9
65 years and over	2.2	2.4	2.7	2.4	2.4	3.0	2.4	2.7	3.2	3.1	3.3
Men:											
45 years and over	0.8	0.9	0.9	0.8	0.6	0.8	0.8	0.9	1.4	1.5	1.5
65 years and over	2.1	2.7	2.5	2.1	1.7	2.4	2.6	2.8	3.0	2.6	2.3
Women:											
45 years and over	1.4	1.3	1.6	1.4	1.5	1.6	1.3	1.3	2.4	2.0	2.4
65 years and over	3.0	3.0	3.8	3.3	3.5	4.2	3.2	3.6	4.0	4.2	4.6
Total knee replacement											
Both sexes:											
45 years and over	2.0	2.3	1.7	2.0	2.6	2.2	2.4	3.0	3.4	4.0	3.2
45–64 years	1.0	1.1	1.2	1.1	1.3	1.2	1.5	2.2	2.1	2.2	2.1
65 years and over	4.2	5.0	3.3	4.2	5.9	5.2	5.0	5.7	6.6	7.9	6.1
Men:											
45 years and over	2.0	1.6	1.8	1.9	2.5	2.4	2.7	3.1	3.6	2.9	2.9
45–64 years	1.1	1.2	1.4	1.1	1.2	1.2	1.9	3.0	1.7	1.8	2.0
65 years and over	4.6	3.7	4.4	4.8	6.5	6.4	7.1	5.8	9.5	6.8	6.6
Women:											
45 years and over	2.3	3.5	2.5	2.4	3.0	2.5	2.6	3.7	3.8	5.3	3.7
45–64 years	1.4	1.8	1.7	1.6	1.9	1.8	1.8	2.6	3.1	3.2	2.7
65 years and over	4.7	7.3	4.9	4.6	5.9	5.2	5.1	6.6	6.1	9.5	6.6

NOTES: Rates are based on the civilian population. Total hip replacement is *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM) procedure code 81.51. Partial hip replacement is procedure code 81.52. Total knee replacement is procedure code 81.54.

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Data table for Figure 28. Hospital discharges with a PTCA procedure among persons 45 years of age and over, by type of procedure, sex, and age: United States, 1996–2006

Type of procedure, sex, and age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Any PTCA procedure											
Discharges per 10,000 population											
Both sexes:											
45 years and over	51.3	46.5	54.3	59.5	52.6	52.8	58.5	58.6	58.1	54.7	55.2
45–64 years	40.3	34.4	40.5	46.4	37.5	37.3	41.6	39.9	40.0	38.4	39.7
65 years and over	68.9	66.4	77.3	81.9	79.6	81.0	90.1	94.6	93.3	87.0	86.2
Men:											
45 years and over	74.4	66.5	74.7	84.0	72.8	74.5	82.9	81.2	81.9	80.6	76.6
45–64 years	62.2	53.5	61.0	69.1	55.9	55.0	61.2	59.8	59.8	59.4	58.2
65 years and over	97.4	91.5	101.5	114.1	108.3	116.3	130.6	129.1	132.0	129.4	119.7
Women:											
45 years and over	31.9	29.7	37.0	38.6	35.5	34.3	37.6	39.2	37.5	32.2	36.5
45–64 years	19.7	16.4	21.3	25.1	20.0	20.5	23.1	20.9	21.2	18.3	22.2
65 years and over	48.9	48.7	60.1	59.0	59.6	56.2	61.4	69.9	65.5	56.4	61.9
PTCA without stent											
Both sexes:											
45 years and over	32.5	23.3	16.7	14.5	9.4	8.7	10.3	9.4	6.4	5.1	5.3
45–64 years	24.9	16.3	11.6	10.6	6.8	5.8	7.9	5.7	4.1	3.1	3.6
65 years and over	44.5	34.8	*25.1	21.2	14.0	14.2	14.8	16.5	11.0	9.0	8.8
Men:											
45 years and over	45.2	32.3	23.1	20.4	13.7	12.7	13.1	11.9	8.8	7.1	7.1
45–64 years	36.9	25.0	17.1	15.5	10.0	8.2	10.3	8.1	5.9	4.1	5.0
65 years and over	60.9	46.2	35.1	*30.2	21.2	22.2	19.5	20.3	15.2	13.9	11.9
Women:											
45 years and over	21.7	15.7	11.2	9.5	5.8	5.4	7.9	7.3	4.5	3.3	3.7
45–64 years	13.7	8.0	6.5	*6.0	3.7	3.4	5.7	3.4	2.4	2.1	2.2
65 years and over	33.0	26.9	*18.1	14.8	9.0	8.5	11.5	*13.8	7.9	5.4	6.5
PTCA with bare stent											
Both sexes:											
45 years and over	18.9	23.2	37.6	45.0	43.2	44.1	48.2	33.0	11.6	5.4	7.4
45–64 years	15.4	18.2	28.9	35.8	30.7	31.5	33.7	22.6	8.2	3.3	5.4
65 years and over	24.4	31.5	52.1	60.7	65.6	66.9	75.3	52.8	18.3	9.7	11.3
Men:											
45 years and over	29.2	34.2	51.5	63.7	59.2	61.8	69.8	46.1	17.6	7.7	10.2
45–64 years	25.4	28.5	43.9	53.6	45.9	46.8	51.0	33.9	12.5	5.2	7.7
65 years and over	36.4	45.2	66.5	83.9	87.0	94.1	111.1	73.5	29.1	13.6	15.8
Women:											
45 years and over	10.2	14.0	25.8	29.1	29.7	28.9	29.7	21.7	6.4	3.4	5.0
45–64 years	6.1	8.5	14.8	19.1	16.3	17.1	17.4	12.0	4.0	1.5	*3.2
65 years and over	15.9	21.9	42.0	44.2	50.6	47.7	49.9	38.0	10.5	6.9	8.1
PTCA with drug-eluting stent											
Both sexes:											
45 years and over . . . . .	...	...	...	...	...	...	...	16.3	40.0	44.2	42.5
45–64 years . . . . .	...	...	...	...	...	...	...	11.6	27.7	32.0	30.7
65 years and over . . . . .	...	...	...	...	...	...	...	25.3	64.0	68.3	66.1
Men:											
45 years and over . . . . .	...	...	...	...	...	...	...	23.3	55.5	65.8	59.4
45–64 years . . . . .	...	...	...	...	...	...	...	17.9	41.4	50.1	45.4
65 years and over . . . . .	...	...	...	...	...	...	...	35.3	87.7	101.9	92.0

See footnotes at end of table.

Data table for Figure 28. Hospital discharges with a PTCA procedure among persons 45 years of age and over, by type of procedure, sex, and age: United States, 1996–2006—Con.

Type of procedure, sex, and age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PTCA with drug-eluting stent—Con.											
Discharges per 10,000 population											
Women:											
45 years and over . . . . .	...	...	...	...	...	...	...	10.2	26.6	25.5	27.8
45–64 years . . . . .	...	...	...	...	...	...	...	5.5	14.7	14.8	16.8
65 years and over . . . . .	...	...	...	...	...	...	...	18.1	47.0	44.1	47.3
Any PTCA procedure											
Standard error											
Both sexes:											
45 years and over	4.8	4.0	5.0	4.8	4.2	4.0	4.3	5.3	4.5	4.2	3.9
45–64 years	3.6	2.9	3.9	4.4	2.8	2.9	3.2	3.5	3.3	3.0	3.1
65 years and over	7.3	6.4	7.7	6.6	7.4	6.9	7.5	9.5	7.6	6.9	6.2
Men:											
45 years and over	6.9	5.7	6.7	6.9	6.0	5.8	6.1	7.3	6.2	6.5	5.7
45–64 years	5.5	5.0	6.2	6.1	4.6	4.5	4.9	5.1	4.9	4.6	4.8
65 years and over	11.1	8.5	9.5	10.5	10.5	10.2	11.7	13.8	10.8	12.0	9.0
Women:											
45 years and over	3.4	2.9	3.8	3.3	2.9	3.0	3.1	4.1	3.3	2.6	2.8
45–64 years	2.5	1.7	2.4	3.2	1.7	1.7	2.3	2.8	2.1	1.9	2.0
65 years and over	5.4	5.4	7.0	5.0	5.9	5.9	5.6	7.4	6.0	4.5	5.0
PTCA without stent											
Both sexes:											
45 years and over	3.7	2.9	3.0	2.6	1.1	1.0	1.2	1.3	0.8	0.5	0.6
45–64 years	2.7	1.9	1.8	1.9	1.0	0.7	0.9	0.8	0.5	0.4	0.5
65 years and over	5.6	4.7	5.2	4.0	1.7	1.9	2.1	2.9	1.5	1.0	1.2
Men:											
45 years and over	5.2	4.1	4.0	3.9	1.8	1.4	1.5	1.7	1.0	0.8	1.1
45–64 years	4.1	3.3	2.9	2.7	1.6	1.1	1.4	1.1	0.8	0.6	0.8
65 years and over	8.7	6.5	6.9	6.9	3.2	3.0	2.9	3.7	2.2	1.9	2.3
Women:											
45 years and over	2.8	1.9	2.2	1.6	0.7	0.8	1.1	1.2	0.7	0.5	0.5
45–64 years	2.1	1.0	1.1	1.4	0.6	0.6	0.8	0.6	0.5	0.5	0.4
65 years and over	4.5	3.8	4.2	2.4	1.2	1.5	2.0	2.8	1.4	0.8	1.0
PTCA with bare stent											
Both sexes:											
45 years and over	1.8	2.3	3.5	3.9	3.7	3.4	3.6	2.9	1.6	0.7	0.9
45–64 years	1.6	1.8	2.9	3.6	2.2	2.5	2.7	2.0	1.1	0.5	0.8
65 years and over	2.7	3.5	5.1	5.4	6.9	5.9	6.4	5.3	2.7	1.4	1.3
Men:											
45 years and over	2.9	3.3	4.6	5.3	5.2	5.0	5.3	4.1	2.5	1.1	1.3
45–64 years	2.7	2.9	4.7	5.3	3.7	4.1	4.0	3.0	1.8	0.9	1.2
65 years and over	4.8	5.0	6.1	7.3	9.4	8.4	10.4	7.9	4.5	2.2	1.9
Women:											
45 years and over	1.2	1.7	2.7	2.9	2.6	2.7	2.4	2.4	1.0	0.5	0.8
45–64 years	1.0	1.2	1.7	2.5	1.4	1.5	1.9	1.8	0.7	0.3	0.7
65 years and over	1.8	2.9	5.1	4.8	5.7	5.4	4.4	4.5	1.8	1.2	1.3

See footnotes at end of table.

Data table for Figure 28. Hospital discharges with a PTCA procedure among persons 45 years of age and over, by type of procedure, sex, and age: United States, 1996–2006—Con.

Type of procedure, sex, and age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
PTCA with drug-eluting stent											
											Standard error
Both sexes:											
45 years and over	1.8	3.5	3.8	3.2
45–64 years	1.3	2.8	2.8	2.7
65 years and over	3.0	5.2	6.1	4.8
Men:											
45 years and over	2.6	4.6	5.9	4.6
45–64 years	2.0	4.0	4.2	4.4
65 years and over	4.7	7.2	10.8	6.8
Women:											
45 years and over	1.3	2.7	2.3	2.3
45–64 years	1.1	1.9	1.7	1.7
65 years and over	2.6	4.7	3.9	4.2

PTCA is percutaneous transluminal coronary angioplasty.

... Category not applicable.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Rates are based on the civilian population. PTCA discharges for 1996–2005 include *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM) codes 36.01 or 36.02 or 36.05; 2006 data are based on the new code 00.66. PTCA discharges without the insertion of a coronary stent include a PTCA code but do not include codes 36.06 and 36.07. PTCA discharges with the insertion of a bare coronary stent include a PTCA code and 36.06 but not 36.07. PTCA discharges with the insertion of a drug-eluting coronary stent include a PTCA code and 36.07 but not 36.06. The code 36.07 was introduced in 2003.

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Data table for Figures 29A and 29B. Cholecystectomy procedures among adults 18 years of age and over, by location of care, type of procedure, sex, and age: United States, 1996 and 2006

Type of procedure, sex, and age	Hospital discharges				Ambulatory surgery visits			
	1996	SE	2006	SE	1996	SE	2006	SE
Any cholecystectomy procedure								
Number per 10,000 population								
Both sexes:								
18 years and over	22.3	1.1	18.1	0.9	16.1	1.4	21.2	2.0
18–44 years	12.2	0.8	13.3	0.9	13.5	1.3	19.5	2.5
45 years and over	35.2	2.0	22.9	1.2	19.3	1.8	23.0	2.5
Men:								
18 years and over	14.8	1.0	12.2	0.8	7.1	0.7	7.5	1.0
18–44 years	4.2	0.5	5.7	0.6	4.5	0.6	*5.1	1.2
45 years and over	29.4	2.1	19.3	1.4	10.6	1.3	10.1	1.6
Women:								
18 years and over	29.3	1.6	23.6	1.2	24.4	2.2	34.2	3.7
18–44 years	20.2	1.5	21.0	1.5	22.4	2.2	34.1	4.8
45 years and over	40.0	2.6	26.0	1.5	26.7	2.8	34.2	4.4
Laparoscopic cholecystectomy procedure								
Both sexes:								
18 years and over	15.3	0.9	14.0	0.7	16.0	1.4	21.2	2.0
18–44 years	9.7	0.7	11.5	0.8	13.4	1.3	19.5	2.5
45 years and over	22.4	1.6	16.6	0.9	19.3	1.8	22.9	2.5
Men:								
18 years and over	8.4	0.6	8.8	0.6	7.0	0.7	7.3	1.0
18–44 years	3.2	0.4	4.6	0.5	4.5	0.6	*5.1	1.2
45 years and over	15.7	1.2	13.3	1.1	10.6	1.3	9.8	1.6
Women:								
18 years and over	21.6	1.5	19.0	1.0	24.3	2.2	34.2	3.7
18–44 years	16.1	1.3	18.5	1.4	22.3	2.2	34.1	4.8
45 years and over	28.0	2.3	19.4	1.2	26.7	2.8	34.2	4.4

SE is standard error.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Cholecystectomy is gallbladder removal. Rates are based on the civilian population as of July 1. Discharges are from nonfederal short-stay hospitals. Visits are to hospital-based and freestanding ambulatory surgery centers. To avoid double counting, visits that resulted in a hospital admission are excluded. Rates are for at least one procedure listed. Cholecystectomy is *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM) procedure code 51.2. Laparoscopic cholecystectomy (laparoscopic cholecystectomy and laparoscopic partial cholecystectomy) is procedure code 51.23 or 51.24 and is a subset of cholecystectomy.

SOURCE: CDC/NCHS, National Hospital Discharge Survey and National Survey of Ambulatory Surgery.

Data table for Figure 30. Upper endoscopy or colonoscopy procedures among adults 18 years of age and over, by location of care, type of procedure, and age: United States, 1996 and 2006

Type of procedure and age	Ambulatory surgery visit				Hospital discharges			
	1996		2006		1996		2006	
	Rate	SE	Rate	SE	Rate	SE	Rate	SE
Upper endoscopy (EGD)								
Number of procedures per 10,000 population								
18 years of age and over	76.8	6.3	146.6	13.3	40.6	1.8	44.2	2.1
18–44 years	36.6	3.4	64.9	8.1	11.2	0.8	12.8	0.8
45–54 years	81.2	7.4	153.8	15.9	29.2	2.5	31.1	2.2
45–64 years	93.7	8.2	183.1	18.1	38.2	2.5	39.6	2.2
65 years and over	181.3	16.1	319.8	28.8	140.3	6.7	148.4	7.5
65–74 years	170.8	15.3	340.5	32.6	91.0	5.6	105.7	6.2
75 years and over	194.3	18.3	298.4	29.4	200.8	9.8	192.5	10.8
75–84 years	201.0	20.0	350.8	36.9	180.4	9.8	170.7	10.7
85 years and over	173.7	19.9	169.3	28.4	262.8	17.8	246.1	16.7
Colonoscopy								
18 years of age and over	80.1	5.8	248.9	28.1	20.2	0.9	20.8	1.0
18–44 years	28.7	3.1	66.6	11.3	4.4	0.4	5.1	0.4
45–54 years	83.4	6.9	327.1	37.8	11.0	1.1	14.5	1.1
45–64 years	105.8	7.8	383.4	42.2	16.6	1.1	18.7	1.2
65 years and over	207.0	16.5	529.1	62.1	77.5	3.8	72.4	4.1
65–74 years	216.1	17.0	637.1	84.9	50.0	3.5	48.6	3.4
75 years and over	195.8	19.1	417.6	46.5	111.2	6.3	96.9	6.1
75–84 years	228.5	22.1	516.7	60.5	97.4	6.1	88.7	6.3
85 years and over	96.7	13.9	173.6	29.2	153.1	16.1	117.3	9.9

SE is standard error; EGD is esophagogastroduodenoscopy.

NOTES: Rates are based on the civilian population as of July 1. Discharges are from nonfederal short-stay hospitals. Visits are to hospital-based and freestanding ambulatory surgery centers. To avoid double counting, visits that resulted in a hospital admission are excluded. Rates are for at least one procedure listed. EGD is *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM) procedure codes 45.13 or 45.16, and colonoscopy is codes 45.23 or 45.25. (See [Appendix II, International Classification of Diseases, ninth revision, Clinical Modification](#). Also see [Tables 103 and XI](#).)

SOURCES: CDC/NCHS, National Hospital Discharge Survey and National Survey of Ambulatory Surgery.

Data table for Figure 31: Medicare decedents 65 years of age and over with an ICU/CCU stay in the last 6 months of life, by state: United States, 2005

<i>State</i>	<i>ICU/CCU admissions during last 6 months of life per 1,000 decedents</i>	<i>Percent of decedents admitted to ICU/CCU at least once during last 6 months of life</i>	<i>State</i>	<i>ICU/CCU admissions during last 6 months of life per 1,000 decedents</i>	<i>Percent of decedents admitted to ICU/CCU at least once during last 6 months of life</i>
United States	556.62	39	Missouri	567.49	40
Alabama	507.94	38	Montana	362.06	28
Alaska	403.84	30	Nebraska	442.01	32
Arizona	622.07	42	Nevada	605.76	44
Arkansas	472.73	35	New Hampshire	329.86	26
California	680.42	45	New Jersey	767.78	49
Colorado	409.32	32	New Mexico	451.12	33
Connecticut	448.10	33	New York	436.67	34
Delaware	557.98	41	North Carolina	523.59	38
District of Columbia	515.73	39	North Dakota	295.82	23
Florida	753.23	49	Ohio	581.12	40
Georgia	528.54	39	Oklahoma	448.49	34
Hawaii	465.42	36	Oregon	340.70	26
Idaho	317.05	25	Pennsylvania	634.39	43
Illinois	687.93	45	Rhode Island	376.51	29
Indiana	542.94	39	South Carolina	567.16	41
Iowa	345.13	26	South Dakota	360.72	28
Kansas	414.05	31	Tennessee	544.15	39
Kentucky	561.81	39	Texas	639.43	44
Louisiana	545.98	39	Utah	373.80	28
Maine	346.97	27	Vermont	284.06	23
Maryland	540.40	38	Virginia	536.26	39
Massachusetts	408.93	31	Washington	460.71	34
Michigan	568.08	40	West Virginia	547.67	39
Minnesota	409.93	30	Wisconsin	358.36	27
Mississippi	428.59	33	Wyoming	362.52	28

ICU/CCU care includes care provided in medical, surgical, trauma, burn, or other types of critical care units.

NOTES: Excludes Medicare enrollees who were members of a health maintenance organization (HMO). Geographic location is based on decedent's residence, not place of care. This analysis is for decedents 65–99 years of age at the time of death.

SOURCE: Dartmouth Atlas of Health Care. Available from: <http://www.dartmouthatlas.org/>.

Data table for Figure 32. Selected solid organ transplantation, by type of organ: United States, 1997–2006

Type of organ	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Incidence of transplants per 1 million population										
Kidney	43.70	46.08	46.79	48.23	50.00	51.25	52.05	54.51	55.60	57.15
Liver	15.64	16.71	17.42	17.70	18.19	18.49	19.51	21.01	21.73	22.23
Heart	8.56	8.69	8.02	7.79	7.72	7.47	7.07	6.86	7.17	7.33
Lung	3.48	3.22	3.27	3.40	3.71	3.61	3.73	3.99	4.74	4.70
Kidney-pancreas	3.19	3.60	3.45	3.24	3.12	3.14	3.00	3.00	3.05	3.09
Multi-organ	---	---	---	---	---	---	---	---	---	---
Pancreas after kidney	0.49	0.58	0.81	1.08	1.07	1.30	1.18	1.43	1.16	0.98
Pancreas transplant alone	0.30	0.33	0.51	0.47	0.59	0.62	0.54	0.62	0.67	0.57
Intestine	0.25	0.26	0.27	0.29	0.39	0.37	0.40	0.52	0.59	0.58
Heart-lung	0.23	0.17	0.19	0.17	0.09	0.11	0.10	0.14	0.12	0.10
Number of transplants										
Total	20,093	21,319	21,826	23,012	23,947	24,552	25,088	26,542	27,530	28,291
Kidney	11,561	12,318	12,633	13,446	14,102	14,526	14,857	15,674	16,076	16,646
Liver	4,014	4,369	4,605	4,807	4,985	5,059	5,365	5,781	6,000	6,136
Heart	2,266	2,310	2,157	2,167	2,171	2,112	2,026	1,960	2,062	2,147
Lung	929	866	892	958	1,059	1,041	1,080	1,168	1,403	1,401
Kidney-pancreas	847	969	937	914	889	902	869	880	896	914
Multi-organ	197	184	175	222	238	322	350	441	519	566
Pancreas after kidney	130	156	220	304	304	374	344	419	343	292
Pancreas transplant alone	64	73	125	118	130	142	116	129	129	98
Intestine	23	28	31	30	42	42	53	52	68	60
Heart-lung	62	46	51	46	27	32	28	38	34	31

--- Data not available.

NOTES: An organ that is divided into segments (liver, lung, pancreas, intestine) is counted once per transplant. Kidney-pancreas and heart-lung transplants are counted as one transplant. Other multiple organ transplants are counted only in the multi-organ category.

SOURCE: Organ Procurement and Transplantation Network, Scientific Registry of Transplant Recipients (OPTN/SRTR), 2007 annual report. Data as of May 1, 2007.

Data table for Figure 33. Assisted reproductive technology (ART) cycles initiated among women, by age: United States, 1996–2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Age	Number of ART cycles initiated										
Total	64,681	72,397	81,438	87,636	99,629	107,587	115,392	122,872	127,977	134,260	138,198
Under 35 years	28,741	30,944	34,952	37,397	41,988	45,274	47,806	50,842	52,334	53,567	54,386
35–37 years.	14,258	15,931	17,769	19,240	21,815	22,412	24,396	25,660	27,259	29,627	31,127
38–40 years.	12,143	13,830	15,271	16,489	18,733	20,710	22,356	24,006	24,725	25,401	25,933
41 years and over	9,539	11,692	13,446	14,510	17,093	19,191	20,834	22,364	23,659	25,665	26,752
41–42 years	4,968	6,214	6,939	7,531	8,665	9,757	10,754	11,446	11,934	12,951	13,204
43 years and over.	4,571	5,478	6,507	6,979	8,428	9,434	10,080	10,918	11,725	12,714	13,548

NOTES: CDC defines ART procedures as those that involve surgically removing eggs from a woman's ovaries, combining them with sperm in the laboratory, and returning them to the woman's body or donating them to another woman. ART procedures do not include treatments in which only sperm are handled (i.e., intrauterine or artificial insemination) or procedures in which a woman only takes medicine to stimulate egg production without the intention of having eggs retrieved from the ovaries. ART is more appropriately considered a cycle of treatment rather than a procedure at a single point in time because ART consists of several steps over an interval of approximately 2 weeks. All ART cycles that were initiated, even those that were discontinued before all steps were completed, are included in this analysis. Cycles in which a new type of treatment was being evaluated are excluded.

SOURCE: CDC, National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health.

Data table for Figure 34. Adults 45 years of age and over reporting prescription drug use in the past month for selected drug categories, by sex and age: United States, 1988–1994 and 2003–2006

Sex and age	Antidiabetic drugs				Statin drugs			
	1988–1994		2003–2006		1988–1994		2003–2006	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Both sexes:								
45 years and over	6.9	0.3	10.7	0.5	2.4	0.3	22.0	0.9
45–64 years.	5.5	0.4	8.3	0.6	2.2	0.3	15.1	1.0
65 years and over	9.0	0.6	15.3	1.0	2.8	0.5	35.4	0.9
Men:								
45 years and over	7.0	0.5	10.1	0.7	2.3	0.3	23.6	0.9
45–64 years.	5.9	0.7	7.9	0.8	*2.5	0.5	16.8	1.3
65 years and over	9.0	1.0	15.0	1.4	*1.9	0.6	38.9	1.5
Women:								
45 years and over	6.8	0.4	11.2	0.8	2.6	0.5	20.5	1.2
45–64 years.	5.1	0.4	8.7	0.8	*1.9	0.4	13.5	1.4
65 years and over	9.0	0.7	15.6	1.4	3.5	0.6	32.8	1.4

SE is standard error.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Data are for the civilian noninstitutionalized population. See [Technical Notes](#) for specific drugs.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Data table for Figure 35. Death rates for human immunodeficiency virus (HIV) disease for all ages, by sex and race and Hispanic origin: United States, 1987–2006

Year	Male	Female	White, not Hispanic male	Black male	Hispanic male	White, not Hispanic female	Black female	Hispanic female
Deaths per 100,000 population								
1987	10.4	1.1	10.7	26.2	18.8	0.5	4.6	2.1
1988	12.6	1.4	11.2	32.8	21.5	0.6	6.2	3.1
1989	16.5	1.8	12.7	42.1	28.5	0.6	8.2	4.1
1990	18.5	2.2	14.1	46.3	28.8	0.7	10.1	3.8
1991	21.0	2.7	15.5	55.8	31.9	0.9	12.2	4.9
1992	23.3	3.2	16.7	65.1	35.1	1.0	14.7	5.7
1993	25.1	3.9	17.4	73.8	35.2	1.3	17.6	6.8
1994	27.5	4.8	18.5	86.2	41.5	1.6	22.4	8.0
1995	27.3	5.3	17.9	89.0	40.8	1.7	24.4	8.8
1996	19.0	4.2	11.2	70.3	28.0	1.3	20.8	6.3
1997	9.6	2.6	4.8	40.9	14.0	0.7	13.7	3.3
1998	7.6	2.2	3.7	33.2	10.2	0.5	12.0	2.8
1999	8.2	2.5	4.0	36.1	10.9	0.7	13.1	3.0
2000	7.9	2.5	3.8	35.1	10.6	0.7	13.2	2.9
2001	7.5	2.5	3.6	33.8	9.7	0.6	13.4	2.7
2002	7.4	2.5	3.5	33.3	9.1	0.6	13.4	2.6
2003	7.1	2.4	3.4	31.3	9.2	0.6	12.8	2.7
2004	6.6	2.4	3.1	29.2	8.2	0.6	13.0	2.4
2005	6.2	2.3	3.0	28.2	7.5	0.6	12.0	1.9
2006	5.9	2.2	2.8	26.3	7.0	0.6	12.2	1.9

NOTES: Data are age-adjusted. Highly active antiretroviral therapy (HAART) was introduced in 1996. The horizontal rules in the data table around 1995–1997 denote the period from pre-HAART to widespread HAART use. Categories for the coding and classification of HIV disease were introduced in the United States in 1987. For the period 1987–1998, underlying cause of death was coded according to the ninth revision of the *International Classification of Diseases* (ICD–9). Starting with 1999 data, cause of death is coded according to ICD–10. (See [Appendix II, Cause of death; Human immunodeficiency virus disease; Tables IV and V.](#)) Age-adjusted rates are calculated using the year 2000 standard population. The black race group may include persons of Hispanic origin. Persons of Hispanic origin may be of any race. (See [Appendix II, Age adjustment; Hispanic origin.](#)) Rates are based on the resident population. (Also see [Table 38.](#))

SOURCE: CDC/NCHS, National Vital Statistics System.

Data table for Figure 36. Costs and number of discharges for hospital stays with the six most expensive principal procedures, United States: 1999–2006

<i>Selected principal procedure</i>	1999	2000	2001	2002	2003	2004	2005	2006
Amount in millions (2006 dollars)								
Respiratory intubation and mechanical ventilation	\$10,687	\$11,424	\$12,011	\$13,184	\$14,356	\$15,198	\$15,514	\$15,729
Percutaneous transluminal coronary angioplasty (PTCA)	6,407	8,161	9,268	9,797	10,331	11,946	12,559	13,327
Cardiac pacemaker, cardioverter, or defibrillator.	3,518	4,238	5,102	6,498	7,521	7,983	7,937	8,693
Coronary artery bypass graft (CABG).	8,344	10,055	9,731	9,265	9,285	8,231	7,872	8,085
Knee arthroplasty (knee replacement)	3,573	4,135	4,608	5,187	5,760	6,751	7,787	7,920
Spinal fusion	2,651	3,394	4,045	4,916	5,862	6,330	7,475	7,670
Standard errors for amounts in millions (2006 dollars)								
Respiratory intubation and mechanical ventilation	\$368	\$425	\$415	\$472	\$523	\$507	\$524	\$463
Percutaneous transluminal coronary angioplasty (PTCA)	466	514	597	647	607	808	788	837
Cardiac pacemaker, cardioverter, or defibrillator.	190	180	271	368	405	478	453	540
Coronary artery bypass graft (CABG).	586	613	590	572	555	487	519	507
Knee arthroplasty (knee replacement)	166	149	202	269	206	306	317	294
Spinal fusion	167	187	222	189	372	358	498	434
Number of discharges								
Respiratory intubation and mechanical ventilation	547,580	528,242	542,971	585,501	616,788	676,430	667,264	712,049
Percutaneous transluminal coronary angioplasty (PTCA)	501,510	601,832	701,981	692,621	675,673	720,927	749,577	828,319
Cardiac pacemaker, cardioverter, or defibrillator.	215,017	232,779	267,316	294,704	308,300	316,787	325,250	353,116
Coronary artery bypass graft (CABG).	323,753	349,967	344,210	316,471	291,095	255,609	227,774	245,231
Knee arthroplasty (knee replacement)	311,106	328,122	363,536	399,139	427,255	481,452	549,867	547,364
Spinal fusion	188,309	210,682	252,400	276,984	297,883	303,374	332,159	343,307

NOTES: Costs were derived from total hospital charges (the amount the hospital billed for the hospital stay) using cost-to-charge ratios based on hospital accounting reports from the Centers for Medicare & Medicaid Services. For each hospital, a hospital-wide cost-to-charge ratio was used to transform charges into costs. Costs tend to reflect the actual costs to produce hospital services, whereas charges represent what the hospital billed for the care. The hospital costs do not include the professional billing (physician fees). The costs shown were for the entire hospital stay, not just the costs of performing the principal procedure. Costs were adjusted to 2006 dollars using the Gross Domestic Product Price Index. Procedures were classified according to the Clinical Classification Software (CCS) procedure group number. CCS codes were as follows: respiratory intubation and mechanical ventilation (216); PTCA (45); CABG (44); cardiac pacemaker, cardioverter, defibrillator (48); spinal fusion (158); knee arthroplasty (152).

SOURCE: Agency for Healthcare Research and Quality, Healthcare Cost & Utilization Project, Nationwide Inpatient Sample.

Trend Tables

Table 1 (page 2 of 3). Resident population, by age, sex, race, and Hispanic origin: United States, selected years 1950–2007

[Data are based on decennial census updated with data from multiple sources]

<i>Sex, race, Hispanic origin, and year</i>	<i>Total resident population</i>	<i>Under 1 year</i>	<i>1–4 years</i>	<i>5–14 years</i>	<i>15–24 years</i>	<i>25–34 years</i>	<i>35–44 years</i>	<i>45–54 years</i>	<i>55–64 years</i>	<i>65–74 years</i>	<i>75–84 years</i>	<i>85 years and over</i>
Number in thousands												
Black or African American female												
1950	7,745	---	¹ 941	1,446	1,300	1,260	1,112	796	443	322	² 125	---
1960	9,758	283	1,085	2,191	1,404	1,300	1,229	974	663	430	160	38
1970	11,832	243	970	2,773	2,196	1,456	1,309	1,134	868	582	230	71
1980	14,046	266	951	2,578	2,937	2,267	1,488	1,258	1,059	776	360	106
1990	16,063	316	1,137	2,641	2,700	2,905	2,279	1,416	1,135	884	495	156
2000	19,187	302	1,228	3,348	2,971	2,866	3,055	2,274	1,353	971	587	233
2005	20,416	324	1,292	3,260	3,244	2,909	3,024	2,727	1,695	1,029	645	267
2006	20,669	333	1,298	3,240	3,293	2,932	3,024	2,793	1,784	1,051	650	274
2007	20,907	351	1,325	3,212	3,331	2,953	3,005	2,852	1,867	1,073	656	283
American Indian or Alaska Native male												
1980	702	17	59	153	161	114	75	53	37	22	9	2
1990	1,024	24	88	206	192	183	140	86	55	32	13	3
2000	1,488	28	109	301	271	229	229	165	88	45	18	5
2005	1,579	22	86	282	303	248	231	197	119	58	26	7
2006	1,599	23	88	273	306	254	232	203	126	60	28	8
2007	1,615	24	90	263	307	259	231	208	132	64	29	9
American Indian or Alaska Native female												
1980	718	16	57	149	158	118	79	57	41	27	12	4
1990	1,041	24	85	200	178	186	148	92	61	41	21	6
2000	1,496	26	106	293	254	219	236	174	95	54	28	10
2005	1,582	21	83	274	289	229	230	209	129	67	36	15
2006	1,602	22	85	265	293	234	229	216	136	70	37	16
2007	1,620	23	87	255	295	240	227	221	143	73	39	18
Asian or Pacific Islander male												
1980	1,814	35	130	321	334	366	252	159	110	72	30	6
1990	3,652	68	258	598	665	718	588	347	208	133	57	12
2000	5,713	84	339	861	934	1,073	947	705	399	231	112	27
2005	6,831	104	404	937	1,000	1,252	1,156	900	569	309	154	44
2006	7,073	108	419	958	1,012	1,281	1,214	938	605	328	162	48
2007	7,188	111	431	967	1,002	1,261	1,248	966	637	344	168	53
Asian or Pacific Islander female												
1980	1,915	34	127	307	325	423	269	192	126	71	33	9
1990	3,805	65	247	578	621	749	664	371	264	166	65	17
2000	6,044	81	336	817	914	1,112	1,024	812	451	305	152	41
2005	7,209	99	384	909	955	1,295	1,221	1,014	657	380	222	73
2006	7,468	103	398	931	963	1,327	1,279	1,051	702	399	235	80
2007	7,586	105	409	940	952	1,301	1,314	1,075	741	415	246	88

See footnotes at end of table.

Table 1 (page 3 of 3). Resident population, by age, sex, race, and Hispanic origin: United States, selected years 1950–2007

[Data are based on decennial census updated with data from multiple sources]

Sex, race, Hispanic origin, and year	Total resident population	Under 1 year	1–4 years	5–14 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years	75–84 years	85 years and over
Number in thousands												
Hispanic or Latino male												
1980	7,280	187	661	1,530	1,646	1,256	761	570	364	200	86	19
1990	11,388	279	980	2,128	2,376	2,310	1,471	818	551	312	131	32
2000	18,162	395	1,506	3,469	3,564	3,494	2,653	1,551	804	474	203	50
2005	22,065	476	1,837	3,996	3,823	4,295	3,376	2,155	1,137	591	299	80
2006	22,925	496	1,906	4,109	3,905	4,456	3,526	2,287	1,218	617	316	89
2007	23,524	528	1,983	4,188	3,910	4,503	3,630	2,414	1,295	643	331	98
Hispanic or Latina female												
1980	7,329	181	634	1,482	1,546	1,249	805	615	411	257	117	30
1990	10,966	268	939	2,039	2,028	2,073	1,448	868	632	403	209	59
2000	17,144	376	1,441	3,318	3,017	3,016	2,476	1,585	907	603	303	101
2005	20,622	456	1,763	3,815	3,370	3,532	3,015	2,115	1,242	731	430	153
2006	21,396	475	1,828	3,923	3,470	3,636	3,134	2,230	1,323	759	452	167
2007	21,981	505	1,900	4,000	3,527	3,665	3,212	2,336	1,397	787	471	181
White, not Hispanic or Latino male												
1980	88,035	1,308	4,772	13,317	16,554	14,739	10,284	9,229	8,803	5,906	2,519	603
1990	91,743	1,351	5,181	12,525	13,219	15,967	14,481	9,875	8,303	6,837	3,275	729
2000	96,551	1,163	4,761	13,238	12,628	12,958	16,088	14,223	9,312	6,894	4,225	1,062
2005	98,327	1,186	4,710	12,409	13,482	12,203	14,703	15,441	11,507	6,868	4,448	1,369
2006	98,540	1,171	4,679	12,263	13,526	12,128	14,418	15,615	11,915	6,949	4,439	1,436
2007	98,774	1,190	4,676	12,113	13,509	12,174	14,069	15,714	12,291	7,106	4,427	1,504
White, not Hispanic or Latina female												
1980	92,872	1,240	4,522	12,647	16,185	14,711	10,468	9,700	9,935	7,707	4,345	1,411
1990	96,557	1,280	4,909	11,846	12,749	15,872	14,520	10,153	9,116	8,674	5,491	1,945
2000	100,774	1,102	4,517	12,529	12,183	12,778	16,089	14,446	9,879	8,188	6,429	2,633
2005	102,031	1,130	4,483	11,767	12,833	12,008	14,647	15,673	12,087	7,946	6,466	2,992
2006	102,252	1,116	4,451	11,635	12,839	11,981	14,375	15,857	12,506	8,013	6,399	3,080
2007	102,418	1,132	4,443	11,496	12,815	12,011	14,013	15,961	12,882	8,164	6,325	3,175

--- Data not available.

¹Population for age group under 5 years.

²Population for age group 75 years and over.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with *Health, United States, 2003*, intercensal population estimates for the 1990s and 2000 are based on the 2000 census. Population estimates for 2001 and later years are 2000-based postcensal estimates. Population figures are census counts as of April 1 for 1950, 1960, 1970, 1980, 1990, and 2000; estimates as of July 1 for other years. See [Appendix I, Population Census and Population Estimates](#). Populations for age groups may not sum to the total due to rounding. Unrounded population figures are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Census Bureau: 1950 Nonwhite Population by Race. Special Report P-E, No. 3B. Washington, DC: U.S. Government Printing Office, 1951; U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964; 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971; U.S. population estimates, by age, sex, race, and Hispanic origin: 1980 to 1991. Current population reports, series P-25, no 1095. Washington, DC: U.S. Government Printing Office, Feb. 1993; NCHS. Estimates of the July 1, 1991-July 1, 1999, April 1, 2000, and July 1, 2001-July 1, 2007 United States resident population by age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau, Population Estimates Program. Available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Table 2 (page 1 of 2). Inmates in state or federal prisons and local jails, by sex, race, Hispanic origin, and age: United States, selected years 1999–2008

[Data are based on reporting by a census of departments of correction and the Federal Bureau of Prisons and a sample of jails]

<i>Sex, race, Hispanic origin, and age</i>	1999	2000	2005	2006	2007	2008	1999	2000	2005	2006	2007	2008
	Number of inmates in thousands ¹						Inmates per 100,000 population ²					
Total ^{3,4}	1,861	1,936	2,183	2,245	2,299	2,311	---	686	744	750	762	762
Male ^{3,4}	1,711	1,776	1,993	2,042	2,091	2,104	1,261	1,297	1,371	1,384	1,406	1,403
Female ^{3,4}	149	156	194	203	208	208	106	110	129	134	136	135
White, not Hispanic: ⁴												
Male	610	664	689	718	756	713	630	683	709	736	773	727
Female	54	64	89	95	97	95	53	63	88	94	95	93
Black, not Hispanic: ⁴												
Male	757	792	806	837	815	846	4,617	4,777	4,682	4,789	4,618	4,777
Female	68	70	66	69	68	68	375	380	347	358	348	349
Hispanic: ⁴												
Male	296	291	403	427	411	427	1,802	1,715	1,856	1,862	1,747	1,760
Female	23	20	29	32	32	33	142	117	144	152	146	147
Male												
18–19	79	81	74	76	87	86	1,868	1,917	1,739	1,766	1,995	1,934
20–24	299	310	357	366	353	353	3,130	3,177	3,291	3,352	3,256	3,256
25–29	317	330	351	359	354	355	3,363	3,580	3,462	3,395	3,286	3,241
30–34	321	334	320	328	329	331	3,193	3,362	3,122	3,289	3,317	3,328
35–39	282	294	291	299	303	309	2,474	2,613	2,765	2,805	2,844	2,919
40–44	190	198	256	263	274	277	1,699	1,747	2,240	2,344	2,496	2,580
45–54	157	165	251	257	281	283	896	903	1,214	1,209	---	---
55 and over	49	51	77	79	90	89	193	199	260	256	---	---
Female												
18–19	4	4	5	5	6	6	92	96	116	120	133	129
20–24	19	20	28	30	31	31	205	210	277	290	304	302
25–29	29	30	29	30	32	32	303	324	299	300	311	308
30–34	37	39	34	36	36	35	370	391	342	370	369	367
35–39	29	31	38	40	39	39	257	272	364	378	371	373
40–44	16	17	31	32	33	33	144	149	264	284	297	303
45–54	12	12	23	25	26	26	63	64	110	112	---	---
55 and over	3	3	4	5	5	5	8	8	12	12	---	---
White, not Hispanic male												
18–19	24	26	24	25	27	27	885	942	905	935	1,016	976
20–24	91	100	107	111	108	104	1,462	1,560	1,627	1,675	1,631	1,564
25–29	96	105	99	104	106	100	1,535	1,732	1,682	1,685	1,686	1,550
30–34	114	125	105	110	110	103	1,674	1,861	1,693	1,874	1,904	1,793
35–39	106	116	106	111	114	107	1,302	1,460	1,562	1,641	1,704	1,643
40–44	74	81	103	107	114	108	897	972	1,299	1,419	1,566	1,529
45–54	71	78	100	105	121	113	522	553	658	677	---	---
55 and over	27	30	40	42	51	46	129	139	167	170	---	---
Black, not Hispanic male												
18–19	35	37	32	33	37	37	5,787	6,027	5,306	5,336	5,710	5,543
20–24	136	143	154	160	146	149	10,407	10,593	10,486	10,698	9,692	9,776
25–29	152	160	150	156	143	148	12,334	13,118	11,955	11,695	10,384	10,408
30–34	142	150	127	132	126	132	11,225	11,892	10,472	11,211	10,688	11,137
35–39	130	136	116	121	118	125	9,548	10,054	9,425	9,804	9,577	10,120
40–44	79	83	99	103	103	107	6,224	6,399	7,575	7,976	8,148	8,622
45–54	59	62	97	101	107	111	3,399	3,409	4,401	4,421	---	---
55 and over	13	13	21	22	25	26	611	635	879	869	---	---

See footnotes at end of table.

Table 2 (page 2 of 2). Inmates in state or federal prisons and local jails, by sex, race, Hispanic origin, and age: United States, selected years 1999–2008

[Data are based on reporting by a census of departments of correction and the Federal Bureau of Prisons and a sample of jails]

Sex, race, Hispanic origin, and age	1999	2000	2005	2006	2007	2008	1999	2000	2005	2006	2007	2008
Hispanic male	Number of inmates in thousands ¹						Inmates per 100,000 population ²					
18–19	16	16	14	15	18	18	2,524	2,419	2,072	2,112	2,383	2,376
20–24	62	60	80	85	80	83	4,141	3,885	3,878	4,168	4,043	4,281
25–29	60	58	86	91	84	87	4,220	4,084	3,884	3,912	3,607	3,792
30–34	56	55	74	78	74	76	3,844	3,756	3,640	3,652	3,388	3,446
35–39	40	40	55	58	55	57	2,898	2,781	3,111	3,094	2,824	2,868
40–44	31	31	41	43	42	44	2,746	2,621	2,649	2,630	2,489	2,510
45–54	22	22	39	42	42	44	1,521	1,426	1,873	1,813	---	---
55 and over	7	8	11	12	13	14	460	468	562	543	---	---
White, not Hispanic female												
18–19	2	2	2	2	2	2	63	71	76	81	90	86
20–24	7	8	13	14	14	14	121	137	206	221	226	221
25–29	10	11	13	14	15	14	154	187	220	226	233	225
30–34	13	15	16	17	16	16	185	224	255	292	288	281
35–39	10	13	18	19	18	18	128	159	260	282	278	279
40–44	6	7	14	15	15	15	73	87	177	200	205	208
45–54	5	6	11	12	13	12	33	39	70	75	---	---
55 and over	1	2	3	3	3	3	5	7	9	9	---	---
Black, not Hispanic female												
18–19	1	1	2	2	2	2	224	231	257	262	245	236
20–24	7	7	9	9	9	9	524	525	611	637	612	608
25–29	13	14	10	10	10	10	956	993	720	716	697	691
30–34	19	19	12	12	12	12	1,362	1,409	855	924	893	892
35–39	14	14	13	14	13	13	940	962	957	999	957	961
40–44	7	8	11	12	12	12	512	513	751	798	808	827
45–54	4	5	8	9	9	9	214	209	323	326	---	---
55 and over	1	1	1	1	1	1	27	28	26	28	---	---
Hispanic female												
18–19	1	1	1	1	1	1	94	87	168	175	187	185
20–24	4	4	5	6	6	6	284	246	317	346	357	367
25–29	5	4	5	6	6	6	357	296	287	305	310	326
30–34	5	4	5	6	6	6	372	301	312	333	313	328
35–39	4	3	5	6	5	5	308	247	322	337	309	313
40–44	2	2	4	4	4	4	203	168	264	279	256	262
45–54	2	2	3	3	3	3	133	106	138	141	---	---
55 and over	0	0	1	1	1	1	11	9	26	26	---	---

--- Data not available.

0 is greater than 0 but less than 500.

¹Estimates as of June 30 of year shown.

²Inmate estimates as of June 30 of year shown. Population is U.S. resident population for July 1 of year shown, except for 2005 data. For 2005 data, population is U.S. resident population as of January 1 of year shown.

³Includes all other races not shown separately. See [Appendix II, Hispanic origin; Race](#).

⁴Includes all other ages not shown separately. A small number of inmates are under age 18.

NOTES: Data are for inmates in custody. See [Appendix I, Annual Survey of Jails and Census of Jails; National Prisoner Statistics](#). Starting with 2004 data, inmates reporting more than one race are excluded. Because of revisions, some categories may not sum to the total. Data for additional years are available. See [Appendix III](#).

SOURCES: West HC, Sabol WJ. Prison inmates at midyear 2008—Statistical tables. Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice, 2009. Reports for earlier years are available from: <http://www.ojp.usdoj.gov/bjs/prisons.htm>.

Table 3 (page 1 of 2). Persons and families below poverty level, by selected characteristics, race, and Hispanic origin: United States, selected years 1973–2007

[Data are based on household interviews of the civilian noninstitutionalized population]

<i>Selected characteristics, race, and Hispanic origin</i> ¹	1973	1980	1985	1990	1995	2000 ²	2004 ³	2006	2007
All persons									
Percent below poverty									
All races	11.1	13.0	14.0	13.5	13.8	11.3	12.7	12.3	12.5
White only	8.4	10.2	11.4	10.7	11.2	9.5	10.8	10.3	10.5
Black or African American only	31.4	32.5	31.3	31.9	29.3	22.5	24.7	24.3	24.5
Asian only	---	---	---	12.2	14.6	9.9	9.8	10.3	10.2
Hispanic or Latino	21.9	25.7	29.0	28.1	30.3	21.5	21.9	20.6	21.5
Mexican	---	---	28.8	28.1	31.2	22.9	---	---	---
Puerto Rican	---	---	43.3	40.6	38.1	25.6	---	---	---
White only, not Hispanic or Latino	7.5	9.1	9.7	8.8	8.5	7.4	8.7	8.2	8.2
Related children under 18 years of age in families									
All races	14.2	17.9	20.1	19.9	20.2	15.6	17.3	16.9	17.6
White only	9.7	13.4	15.6	15.1	15.5	12.4	14.3	13.6	14.4
Black or African American only	40.6	42.1	43.1	44.2	41.5	30.9	33.4	33.0	34.3
Asian only	---	---	---	17.0	18.6	12.5	9.4	12.0	11.8
Hispanic or Latino	27.8	33.0	39.6	37.7	39.3	27.6	28.6	26.6	28.3
Mexican	---	---	37.4	35.5	39.3	29.5	---	---	---
Puerto Rican	---	---	58.6	56.7	53.2	32.1	---	---	---
White only, not Hispanic or Latino	---	11.3	12.3	11.6	10.6	8.5	9.9	9.5	9.7
Related children under 18 years of age in families with female householder and no spouse present									
All races	---	50.8	53.6	53.4	50.3	40.1	41.9	42.1	43.0
White only	---	41.6	45.2	45.9	42.5	33.9	38.2	37.8	39.0
Black or African American only	---	64.8	66.9	64.7	61.6	49.3	49.2	49.7	50.4
Asian only	---	---	---	32.2	42.4	38.0	18.7	36.2	32.3
Hispanic or Latino	---	65.0	72.4	68.4	65.7	49.8	51.9	47.2	51.6
Mexican	---	---	64.4	62.4	65.9	51.4	---	---	---
Puerto Rican	---	---	85.4	82.7	79.6	55.3	---	---	---
White only, not Hispanic or Latino	---	---	---	39.6	33.5	28.0	31.5	32.9	32.4
All persons									
Number below poverty in thousands									
All races	22,973	29,272	33,064	33,585	36,425	31,581	37,040	36,460	37,276
White only	15,142	19,699	22,860	22,326	24,423	21,645	25,327	24,416	25,120
Black or African American only	7,388	8,579	8,926	9,837	9,872	7,982	9,014	9,048	9,237
Asian only	---	---	---	858	1,411	1,258	1,201	1,353	1,349
Hispanic or Latino	2,366	3,491	5,236	6,006	8,574	7,747	9,122	9,243	9,890
Mexican	---	---	3,220	3,764	5,608	5,460	---	---	---
Puerto Rican	---	---	1,011	966	1,183	814	---	---	---
White only, not Hispanic or Latino	12,864	16,365	17,839	16,622	16,267	14,366	16,908	16,013	16,032
Related children under 18 years of age in families									
All races	9,453	11,114	12,483	12,715	13,999	11,005	12,473	12,299	12,802
White only	5,462	6,817	7,838	7,696	8,474	6,834	7,876	7,522	8,002
Black or African American only	3,822	3,906	4,057	4,412	4,644	3,495	3,702	3,690	3,838
Asian only	---	---	---	356	532	407	265	351	345
Hispanic or Latino	1,364	1,718	2,512	2,750	3,938	3,342	3,985	3,959	4,348
Mexican	---	---	1,589	1,733	2,655	2,537	---	---	---
Puerto Rican	---	---	535	490	610	329	---	---	---
White only, not Hispanic or Latino	---	5,174	5,421	5,106	4,745	3,715	4,190	3,930	3,996

See footnotes at end of table.

Table 3 (page 2 of 2). Persons and families below poverty level, by selected characteristics, race, and Hispanic origin: United States, selected years 1973–2007

[Data are based on household interviews of the civilian noninstitutionalized population]

<i>Selected characteristics, race, and Hispanic origin</i> ¹	1973	1980	1985	1990	1995	2000 ²	2004 ³	2006	2007
Related children under 18 years of age in families with female householder and no spouse present									
				Number below poverty in thousands					
All races	---	5,866	6,716	7,363	8,364	6,300	7,152	7,341	7,546
White only	---	2,813	3,372	3,597	4,051	3,090	3,782	3,840	3,931
Black or African American only	---	2,944	3,181	3,543	3,954	2,908	2,963	2,971	3,114
Asian only	---	---	---	80	145	162	55	91	100
Hispanic or Latino	---	809	1,247	1,314	1,872	1,407	1,840	1,848	2,092
Mexican	---	---	553	615	1,056	938	---	---	---
Puerto Rican	---	---	449	382	459	242	---	---	---
White only, not Hispanic or Latino	---	---	---	2,411	2,299	1,832	2,114	2,206	2,101

--- Data not available.

¹The race groups, white, black, and Asian, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2002 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The three single-race categories shown in the table conform to the 1997 Standards. For 2002 and subsequent years, race-specific estimates are for persons who reported only one racial group. Estimates for single-race categories prior to 2002 are based on answers to the Current Population Survey question which asked respondents to choose only a single race. Prior to data year 2002, data were tabulated according to the 1977 Standards in which the Asian only category included Native Hawaiian and Other Pacific Islander. See [Appendix II, Hispanic origin; Race](#).

²Estimates are consistent with 2001 data through implementation of the 2000 census-based population controls and a 28,000 household sample expansion.

³The 2004 data have been revised to reflect a correction to the weights in the 2005 Annual Social and Economic Supplements (ASEC) of the Current Population Survey.

NOTES: Estimates of poverty for 1991–1998 are based on 1990 postcensal population estimates. Estimates for 1999 and subsequent years are based on 2000 census population controls. Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. See [Appendix II, Poverty](#). The Current Population Survey is not large enough to produce reliable annual estimates for American Indian or Alaska Native persons, or for Native Hawaiians. The 2005–2007 average poverty rate for American Indian or Alaska Natives only was 26.6%, representing 665,000 persons. Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements; DeNavas-Walt C, Proctor BD, Smith JC. Income, Poverty, and Health Insurance Coverage in the United States: 2007. Current Population Reports, Series P–60, No 235. Washington, DC: U.S. Government Printing Office. 2008.

Table 4 (page 1 of 3). Crude birth rates, fertility rates, and birth rates, by age, race, and Hispanic origin of mother: United States, selected years 1950–2006

[Data are based on birth certificates]

Race, Hispanic origin, and year	Crude birth rate ¹	Fertility rate ²	Age of mother																																																																																																																																											
			10–14 years	15–19 years					20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–54 years ³																																																																																																																																
				Total	15–17 years	18–19 years																																																																																																																																								
All races													Live births per 1,000 women																																																																																																																																	
1950	24.1	106.2	1.0	81.6	40.7	132.7	196.6	166.1	103.7	52.9	15.1	1.2	1960	23.7	118.0	0.8	89.1	43.9	166.7	258.1	197.4	112.7	56.2	15.5	0.9	1970	18.4	87.9	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5	1980	15.9	68.4	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2	1985	15.8	66.3	1.2	51.0	31.0	79.6	108.3	111.0	69.1	24.0	4.0	0.2	1990	16.7	70.9	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2	1995	14.6	64.6	1.3	56.0	35.5	87.7	107.5	108.8	81.1	34.0	6.6	0.3	2000	14.4	65.9	0.9	47.7	26.9	78.1	109.7	113.5	91.2	39.7	8.0	0.5	2004	14.0	66.3	0.7	41.1	22.1	70.0	101.7	115.5	95.3	45.4	8.9	0.5	2005	14.0	66.7	0.7	40.5	21.4	69.9	102.2	115.5	95.8	46.3	9.1	0.6	2006	14.2	68.5	0.6	41.9	22.0	73.0	105.9	116.7	97.7	47.3	9.4	0.6
Race of child: ⁴ White													Race of mother: ⁵ White																																																																																																																																	
1950	23.0	102.3	0.4	70.0	31.3	120.5	190.4	165.1	102.6	51.4	14.5	1.0	1980	15.1	65.6	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2	1985	15.0	64.1	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2	1990	15.8	68.3	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2	1995	14.1	63.6	0.8	49.5	29.6	80.2	104.7	111.7	83.3	34.2	6.4	0.3	2000	13.9	65.3	0.6	43.2	23.3	72.3	106.6	116.7	94.6	40.2	7.9	0.4	2004	13.5	66.1	0.5	37.7	19.5	65.0	99.2	118.6	99.1	46.4	8.9	0.5	2005	13.4	66.3	0.5	37.0	18.9	64.7	99.2	118.3	99.3	47.3	9.0	0.6	2006	13.7	68.0	0.5	38.2	19.4	67.5	102.5	119.1	100.9	48.2	9.2	0.6																										
Race of child: ⁴ Black or African American													Race of mother: ⁵ Black or African American																																																																																																																																	
1960	31.9	153.5	4.3	156.1	---	---	295.4	218.6	137.1	73.9	21.9	1.1	1980	17.8	71.0	4.1	94.4	68.5	135.0	133.7	95.6	63.0	28.4	6.0	0.3	1985	20.4	78.8	4.5	95.4	69.3	132.4	135.0	100.2	57.9	23.9	4.6	0.3	1990	22.4	86.8	4.9	112.8	82.3	152.9	160.2	115.5	68.7	28.1	5.5	0.3	1995	17.8	71.0	4.1	94.4	68.5	135.0	133.7	95.6	63.0	28.4	6.0	0.3	2000	17.0	70.0	2.3	77.4	49.0	118.8	141.3	100.3	65.4	31.5	7.2	0.4	2004	16.0	67.6	1.6	63.3	37.2	104.4	127.7	103.6	67.9	34.0	7.9	0.5	2005	16.2	69.0	1.7	62.0	35.5	104.9	129.9	105.9	70.3	35.3	8.5	0.5	2006	16.8	72.1	1.5	64.6	36.6	110.2	135.8	109.4	74.0	36.6	8.5	0.5																										
American Indian or Alaska Native mothers ⁵																																																																																																																																														
1980	20.7	82.7	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*	1985	19.8	78.6	1.7	79.2	47.7	124.1	139.1	109.6	62.6	27.4	6.0	*	1990	18.9	76.2	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*	1995	15.3	63.0	1.6	72.9	44.6	122.2	123.1	91.6	56.5	24.3	5.5	*	2000	14.0	58.7	1.1	58.3	34.1	97.1	117.2	91.8	55.5	24.6	5.7	0.3	2004	14.0	58.9	0.9	52.5	30.0	87.0	109.7	92.8	58.0	26.8	6.0	0.2	2005	14.2	59.9	0.9	52.7	30.5	87.6	109.2	93.8	60.1	27.0	6.0	0.3	2006	14.9	63.1	0.9	55.0	30.7	93.0	115.4	97.8	61.8	28.4	6.1	0.4																																							

See footnotes at end of table.

Table 4 (page 2 of 3). Crude birth rates, fertility rates, and birth rates, by age, race, and Hispanic origin of mother: United States, selected years 1950–2006

[Data are based on birth certificates]

Race, Hispanic origin, and year	Crude birth rate ¹	Fertility rate ²	Age of mother									
			10–14 years	15–19 years			20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–54 years ³
				Total	15–17 years	18–19 years						
Asian or Pacific Islander mothers ⁵												
1980	19.9	73.2	0.3	26.2	12.0	46.2	93.3	127.4	96.0	38.3	8.5	0.7
1985	18.7	68.4	0.4	23.8	12.5	40.8	83.6	123.0	93.6	42.7	8.7	1.2
1990	19.0	69.6	0.7	26.4	16.0	40.2	79.2	126.3	106.5	49.6	10.7	1.1
1995	16.7	62.6	0.7	25.5	15.6	40.1	64.2	103.7	102.3	50.1	11.8	0.8
2000	17.1	65.8	0.3	20.5	11.6	32.6	60.3	108.4	116.5	59.0	12.6	0.8
2004	16.8	67.1	0.2	17.3	8.9	29.6	59.8	108.6	116.9	62.1	13.6	1.0
2005	16.5	66.6	0.2	17.0	8.2	30.1	61.1	107.9	115.0	61.8	13.8	1.0
2006	16.6	67.5	0.2	17.0	8.8	29.5	63.2	108.4	116.9	63.0	14.1	1.0
Hispanic or Latina mothers ^{5,6}												
1980	23.5	95.4	1.7	82.2	52.1	126.9	156.4	132.1	83.2	39.9	10.6	0.7
1990	26.7	107.7	2.4	100.3	65.9	147.7	181.0	153.0	98.3	45.3	10.9	0.7
1995	24.1	98.8	2.6	99.3	68.3	145.4	171.9	140.4	90.5	43.7	10.7	0.6
2000	23.1	95.9	1.7	87.3	55.5	132.6	161.3	139.9	97.1	46.6	11.5	0.6
2004	22.9	97.8	1.3	82.6	49.7	133.5	165.3	145.6	104.1	52.9	12.4	0.7
2005	23.1	99.4	1.3	81.7	48.5	134.6	170.0	149.2	106.8	54.2	13.0	0.8
2006	23.4	101.5	1.3	83.0	47.9	139.7	177.0	152.4	108.5	55.6	13.3	0.8
White, not Hispanic or Latina mothers ^{5,6}												
1980	14.2	62.4	0.4	41.2	22.4	67.7	105.5	110.6	59.9	17.7	3.0	0.1
1990	14.4	62.8	0.5	42.5	23.2	66.6	97.5	115.3	79.4	30.0	4.7	0.2
1995	12.5	57.5	0.4	39.3	22.0	66.2	90.2	105.1	81.5	32.8	5.9	0.3
2000	12.2	58.5	0.3	32.6	15.8	57.5	91.2	109.4	93.2	38.8	7.3	0.4
2004	11.6	58.4	0.2	26.7	12.0	48.7	81.9	110.0	97.1	44.8	8.2	0.5
2005	11.5	58.3	0.2	25.9	11.5	48.0	81.4	109.1	96.9	45.6	8.3	0.5
2006	11.6	59.5	0.2	26.6	11.8	49.3	83.4	109.1	98.1	46.3	8.4	0.6
Black or African American, not Hispanic or Latina mothers ^{5,6}												
1980	22.9	90.7	4.6	105.1	77.2	146.5	152.2	111.7	65.2	25.8	5.8	0.3
1990	23.0	89.0	5.0	116.2	84.9	157.5	165.1	118.4	70.2	28.7	5.6	0.3
1995	18.2	72.8	4.2	97.2	70.4	139.2	137.8	98.5	64.4	28.8	6.1	0.3
2000	17.3	71.4	2.4	79.2	50.1	121.9	145.4	102.8	66.5	31.8	7.2	0.4
2004	15.8	67.0	1.6	63.1	37.1	103.9	126.9	103.0	67.4	33.7	7.8	0.5
2005	15.7	67.2	1.7	60.9	34.9	103.0	126.8	103.0	68.4	34.3	8.2	0.5
2006	16.5	70.6	1.6	63.7	36.2	108.4	133.2	107.1	72.6	36.0	8.3	0.5

See footnotes at end of table.

Table 4 (page 3 of 3). Crude birth rates, fertility rates, and birth rates, by age, race, and Hispanic origin of mother: United States, selected years 1950–2006

[Data are based on birth certificates]

-- Data not available.

* Rates based on fewer than 20 births are considered unreliable and are not shown.

¹ Live births per 1,000 population.

² Total number of live births regardless of age of mother per 1,000 women 15–44 years of age.

³ Prior to 1997, data are for live births to mothers 45–49 years of age per 1,000 women 45–49 years of age. Starting with 1997 data, rates are for live births to mothers 45–54 years of age per 1,000 women 45–49 years of age. See [Appendix II, Age](#).

⁴ Live births are tabulated by race of child. See [Appendix II, Race, Birth File](#).

⁵ Live births are tabulated by race and/or Hispanic origin of mother. See [Appendix II, Race, Birth File](#).

⁶ Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Rates in 1985 were not calculated because estimates for the Hispanic and non-Hispanic populations were not available.

NOTES: Data are based on births adjusted for underregistration for 1950 and on registered births for all other years. Starting with 1970 data, births to persons who were not residents of the 50 states and the District of Columbia are excluded. Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using the 2000 census counts and starting in 2001 rates were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics reports. vol 57 no 7. Hyattsville, MD: NCHS. 2009; Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic populations, 2000 and 2001: United States. National vital statistics reports. vol 51 no 12. Hyattsville, MD: NCHS. 2003; Ventura SJ. Births of Hispanic parentage, 1980 and 1985. Monthly vital statistics report. vol 32 no 6 and vol 36 no 11, suppl. Public Health Service. Hyattsville, MD. 1983 and 1988; Internet release of *Vital statistics of the United States, 2000, vol 1, natality*, tables 1–1 and 1–7; available from:

<http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab2000.htm>.

Table 5. Live births, by plurality, and detailed race and Hispanic origin of mother: United States, selected years 1970–2006

[Data are based on birth certificates]

<i>Plurality of birth and race and Hispanic origin of mother</i>	1970	1971	1975	1980	1985	1990	1995	2000	2005	2006
All births										
	Number of live births									
All races	3,731,386	3,555,970	3,144,198	3,612,258	3,760,561	4,158,212	3,899,589	4,058,814	4,138,349	4,265,555
White	3,109,956	2,939,568	2,576,818	2,936,351	3,037,913	3,290,273	3,098,885	3,194,005	3,229,294	3,310,308
Black or African American	561,992	553,750	496,829	568,080	581,824	684,336	603,139	622,598	633,134	666,481
American Indian or Alaska Native	22,264	23,254	22,690	29,389	34,037	39,051	37,278	41,668	44,813	47,721
Asian or Pacific Islander ¹	---	27,004	28,884	74,355	104,606	141,635	160,287	200,543	231,108	241,045
Hispanic or Latina ²	---	---	---	307,163	372,814	595,073	679,768	815,868	985,505	1,039,077
Mexican	---	---	---	215,439	242,976	385,640	469,615	581,915	693,197	718,146
Puerto Rican	---	---	---	33,671	35,147	58,807	54,824	58,124	63,340	66,932
Cuban	---	---	---	7,163	10,024	11,311	12,473	13,429	16,064	16,936
Central and South American	---	---	---	21,268	40,985	83,008	94,996	113,344	151,201	165,321
Other and unknown Hispanic or Latina	---	---	---	29,622	43,682	56,307	47,860	49,056	61,703	71,742
Not Hispanic or Latina: ²										
White	---	---	---	1,256,777	1,407,460	2,626,500	2,382,638	2,362,968	2,279,768	2,308,640
Black or African American	---	---	---	300,480	337,448	661,701	587,781	604,346	583,759	617,247
Twin births										
All races	---	63,298	59,192	68,339	77,102	93,865	96,736	118,916	133,122	137,085
White	---	49,972	46,715	53,104	60,351	72,617	76,196	93,235	103,367	105,224
Black or African American	---	12,452	11,375	13,638	14,646	18,164	17,000	20,626	22,580	24,004
American Indian or Alaska Native	---	362	348	491	537	699	769	900	1,086	1,148
Asian or Pacific Islander ¹	---	320	505	1,045	1,536	2,320	2,771	4,155	6,089	6,709
Hispanic or Latina ²	---	---	---	5,154	6,550	10,713	12,685	16,470	21,723	22,698
Mexican	---	---	---	3,599	4,292	6,701	8,341	11,130	14,080	14,532
Puerto Rican	---	---	---	631	705	1,226	1,248	1,461	1,973	1,999
Cuban	---	---	---	102	201	228	312	371	517	496
Central and South American	---	---	---	371	665	1,463	1,769	2,361	3,540	3,828
Other and unknown Hispanic or Latina	---	---	---	451	687	1,095	1,015	1,147	1,613	1,843
Not Hispanic or Latina: ²										
White	---	---	---	23,004	28,402	60,210	62,370	76,018	82,223	83,108
Black or African American	---	---	---	7,278	8,400	17,646	16,622	20,173	21,254	22,702
Triplet and higher-order multiple births										
All races	---	1,034	1,066	1,337	1,925	3,028	4,973	7,325	6,694	6,540
White	---	834	909	1,104	1,648	2,639	4,505	6,551	5,753	5,613
Black or African American	---	196	151	211	240	321	352	521	646	620
American Indian or Alaska Native	---	0	2	9	13	4	20	18	25	27
Asian or Pacific Islander ¹	---	0	4	9	23	61	96	235	270	280
Hispanic or Latina ²	---	---	---	78	106	235	355	659	761	787
Mexican	---	---	---	43	82	121	202	391	444	491
Puerto Rican	---	---	---	12	14	28	35	73	79	67
Cuban	---	---	---	0	3	9	24	15	29	15
Central and South American	---	---	---	8	4	59	59	122	152	143
Other and unknown Hispanic or Latina	---	---	---	15	3	18	35	58	57	71
Not Hispanic or Latina: ²										
White	---	---	---	490	779	2,358	4,050	5,821	4,966	4,805
Black or African American	---	---	---	128	132	306	340	506	616	580

--- Data not available.

¹Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

²Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics reports. vol 57 no 7. Hyattsville, MD: NCHS. 2009; Births: Final data for each data year 1997–2005. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1970–1996. Monthly vital statistics report. Hyattsville, MD.

Table 6. Twin and higher-order multiple births, by race, Hispanic origin, and age of mother: United States, selected years 1971–2006

[Data are based on birth certificates]

<i>Plurality of birth and race, Hispanic origin, and age of mother</i>	1971	1975	1980	1985	1990	1995	1997	2000	2004	2005	2006
Twin births											
Number per 1,000 live births											
All races	17.8	18.8	18.9	20.5	22.6	24.8	26.8	29.3	32.2	32.2	32.1
White	17.0	18.1	18.1	19.9	22.1	24.6	26.7	29.2	32.1	32.0	31.8
Black or African American	22.5	22.9	24.0	25.2	26.5	28.2	30.0	33.1	35.1	35.7	36.0
American Indian or Alaska Native	15.6	15.3	16.7	15.8	17.9	20.6	20.6	21.6	24.7	24.2	24.1
Asian or Pacific Islander ¹	11.9	17.5	14.1	14.7	16.4	17.3	19.2	20.7	26.5	26.3	27.8
Hispanic or Latina ²	---	---	16.8	17.6	18.0	18.7	19.5	20.2	21.5	22.0	21.8
Mexican	---	---	16.7	17.7	17.4	17.8	18.5	19.1	19.9	20.3	20.2
Puerto Rican	---	---	18.7	20.1	20.8	22.8	23.0	25.1	28.7	31.1	29.9
Cuban	---	---	14.2	20.1	20.2	25.0	28.6	27.6	37.6	32.2	29.3
Central and South American	---	---	17.4	16.2	17.6	18.6	20.6	20.8	23.6	23.4	23.2
Other and unknown Hispanic or Latina	---	---	15.2	15.7	19.4	21.2	21.1	23.4	23.5	26.1	25.7
Not Hispanic or Latina: ²											
White	---	---	18.3	20.2	22.9	26.2	28.8	32.2	36.3	36.1	36.0
Black or African American	---	---	24.2	24.9	26.7	28.3	30.0	33.4	35.6	36.4	36.8
Age of mother:											
Under 20 years	11.6	12.7	12.8	13.0	14.3	14.2	15.0	15.8	15.7	16.6	16.2
20–24 years	16.2	17.6	17.4	18.3	19.2	19.9	20.4	22.0	22.8	22.4	22.8
25–29 years	19.8	20.9	20.5	21.6	23.5	24.8	26.3	28.2	30.2	30.6	30.3
30–34 years	23.7	24.5	23.5	25.5	27.6	30.6	33.7	36.5	40.1	40.0	40.0
35–39 years	27.3	25.8	25.3	26.3	30.2	35.7	39.3	43.5	48.5	48.0	48.7
40–44 years	22.3	23.3	23.0	20.5	24.7	32.3	38.6	45.2	53.7	54.4	55.4
45–49 years	*18.1	*	*	*18.9	*23.8	101.9	133.2	153.1	195.4	182.9	185.0
50–54 years	---	---	---	---	---	---	347.2	313.7	379.7	407.7	360.3
Triplet and higher-order multiple births											
Number per 100,000 live births											
All races	29.1	33.9	37.0	51.2	72.8	127.5	173.6	180.5	176.9	161.8	153.3
White	28.4	35.3	37.6	54.2	80.2	145.4	195.9	205.1	196.3	178.2	169.6
Black or African American	35.4	30.4	37.1	41.2	46.9	58.4	88.3	83.7	98.2	102.0	93.0
American Indian or Alaska Native	*	*	*	*	*	*53.7	*	*	*50.1	*55.8	*56.6
Asian or Pacific Islander	*	*	*	*22.0	43.1	59.9	103.1	117.2	140.5	116.8	116.2
Hispanic or Latina ²	---	---	25.4	28.4	39.5	52.2	72.7	80.8	76.4	77.2	75.7
Not Hispanic or Latina: ²											
White	---	---	39.0	55.3	89.8	170.0	230.8	246.3	243.4	217.8	208.1
Black or African American	---	---	42.6	39.1	46.2	57.8	90.0	83.7	99.7	105.5	94.0
Age of mother:											
Under 20 years	9.1	10.9	14.8	13.8	15.9	17.6	20.7	23.2	20.6	19.7	21.5
20–24 years	25.4	28.1	31.4	35.0	32.4	35.3	46.8	44.2	41.7	44.7	48.1
25–29 years	43.7	45.4	42.8	66.3	73.9	118.3	151.0	163.3	158.7	144.5	125.6
30–34 years	36.4	53.5	58.3	71.2	126.3	217.2	293.6	307.3	285.0	257.0	253.4
35–39 years	35.7	45.1	47.6	70.0	156.8	285.3	403.2	368.5	375.3	332.0	315.9
40–44 years	*	*	*	*	*57.6	273.6	315.4	415.5	364.6	328.7	336.4
45–49 years	*	*	*	*	*	*1,466.8	2,100.2	1,586.6	1,235.2	1,699.6	1,265.4
50–54 years	---	---	---	---	---	---	*	*9,019.6	*	*	*4,048.6

--- Data not available.

* Rates preceded by an asterisk are based on fewer than 50 births. Rates based on fewer than 20 births are considered unreliable and are not shown.

¹Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

²Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File; Martin JA, Park MM. Trends in twin and triplet births: 1980–97. National vital statistics reports. vol 47 no 24. Hyattsville, MD: NCHS. 1999.

Table 7. Prenatal care for live births, by detailed race and Hispanic origin of mother: United States, selected years 1970–2000 and selected states 2005–2006

[Data are based on birth certificates]

Prenatal care, race, and Hispanic origin of mother	1970	1980	1990	2000	34 reporting areas (1989 revision)		12 reporting areas (2003 revision)	
					2005 ¹	2006 ¹	2005 ²	2006 ²
Prenatal care began during 1st trimester	Percent of live births ³							
All races	68.0	76.3	75.8	83.2	83.8	83.2	70.2	68.3
White	72.3	79.2	79.2	85.0	85.4	84.7	72.1	70.2
Black or African American	44.2	62.4	60.6	74.3	76.2	76.0	59.5	58.0
American Indian or Alaska Native	38.2	55.8	57.9	69.3	70.2	69.5	57.8	56.0
Asian or Pacific Islander ⁴	---	73.7	75.1	84.0	85.2	84.8	72.2	71.1
Hispanic or Latina ⁵	---	60.2	60.2	74.4	77.6	77.3	60.0	57.6
Mexican	---	59.6	57.8	72.9	77.6	77.2	56.1	53.3
Puerto Rican	---	55.1	63.5	78.5	79.9	79.2	69.4	68.1
Cuban	---	82.7	84.8	91.7	85.9	84.8	84.0	80.4
Central and South American	---	58.8	61.5	77.6	76.8	76.0	65.0	61.3
Other and unknown Hispanic or Latina	---	66.4	66.4	75.8	77.0	78.5	65.0	63.5
Not Hispanic or Latina ⁵	---	---	---	---	---	---	---	---
White	---	81.2	83.3	88.5	88.7	88.1	77.2	76.0
Black or African American	---	60.8	60.7	74.3	76.3	76.1	60.1	58.2
Prenatal care began during 3rd trimester or no prenatal care								
All races	7.9	5.1	6.1	3.9	3.5	3.6	7.7	8.2
White	6.3	4.3	4.9	3.3	3.1	3.2	7.0	7.5
Black or African American	16.6	8.9	11.3	6.7	5.7	5.7	11.5	11.9
American Indian or Alaska Native	28.9	15.2	12.9	8.6	8.2	8.1	12.7	12.4
Asian or Pacific Islander ⁴	---	6.5	5.8	3.3	3.0	3.1	6.6	7.2
Hispanic or Latina ⁵	---	12.0	12.0	6.3	5.0	5.0	11.9	12.2
Mexican	---	11.8	13.2	6.9	5.0	5.0	13.8	14.3
Puerto Rican	---	16.2	10.6	4.5	4.1	4.1	6.6	6.7
Cuban	---	3.9	2.8	1.4	2.6	3.2	2.7	3.1
Central and South American	---	13.1	10.9	5.4	5.5	5.8	9.2	9.9
Other and unknown Hispanic or Latina	---	9.2	8.5	5.9	5.6	4.9	9.6	9.5
Not Hispanic or Latina ⁵	---	---	---	---	---	---	---	---
White	---	3.5	3.4	2.3	2.2	2.3	4.9	5.3
Black or African American	---	9.7	11.2	6.7	5.6	5.7	11.3	11.9

--- Data not available.

¹Data are for the 34 reporting areas that used the 1989 Revision of the U.S. Standard Certificate of Live Birth for data on prenatal care in 2005 and 2006. Reporting areas that have implemented the 2003 Revision of the U.S. Standard Certificate of Live Birth are excluded because prenatal care data based on the 2003 revision are not comparable with data based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. See [Appendix II, Prenatal care](#).

²Data are for the 12 reporting areas that used the 2003 Revision of the U.S. Standard Certificate of Live Birth for data on prenatal care in 2005 and 2006. Reporting areas that used the 1989 Revision of the U.S. Standard Certificate of Live Birth are excluded because prenatal care data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions.

³Excludes live births where trimester when prenatal care began is unknown.

⁴Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race; Birth File](#).

⁵Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: Prior to 2003, all data are based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. See [Appendix II, Prenatal care](#). Data for 1970 and 1975 exclude births that occurred in states not reporting prenatal care. Starting in 2003 some states have implemented the 2003 Revision of the U. S. Standard Certificate of Live Birth on a voluntary basis. Data are not shown for 2005 and 2006 for the six states that implemented the 2003 revision mid-year 2005 or during 2006. California implemented a partial revision of the 2003 Revision of the U.S. Standard Certificate of Live Birth in 2006 but continued to use the 1989 revision format for data on prenatal care. See [Appendix II, Prenatal care](#) for a listing of states that used the 1989 and 2003 revisions in both 2005 and 2006. The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics reports. vol 57 no 7. Hyattsville, MD: NCHS. 2009; Births: Final data for each data year 1997–2005. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1970–1996. Monthly vital statistics report. Hyattsville, MD.

Table 8. Teenage childbearing, by detailed race and Hispanic origin of mother: United States, selected years 1970–2006

[Data are based on birth certificates]

<i>Maternal age, race, and Hispanic origin of mother</i>	1970	1975	1980	1985	1990	1995	2000	2003	2004	2005	2006
Age of mother under 18 years											
	Percent of live births										
All races	6.3	7.6	5.8	4.7	4.7	5.3	4.1	3.4	3.4	3.4	3.4
White	4.8	6.0	4.5	3.7	3.6	4.3	3.5	3.0	3.0	2.9	3.0
Black or African American	14.8	16.3	12.5	10.6	10.1	10.8	7.8	6.6	6.4	6.2	6.2
American Indian or Alaska Native	7.5	11.2	9.4	7.6	7.2	8.7	7.3	6.6	6.4	6.5	6.2
Asian or Pacific Islander ¹	---	---	1.5	1.6	2.1	2.2	1.5	1.1	1.1	1.0	1.0
Hispanic or Latina ²	---	---	7.4	6.4	6.6	7.6	6.3	5.4	5.4	5.3	5.2
Mexican	---	---	7.7	6.9	6.9	8.0	6.6	5.8	5.8	5.7	5.6
Puerto Rican	---	---	10.0	8.5	9.1	10.8	7.8	6.9	6.8	6.5	6.3
Cuban	---	---	3.8	2.2	2.7	2.8	3.1	2.4	2.4	2.4	2.5
Central and South American	---	---	2.4	2.4	3.2	4.1	3.3	2.8	2.8	2.9	2.9
Other and unknown Hispanic or Latina	---	---	6.5	7.0	8.0	9.0	7.6	6.3	6.3	6.6	6.5
Not Hispanic or Latina: ²											
White	---	---	4.0	3.2	3.0	3.4	2.6	2.1	2.0	2.0	2.0
Black or African American	---	---	12.7	10.7	10.2	10.8	7.8	6.6	6.5	6.3	6.3
Age of mother 18–19 years											
All races	11.3	11.3	9.8	8.0	8.1	7.9	7.7	6.9	6.8	6.8	7.0
White	10.4	10.3	9.0	7.1	7.3	7.2	7.1	6.4	6.4	6.3	6.5
Black or African American	16.6	16.9	14.5	12.9	13.0	12.4	11.9	10.7	10.7	10.6	10.8
American Indian or Alaska Native	12.8	15.2	14.6	12.4	12.3	12.7	12.4	11.6	11.5	11.3	11.4
Asian or Pacific Islander ¹	---	---	3.9	3.4	3.7	3.5	3.0	2.4	2.3	2.3	2.2
Hispanic or Latina ²	---	---	11.6	10.1	10.2	10.3	9.9	8.9	8.9	8.8	9.0
Mexican	---	---	12.0	10.6	10.7	10.8	10.4	9.5	9.4	9.2	9.4
Puerto Rican	---	---	13.3	12.4	12.6	12.7	12.2	11.0	10.8	10.9	11.4
Cuban	---	---	9.2	4.9	5.0	4.9	4.4	5.5	5.4	5.3	5.5
Central and South American	---	---	6.0	5.8	5.9	6.5	6.5	5.6	5.6	5.7	6.0
Other and unknown Hispanic or Latina	---	---	10.8	10.5	11.1	11.1	11.3	9.6	9.9	10.5	10.4
Not Hispanic or Latina: ²											
White	---	---	8.5	6.5	6.6	6.4	6.1	5.4	5.4	5.3	5.4
Black or African American	---	---	14.7	12.9	13.0	12.4	12.0	10.8	10.8	10.7	10.9

--- Data not available.

¹Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

²Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

Table 9. Nonmarital childbearing, by detailed race and Hispanic origin of mother, and maternal age: United States, selected years 1970–2006

[Data are based on birth certificates]

<i>Race, Hispanic origin of mother, and maternal age</i>	1970	1975	1980	1985	1990	1995	2000	2003	2004	2005	2006
Live births per 1,000 unmarried women 15–44 years of age ¹											
All races and origins	26.4	24.5	29.4	32.8	43.8	44.3	44.1	44.9	46.1	47.5	50.6
White ²	13.9	12.4	18.1	22.5	32.9	37.0	38.2	40.4	41.6	43.0	46.1
Black or African American ²	95.5	84.2	81.1	77.0	90.5	74.5	70.5	66.3	67.2	67.8	71.5
Asian or Pacific Islander	---	---	---	---	---	---	20.9	22.2	23.6	24.9	25.9
Hispanic or Latina ³	---	---	---	---	89.6	88.8	87.2	92.2	95.7	100.3	106.1
White, not Hispanic or Latina	---	---	---	---	24.4	28.1	28.0	28.6	29.4	30.1	32.0
Percent of live births to unmarried mothers											
All races and origins	10.7	14.3	18.4	22.0	28.0	32.2	33.2	34.6	35.8	36.9	38.5
White	5.5	7.1	11.2	14.7	20.4	25.3	27.1	29.4	30.5	31.7	33.3
Black or African American	37.5	49.5	56.1	61.2	66.5	69.9	68.5	68.2	68.8	69.3	70.2
American Indian or Alaska Native	22.4	32.7	39.2	46.8	53.6	57.2	58.4	61.3	62.3	63.5	64.6
Asian or Pacific Islander ⁴	---	---	7.3	9.5	13.2	16.3	14.8	15.0	15.5	16.2	16.5
Hispanic or Latina ³	---	---	23.6	29.5	36.7	40.8	42.7	45.0	46.4	48.0	49.9
Mexican	---	---	20.3	25.7	33.3	38.1	40.7	43.7	45.2	46.7	48.6
Puerto Rican	---	---	46.3	51.1	55.9	60.0	59.6	59.8	61.0	61.7	62.4
Cuban	---	---	10.0	16.1	18.2	23.8	27.3	31.4	33.2	36.4	39.4
Central and South American	---	---	27.1	34.9	41.2	44.1	44.7	46.0	47.6	49.2	51.5
Other and unknown Hispanic or Latina	---	---	22.4	31.1	37.2	44.0	46.2	46.7	46.6	48.6	49.2
Not Hispanic or Latina: ³											
White	---	---	9.5	12.4	16.9	21.2	22.1	23.6	24.5	25.3	26.6
Black or African American	---	---	57.2	62.0	66.7	70.0	68.7	68.5	69.3	69.9	70.7
Number of live births, in thousands											
Live births to unmarried mothers	399	448	666	828	1,165	1,254	1,347	1,416	1,470	1,527	1,642
Maternal age											
Percent distribution of live births to unmarried mothers											
Under 20 years	50.1	52.1	40.8	33.8	30.9	30.9	28.0	24.3	23.7	23.1	22.7
20–24 years	31.8	29.9	35.6	36.3	34.7	34.5	37.4	38.8	38.5	38.3	38.1
25 years and over	18.1	18.0	23.5	29.9	34.4	34.7	34.6	36.9	37.8	38.7	39.2

--- Data not available.

¹Rates computed by relating births to unmarried mothers, regardless of age of mother, to unmarried women 15–44 years of age. Population data for unmarried American Indian or Alaska Native women are not available for rate calculations. Prior to 2000, population data for unmarried Asian or Pacific Islander women were not available for rate calculations.

²For 1970 and 1975, birth rates are by race of child.

³Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

⁴Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

NOTES: National estimates for 1970 and 1975 for unmarried mothers are based on births occurring in states reporting marital status of mother. Changes in reporting procedures for marital status occurred in some states during the 1990s. Interpretation of trend data should also take into consideration expansion of reporting areas and immigration. See [Appendix II, Marital status](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using the 2000 census counts and starting with 2001, rates were computed using 2000-based postcensal estimates. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics reports. vol 57 no 7. Hyattsville, MD: NCHS. 2009; Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic populations, 2000 and 2001: United States. National vital statistics reports. vol 51 no 12. Hyattsville, MD: NCHS. 2003; Births: Final data for each data year 1997–2005. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1993–1996. Monthly vital statistics report. Hyattsville, MD; Ventura SJ. Births to unmarried mothers: United States, 1980–1992. Vital Health Stat 21(53). 1995.

Table 10. Mothers who smoked cigarettes during pregnancy, by selected characteristics: United States, selected years 1990–2000 and selected states 2005–2006

[Data are based on birth certificates]

Characteristic of mother	1990 ¹	2000 ¹	33 reporting areas (1989 revision)		11 reporting areas (2003 revision)	
			2005 ^{1,2}	2006 ^{1,2}	2005 ^{1,3}	2006 ^{1,3}
Race of mother						
Percent of mothers who smoked ^{1,4,5}						
All races	18.4	12.2	10.1	10.0	12.4	12.2
White	19.4	13.2	11.1	11.0	13.2	13.0
Black or African American	15.9	9.1	7.7	7.6	10.0	9.8
American Indian or Alaska Native	22.4	20.0	16.6	16.5	21.7	21.2
Asian or Pacific Islander ^{6,7}	5.5	2.8	2.2	2.1	2.4	2.4
Hispanic origin and race of mother ⁸						
Hispanic or Latina ⁶	6.7	3.5	2.8	2.6	2.7	2.6
Mexican	5.3	2.4	2.0	1.9	1.9	1.9
Puerto Rican	13.6	10.3	8.1	7.9	14.9	14.2
Cuban	6.4	3.3	4.9	5.7	7.7	10.3
Central and South American	3.0	1.5	1.1	1.0	0.9	1.0
Other and unknown Hispanic or Latina	10.8	7.4	7.2	6.5	3.8	3.1
Not Hispanic or Latina:						
White	21.0	15.6	13.3	13.3	17.7	17.6
Black or African American	15.9	9.2	8.1	7.9	10.3	10.0
Age of mother ⁵						
Under 15 years	7.5	7.1	4.2	3.3	5.2	4.9
15–19 years	20.8	17.8	14.4	13.6	16.6	15.8
15–17 years	17.6	15.0	10.9	10.3	12.0	11.3
18–19 years	22.5	19.2	16.0	15.1	18.9	18.0
20–24 years	22.1	16.8	15.5	15.0	18.6	17.9
25–29 years	18.0	10.5	9.5	9.6	11.5	11.7
30–34 years	15.3	8.0	5.8	5.8	7.1	7.1
35–39 years	13.3	9.1	5.9	5.6	7.1	6.9
40–54 years ⁹	12.3	9.5	6.5	6.3	8.0	7.4
Education of mother ¹⁰						
Percent of mothers 20 years of age and over who smoked ^{1,5}						
0–8 years ²	17.5	7.9	6.0	5.8	---	---
9–11 years ²	40.5	28.2	25.2	24.6	---	---
12 years ²	21.9	16.6	14.8	14.6	---	---
13–15 years ²	12.8	9.1	8.4	8.4	---	---
16 years or more ²	4.5	2.0	1.4	1.4	---	---
No high school diploma or GED ³	---	---	---	---	16.1	16.3
High school diploma or GED ³	---	---	---	---	19.6	19.1
Some college, no Bachelor's degree ³	---	---	---	---	11.7	11.6
Bachelor's degree or more ³	---	---	---	---	1.8	1.7

--- Data not available.

¹Maternal tobacco use during pregnancy was not reported on the birth certificates of California.

²Data are for the 33 reporting areas that used the 1989 Revision of the U.S. Standard Certificate of Live Birth for data on smoking in 2005 and 2006. Reporting areas that have implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are excluded because maternal tobacco use and education data based on the 2003 revision are not comparable with data based on the 1989 revision. See [Appendix II, Cigarette smoking](#).

³Data are for the 11 reporting areas that used the 2003 Revision of the U.S. Standard Certificate of Live Birth for data on smoking in 2005 and 2006. Reporting areas that used the 1989 Revision of the U.S. Standard Certificate of Live Birth are excluded because smoking and education data based on the 2003 revision are not comparable with data based on the 1989 revision.

⁴Data from states that did not require the reporting of mother's tobacco use during pregnancy on the birth certificate are not included. Reporting area for tobacco use increased from 43 states and the District of Columbia (D.C.) in 1989 to 49 states and D.C. in 2000–2002. See [Appendix II, Cigarette smoking](#).

⁵Excludes live births for whom smoking status of mother is unknown.

⁶Data from California are excluded because mother's tobacco use is unknown. In 2006, California accounted for 29% of the births to Asian or Pacific Islander mothers and 28% of the births to Hispanic mothers.

⁷Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

⁸Data from states that did not require the reporting of Hispanic origin of mother on the birth certificate are not included. Reporting of Hispanic origin increased from 47 states in 1989 to include all 50 states and D.C. by 1993. See [Appendix II, Hispanic origin](#).

⁹Prior to 1997, data are for live births to mothers 40–49 years of age.

¹⁰Data from states that did not require the reporting of mother's education on the birth certificate are not included. See [Appendix II, Education](#).

NOTES: Prior to 2003, all data are based on the 1989 Revision of the U.S. Standard Certificate of Live Birth. Starting in 2003 some states have implemented the 2003 Revision of the U. S. Standard Certificate of Live Birth on a voluntary basis. Data are not shown for 2005 and 2006 for the seven states that implemented the 2003 revision mid-year 2005 or during 2006. See [Appendix II, Cigarette Smoking](#) for a listing of states that used the 2003 revision in 2005 and 2006. The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

Table 11. Low birthweight live births, by detailed race, Hispanic origin, and smoking status of mother: United States, selected years 1970–2006

[Data are based on birth certificates]

<i>Birthweight, race and Hispanic origin of mother, and smoking status of mother</i>	1970	1975	1980	1985	1990	1995	2000	2004	2005	2006
Low birthweight (less than 2,500 grams)										
	Percent of live births ¹									
All races	7.93	7.38	6.84	6.75	6.97	7.32	7.57	8.08	8.19	8.26
White	6.85	6.27	5.72	5.65	5.70	6.22	6.55	7.07	7.16	7.21
Black or African American	13.90	13.19	12.69	12.65	13.25	13.13	12.99	13.44	13.59	13.59
American Indian or Alaska Native	7.97	6.41	6.44	5.86	6.11	6.61	6.76	7.45	7.36	7.52
Asian or Pacific Islander ²	---	---	6.68	6.16	6.45	6.90	7.31	7.89	7.98	8.12
Hispanic or Latina ³	---	---	6.12	6.16	6.06	6.29	6.41	6.79	6.88	6.99
Mexican	---	---	5.62	5.77	5.55	5.81	6.01	6.44	6.49	6.58
Puerto Rican	---	---	8.95	8.69	8.99	9.41	9.30	9.82	9.92	10.14
Cuban	---	---	5.62	6.02	5.67	6.50	6.49	7.72	7.64	7.14
Central and South American	---	---	5.76	5.68	5.84	6.20	6.34	6.70	6.78	6.81
Other and unknown Hispanic or Latina	---	---	6.96	6.83	6.87	7.55	7.84	7.78	8.27	8.54
Not Hispanic or Latina: ³										
White	---	---	5.69	5.61	5.61	6.20	6.60	7.20	7.29	7.32
Black or African American	---	---	12.71	12.62	13.32	13.21	13.13	13.74	14.02	13.97
11 reporting areas										
Cigarette smoker ⁴	---	---	---	---	A	A	A	A	11.93	11.96
Nonsmoker ⁴	---	---	---	---	A	A	A	A	7.54	7.73
Very low birthweight (less than 1,500 grams)										
All races	1.17	1.16	1.15	1.21	1.27	1.35	1.43	1.48	1.49	1.49
White	0.95	0.92	0.90	0.94	0.95	1.06	1.14	1.20	1.20	1.20
Black or African American	2.40	2.40	2.48	2.71	2.92	2.97	3.07	3.07	3.15	3.05
American Indian or Alaska Native	0.98	0.95	0.92	1.01	1.01	1.10	1.16	1.28	1.17	1.28
Asian or Pacific Islander ²	---	---	0.92	0.85	0.87	0.91	1.05	1.14	1.14	1.12
Hispanic or Latina ³	---	---	0.98	1.01	1.03	1.11	1.14	1.20	1.20	1.19
Mexican	---	---	0.92	0.97	0.92	1.01	1.03	1.13	1.12	1.12
Puerto Rican	---	---	1.29	1.30	1.62	1.79	1.93	1.96	1.87	1.91
Cuban	---	---	1.02	1.18	1.20	1.19	1.21	1.30	1.50	1.28
Central and South American	---	---	0.99	1.01	1.05	1.13	1.20	1.19	1.19	1.13
Other and unknown Hispanic or Latina	---	---	1.01	0.96	1.09	1.28	1.42	1.27	1.36	1.36
Not Hispanic or Latina: ³										
White	---	---	0.87	0.91	0.93	1.04	1.14	1.20	1.21	1.20
Black or African American	---	---	2.47	2.67	2.93	2.98	3.10	3.15	3.27	3.15
11 reporting areas										
Cigarette smoker ⁴	---	---	---	---	A	A	A	A	1.78	1.74
Nonsmoker ⁴	---	---	---	---	A	A	A	A	1.36	1.40

--- Data not available.

^AData not shown. Due to a change in reporting, data are not comparable to other years. See footnote 4.

¹Excludes live births with unknown birthweight. Percent based on live births with known birthweight.

²Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

³Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

⁴Percent based on live births with known smoking status of mother and known birthweight. Only reporting areas that have implemented the 2003 Revision of the U.S. Standard Certificate of Live Birth are shown because maternal tobacco use data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions to the U.S. Standard Certificate of Live Birth. In addition, California did not require reporting of tobacco use during pregnancy. Data are for the 11 reporting areas that used the 2003 Revision of the U.S. Standard Certificate of Live Birth for data on smoking in 2005 and 2006. See [Appendix II, Cigarette smoking](#). For data for reporting areas that use the 1989 Revision of the U.S. Standard Certificate of Live Birth, see: Births: Final data for 2006, available from <http://www.cdc.gov/nchs/births.htm>.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

Table 12 (page 1 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2006

[Data are based on birth certificates]

Education, race, and Hispanic origin of mother	1989	1990	2000	2002	33 reporting areas (1989 revision)	
					2005 ¹	2006 ¹
Percent of live births weighing less than 2,500 grams ²						
Less than 12 years of education						
All races	9.0	8.6	8.2	8.2	9.2	9.3
White	7.3	7.0	7.1	7.1	7.8	7.9
Black or African American	17.0	16.5	14.9	15.0	15.4	15.4
American Indian or Alaska Native	7.3	7.4	7.2	8.4	8.7	7.7
Asian or Pacific Islander ³	6.6	6.4	7.2	7.4	7.7	7.3
Hispanic or Latina ⁴	6.0	5.7	6.0	6.0	6.4	6.6
Mexican	5.3	5.2	5.6	5.7	5.9	6.1
Puerto Rican	11.3	10.3	10.9	10.4	11.4	11.8
Cuban	9.4	7.9	8.4	7.5	*11.6	*12.2
Central and South American	5.8	5.8	6.2	6.2	6.4	6.4
Other and unknown Hispanic or Latina	8.2	8.0	8.6	7.8	9.5	9.8
Not Hispanic or Latina: ⁴						
White	8.4	8.3	9.0	9.3	9.8	9.9
Black or African American	17.6	16.7	15.2	15.3	16.4	16.5
12 years of education						
All races	7.1	7.1	7.9	8.2	9.0	9.1
White	5.7	5.8	6.8	7.0	7.6	7.6
Black or African American	13.4	13.1	13.0	13.4	13.9	14.0
American Indian or Alaska Native	5.6	6.1	6.7	7.1	7.1	7.5
Asian or Pacific Islander ³	6.4	6.5	7.4	7.9	8.3	8.1
Hispanic or Latina ⁴	5.9	6.0	6.2	6.5	7.1	7.0
Mexican	5.2	5.5	5.8	6.1	6.5	6.3
Puerto Rican	8.8	8.3	8.8	9.3	10.1	10.4
Cuban	5.3	5.2	6.5	6.0	8.2	8.3
Central and South American	5.7	5.8	6.0	6.4	6.5	6.5
Other and unknown Hispanic or Latina	6.1	6.6	7.3	7.7	8.9	8.8
Not Hispanic or Latina: ⁴						
White	5.7	5.7	6.9	7.3	7.8	7.8
Black or African American	13.6	13.2	13.1	13.5	14.4	14.5
13 years or more of education						
All races	5.5	5.4	6.6	7.0	7.4	7.5
White	4.6	4.6	5.8	6.2	6.5	6.6
Black or African American	11.2	11.1	11.6	12.0	12.5	12.4
American Indian or Alaska Native	5.6	4.7	6.5	7.0	7.0	6.8
Asian or Pacific Islander ³	6.1	6.0	7.0	7.6	8.0	8.3
Hispanic or Latina ⁴	5.5	5.5	6.2	6.6	7.1	7.4
Mexican	5.1	5.2	5.8	6.2	6.5	6.9
Puerto Rican	7.4	7.4	7.9	8.9	9.0	9.4
Cuban	4.9	5.0	5.9	6.4	7.1	7.5
Central and South American	5.2	5.6	6.3	6.5	6.8	6.9
Other and unknown Hispanic or Latina	5.4	5.2	6.6	7.0	7.6	7.9
Not Hispanic or Latina: ⁴						
White	4.6	4.5	5.8	6.2	6.5	6.5
Black or African American	11.2	11.1	11.7	12.1	12.7	12.6

See footnotes at end of table.

Table 12 (page 2 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2006

[Data are based on birth certificates]

Education, race, and Hispanic origin of mother	1989	1990	2000	2002	12 reporting areas (2003 revision)	
					2005 ⁵	2006 ⁵
No high school diploma or GED						
Percent of live births weighing less than 2,500 grams ²						
All races	---	---	---	---	8.6	8.8
White	---	---	---	---	7.6	7.8
Black or African American	---	---	---	---	14.1	14.7
American Indian or Alaska Native	---	---	---	---	7.5	8.3
Asian or Pacific Islander ³	---	---	---	---	7.4	7.3
Hispanic or Latina	---	---	---	---	6.6	6.8
Mexican	---	---	---	---	6.3	6.5
Puerto Rican	---	---	---	---	10.9	10.8
Cuban	---	---	---	---	8.6	9.3
Central and South American	---	---	---	---	6.6	6.6
Other and unknown Hispanic or Latina	---	---	---	---	8.1	8.7
Not Hispanic or Latina:	---	---	---	---	---	---
White	---	---	---	---	9.7	9.9
Black or African American	---	---	---	---	15.9	15.8
High school diploma or GED						
All races	---	---	---	---	8.8	8.9
White	---	---	---	---	7.7	7.8
Black or African American	---	---	---	---	13.7	13.7
American Indian or Alaska Native	---	---	---	---	7.3	9.4
Asian or Pacific Islander ³	---	---	---	---	7.6	8.6
Hispanic or Latina	---	---	---	---	7.3	7.3
Mexican	---	---	---	---	7.2	7.1
Puerto Rican	---	---	---	---	9.4	9.4
Cuban	---	---	---	---	6.8	6.5
Central and South American	---	---	---	---	6.5	6.5
Other and unknown Hispanic or Latina	---	---	---	---	7.6	8.2
Not Hispanic or Latina:	---	---	---	---	---	---
White	---	---	---	---	7.9	8.0
Black or African American	---	---	---	---	14.2	14.1
Some college, no Bachelor's degree						
All races	---	---	---	---	7.8	8.0
White	---	---	---	---	6.9	7.0
Black or African American	---	---	---	---	12.6	12.6
American Indian or Alaska Native	---	---	---	---	7.0	7.0
Asian or Pacific Islander ³	---	---	---	---	7.5	8.3
Hispanic or Latina	---	---	---	---	7.4	7.4
Mexican	---	---	---	---	7.2	7.3
Puerto Rican	---	---	---	---	8.9	9.0
Cuban	---	---	---	---	7.8	6.8
Central and South American	---	---	---	---	6.7	6.5
Other and unknown Hispanic or Latina	---	---	---	---	7.6	8.0
Not Hispanic or Latina:	---	---	---	---	---	---
White	---	---	---	---	6.7	6.9
Black or African American	---	---	---	---	12.9	12.9
Bachelor's degree or more						
All races	---	---	---	---	6.7	6.8
White	---	---	---	---	6.2	6.3
Black or African American	---	---	---	---	11.0	11.4
American Indian or Alaska Native	---	---	---	---	*5.6	*8.0
Asian or Pacific Islander ³	---	---	---	---	8.2	8.1
Hispanic or Latina	---	---	---	---	7.0	7.0
Mexican	---	---	---	---	7.1	6.9
Puerto Rican	---	---	---	---	7.6	7.5
Cuban	---	---	---	---	7.2	6.1
Central and South American	---	---	---	---	6.6	6.9
Other and unknown Hispanic or Latina	---	---	---	---	6.6	7.6
Not Hispanic or Latina:	---	---	---	---	---	---
White	---	---	---	---	6.1	6.3
Black or African American	---	---	---	---	11.2	11.7

See footnotes at end of table.

Table 12 (page 3 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2006

[Data are based on birth certificates]

--- Data not available.

* Percents preceded by an asterisk are based on fewer than 50 births in the numerator.

¹Data are for the 33 reporting areas (31 states, District of Columbia (D.C.), and New York City) that used the 1989 Revision of the U.S. Standard Certificate of Live Birth in 2005 and 2006. Reporting areas that have implemented the 2003 Revision of the U.S. Standard Certificate of Live Birth are excluded because maternal education data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions See [Appendix II, Education](#).

²Excludes live births with unknown birthweight. Percent based on live births with known birthweight.

³Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single- race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

⁴Prior to 1993, data shown only for states with an Hispanic-origin item and education of mother item on the birth certificate. See [Appendix II, Education; Hispanic origin](#).

⁵Data are for the 12 reporting areas that used the 2003 Revision of the U.S. Standard Certificate of Live Birth in 2005 and 2006. Reporting areas that used the 1989 Revision of the U.S. Standard Certificate of Live Birth are excluded because maternal education data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions See [Appendix II, Education](#).

NOTES: Prior to 2003, all data are based on the 1989 or earlier revisions of the U.S. Standard Certificate of Live Birth. In 1992–2002, education of mother was reported on the birth certificate by all 50 states and D.C. Prior to 1992, data from states lacking an education of mother item were excluded. Starting in 2003 some states have implemented the 2003 Revision of the U. S. Standard Certificate of Live Birth on a voluntary basis. Data are not shown for 2005 and 2006 for the seven states that implemented the 2003 revision mid-year 2005 or during 2006. See [Appendix II, Education](#), for a listing of states that used the 2003 revisions in 2005 and 2006. The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

Table 13 (page 1 of 2). Low birthweight live births, by race and Hispanic origin of mother, and state: United States, average annual 1998–2000, 2001–2003, and 2004–2006

[Data are based on birth certificates]

State	Not Hispanic or Latina								
	All races			White			Black or African American		
	1998–2000	2001–2003	2004–2006	1998–2000	2001–2003	2004–2006	1998–2000	2001–2003	2004–2006
	Percent of live births weighing less than 2,500 grams ¹								
United States	7.59	7.81	8.18	6.60	6.90	7.27	13.18	13.33	13.91
Alabama	9.45	9.82	10.52	7.50	7.88	8.60	13.64	14.27	15.39
Alaska	5.80	5.83	6.02	5.22	4.96	5.63	10.65	10.13	11.60
Arizona	6.91	6.93	7.08	6.69	6.75	6.97	12.61	12.90	12.60
Arkansas	8.69	8.74	9.13	7.47	7.62	7.89	13.56	14.08	14.97
California	6.18	6.43	6.80	5.67	5.99	6.39	11.73	11.90	12.33
Colorado	8.45	8.80	9.02	8.08	8.51	8.78	14.13	14.82	15.22
Connecticut	7.61	7.55	7.95	6.40	6.47	6.79	12.83	12.46	12.88
Delaware	8.54	9.55	9.26	6.68	7.99	7.60	14.05	14.39	14.48
District of Columbia	12.68	11.54	11.26	6.40	6.16	6.67	15.35	14.52	14.23
Florida	8.06	8.36	8.67	6.88	7.18	7.49	12.34	12.85	13.36
Georgia	8.63	8.91	9.47	6.71	7.15	7.48	12.77	13.07	14.26
Hawaii	7.54	8.34	8.05	5.47	6.67	6.20	10.60	11.93	10.37
Idaho	6.30	6.34	6.80	6.17	6.28	6.78	*	*9.25	*9.39
Illinois	7.98	8.14	8.52	6.51	6.94	7.31	14.16	14.16	14.67
Indiana	7.71	7.71	8.22	7.13	7.11	7.62	13.01	13.11	13.74
Iowa	6.23	6.54	7.02	5.98	6.31	6.88	12.36	12.38	11.35
Kansas	7.00	7.11	7.21	6.64	6.81	6.91	12.58	12.52	13.25
Kentucky	8.20	8.55	9.00	7.66	8.06	8.62	13.72	13.85	13.85
Louisiana	10.13	10.53	11.27	7.11	7.67	8.38	14.48	14.64	15.76
Maine	5.96	6.29	6.68	5.99	6.31	6.65	*10.45	*8.47	8.37
Maryland	8.77	9.02	9.28	6.52	7.00	7.37	13.15	13.07	13.24
Massachusetts	7.04	7.42	7.87	6.36	6.74	7.24	11.53	11.56	11.94
Michigan	7.89	8.05	8.34	6.31	6.76	7.05	14.38	14.08	14.46
Minnesota	6.01	6.27	6.53	5.69	5.81	6.00	11.05	10.29	10.71
Mississippi	10.37	11.09	11.95	7.55	8.19	8.76	13.84	14.91	16.11
Missouri	7.71	7.88	8.13	6.67	6.99	7.17	13.68	13.32	13.95
Montana	6.67	6.85	7.19	6.62	6.72	7.08	*	*	*13.33
Nebraska	6.69	6.91	7.04	6.30	6.64	6.69	12.78	12.56	13.00
Nevada	7.45	7.73	8.20	7.31	7.40	7.99	12.94	13.55	14.23
New Hampshire	6.08	6.37	6.88	5.85	6.26	6.82	*9.26	11.70	10.43
New Jersey	7.96	8.02	8.35	6.46	6.86	7.25	13.69	13.22	13.75
New Mexico	7.76	8.14	8.55	7.95	7.93	8.48	12.59	14.63	14.69
New York	7.80	7.81	8.26	6.44	6.52	6.97	12.19	12.06	12.91
North Carolina	8.83	8.97	9.10	7.24	7.60	7.78	13.76	14.03	14.31
North Dakota	6.38	6.32	6.55	6.39	6.14	6.50	*10.25	*8.50	*9.12
Ohio	7.84	8.21	8.65	6.85	7.22	7.62	13.30	13.63	14.14
Oklahoma	7.34	7.85	8.12	6.97	7.50	7.76	12.52	13.72	14.23
Oregon	5.46	5.82	6.07	5.24	5.70	5.97	10.59	10.50	10.08
Pennsylvania	7.74	8.05	8.35	6.56	6.88	7.23	13.81	13.93	13.67
Rhode Island	7.35	7.94	7.93	6.63	7.23	7.34	12.55	11.80	10.94
South Carolina	9.67	9.88	10.17	7.22	7.58	7.84	14.31	14.58	15.24
South Dakota	5.96	6.73	6.84	5.85	6.53	6.73	*13.14	*8.54	*8.85
Tennessee	9.16	9.25	9.43	7.79	8.05	8.36	14.35	14.30	14.52
Texas	7.39	7.72	8.26	6.63	7.06	7.55	12.66	13.14	14.08
Utah	6.71	6.47	6.81	6.54	6.29	6.54	14.01	14.04	10.81
Vermont	6.09	6.47	6.52	6.02	6.53	6.40	*	*	*12.56
Virginia	7.87	7.99	8.25	6.48	6.66	7.09	12.44	12.71	12.82
Washington	5.71	5.90	6.29	5.31	5.57	5.76	10.26	10.46	10.51
West Virginia	8.14	8.70	9.50	7.94	8.54	9.37	13.78	12.61	14.56
Wisconsin	6.57	6.67	6.95	5.75	5.93	6.22	13.45	13.35	13.51
Wyoming	8.51	8.58	8.71	8.49	8.37	8.79	*16.95	*11.83	*14.29

See footnotes at end of table.

Table 13 (page 2 of 2). Low birthweight live births, by race and Hispanic origin of mother, and state: United States, average annual 1998–2000, 2001–2003, and 2004–2006

[Data are based on birth certificates]

State	Hispanic or Latina ²			American Indian or Alaska Native ³			Asian or Pacific Islander ³		
	1998–2000	2001–2003	2004–2006	1998–2000	2001–2003	2004–2006	1998–2000	2001–2003	2004–2006
	Percent of live births weighing less than 2,500 grams ¹								
United States	6.41	6.57	6.89	6.90	7.31	7.45	7.39	7.70	8.00
Alabama	6.38	6.97	6.65	*6.82	11.20	8.94	8.03	7.65	7.94
Alaska	6.12	5.91	5.26	5.91	5.94	5.55	7.39	6.67	6.98
Arizona	6.66	6.63	6.70	6.87	6.89	7.33	7.60	8.28	7.91
Arkansas	6.09	5.92	6.75	*6.80	7.77	9.00	8.54	6.79	7.46
California	5.57	5.81	6.19	6.00	6.66	6.55	6.92	7.26	7.56
Colorado	8.21	8.40	8.54	8.76	9.86	9.75	10.04	10.21	10.00
Connecticut	9.12	8.29	8.56	*	10.31	7.25	7.29	7.91	8.42
Delaware	6.99	7.22	6.55	*	*	*19.80	7.83	9.49	8.80
District of Columbia	6.85	7.79	7.51	*	*	*	*9.15	*6.76	9.45
Florida	6.50	6.74	7.03	6.68	7.72	6.93	8.52	8.24	8.70
Georgia	5.57	5.81	6.08	9.06	8.91	9.36	7.05	8.29	8.27
Hawaii	7.66	8.36	8.15	*6.77	*	*	8.06	8.81	8.73
Idaho	6.77	6.63	6.52	7.43	5.88	8.73	7.48	6.38	6.97
Illinois	6.28	6.37	6.86	8.56	9.81	8.72	8.30	8.36	8.55
Indiana	6.11	6.27	6.58	*8.52	*9.13	*8.41	7.30	7.75	7.71
Iowa	5.76	6.21	6.19	8.74	8.54	7.77	7.22	7.38	7.88
Kansas	5.99	6.02	5.91	5.11	7.14	6.84	7.67	7.55	7.26
Kentucky	6.85	7.24	7.17	*9.33	*8.85	*	7.16	7.50	7.78
Louisiana	6.92	6.83	7.38	7.41	10.54	8.64	8.21	8.04	8.27
Maine	*6.42	*5.53	*6.22	*	*	*	*5.50	*5.91	9.00
Maryland	6.55	6.94	7.06	8.35	11.74	*8.94	7.44	7.53	7.83
Massachusetts	8.13	8.34	8.46	*6.46	*6.78	*8.38	7.47	7.81	7.64
Michigan	6.52	6.36	6.60	6.80	6.73	7.59	7.69	7.72	8.34
Minnesota	5.82	5.78	5.95	6.54	7.00	6.79	7.17	7.69	7.36
Mississippi	6.09	6.52	6.60	7.22	6.36	6.95	7.48	7.00	9.14
Missouri	6.19	6.10	6.21	7.78	7.83	7.72	6.74	7.36	7.78
Montana	6.81	7.91	7.79	7.17	7.38	7.64	*	*8.09	*9.04
Nebraska	6.64	6.15	6.38	5.99	7.05	6.98	8.00	8.22	7.54
Nevada	6.19	6.63	6.63	8.00	6.36	7.72	8.21	8.62	10.53
New Hampshire	5.48	5.26	7.79	*	*	*	7.14	6.29	7.62
New Jersey	7.32	7.15	7.35	11.03	10.63	*8.64	7.73	7.75	8.36
New Mexico	7.77	8.30	8.60	6.54	7.16	7.60	8.54	7.17	9.49
New York	7.52	7.45	7.76	8.58	7.01	7.41	7.26	7.62	7.98
North Carolina	6.23	6.14	6.28	10.33	10.81	10.49	7.68	7.98	8.19
North Dakota	*5.69	*6.58	*7.39	5.82	7.07	6.43	*	*6.67	*
Ohio	7.51	7.17	7.11	7.57	10.68	10.33	7.89	7.93	8.34
Oklahoma	6.06	6.32	6.63	6.22	6.51	6.96	6.58	7.63	7.41
Oregon	5.59	5.40	5.62	6.09	7.59	6.89	6.23	6.59	7.39
Pennsylvania	9.14	8.95	8.93	9.68	10.00	10.76	7.21	7.97	7.89
Rhode Island	7.11	8.03	8.29	11.36	11.63	13.49	8.72	10.42	9.60
South Carolina	6.39	6.59	6.60	*8.72	*9.73	10.62	7.06	8.83	8.02
South Dakota	*5.05	8.42	5.73	6.10	6.78	7.37	*7.72	13.04	*6.72
Tennessee	6.60	6.13	6.25	*8.53	*7.16	*7.47	8.20	8.31	8.25
Texas	6.70	6.97	7.43	7.03	6.41	8.48	7.74	7.98	8.61
Utah	7.26	6.97	7.42	7.47	6.42	7.51	7.41	7.30	8.96
Vermont	*	*	*	*	*	*	*	*	*9.20
Virginia	6.21	6.09	6.17	*7.38	*10.87	*8.89	7.32	7.53	7.68
Washington	5.45	5.39	6.15	6.96	7.32	7.54	6.71	6.58	7.16
West Virginia	*	*7.75	*4.79	*	*	*	*7.54	*9.31	*8.94
Wisconsin	6.41	6.01	6.35	5.92	6.59	6.11	7.35	7.27	7.02
Wyoming	7.32	8.83	7.76	7.70	11.10	8.49	*15.48	*	*10.40

* Percents preceded by an asterisk are based on fewer than 50 births. Percents not shown are based on fewer than 20 births.

¹Excludes live births with unknown birthweight.

²Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

³Includes persons of Hispanic and non-Hispanic origin.

NOTES: For information on very low birthweight live births, see Table 37 in Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics reports. vol 57 no 7. Hyattsville, MD: NCHS. 2009; Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

Table 14 (page 1 of 2). Legal abortions and legal abortion ratios, by selected patient characteristics: United States, selected years 1973–2005

[Data are based on reporting by state health departments and by hospitals and other medical facilities]

Characteristic	1973	1975	1980	1985	1990	1995	1999 ¹	2000 ²	2003 ³	2004 ³	2005 ⁴
Number of legal abortions reported in thousands											
Centers for Disease Control and Prevention (CDC)	616	855	1,298	1,329	1,429	1,211	862	857	848	839	820
Guttmacher Institute ⁵	745	1,034	1,554	1,589	1,609	1,359	1,315	1,313	1,287	1,222	1,206
Abortions per 100 live births ⁶											
Total CDC	19.6	27.2	35.9	35.4	34.4	31.1	25.6	24.5	24.1	23.8	23.3
Age											
Under 15 years	123.7	119.3	139.7	137.6	81.8	66.4	70.9	70.8	83.0	76.2	76.4
15–19 years	53.9	54.2	71.4	68.8	51.1	39.9	37.5	36.1	37.4	36.2	35.8
20–24 years	29.4	28.9	39.5	38.6	37.8	34.8	31.6	30.0	30.0	29.1	28.3
25–29 years	20.7	19.2	23.7	21.7	21.8	22.0	20.8	19.8	19.5	19.1	18.7
30–34 years	28.0	25.0	23.7	19.9	19.0	16.4	15.2	14.5	14.4	14.3	14.0
35–39 years	45.1	42.2	41.0	33.6	27.3	22.3	19.3	18.1	17.3	17.0	16.8
40 years and over	68.4	66.8	80.7	62.3	50.6	38.5	32.9	30.1	29.3	28.6	27.8
Race											
White ⁷	32.6	27.7	33.2	27.7	25.8	20.3	17.7	16.7	16.5	16.1	15.8
Black or African American ⁸	42.0	47.6	54.3	47.2	53.7	53.1	52.9	50.3	49.1	47.2	46.7
Hispanic origin ⁹											
Hispanic or Latina	---	---	---	---	---	27.1	26.1	22.5	22.8	21.1	20.5
Not Hispanic or Latina	---	---	---	---	---	27.9	25.2	23.3	23.4	23.6	22.3
Marital status											
Married	7.6	9.6	10.5	8.0	8.7	7.6	7.0	6.5	6.3	6.1	5.8
Unmarried	139.8	161.0	147.6	117.4	86.3	64.5	60.4	57.0	53.8	51.0	48.5
Previous live births ¹⁰											
0	43.7	38.4	45.7	45.1	36.0	28.6	24.3	22.6	22.7	23.0	22.6
1	23.5	22.0	20.2	21.6	22.7	22.0	20.6	19.4	19.0	19.0	18.2
2	36.8	36.8	29.5	29.9	31.5	30.6	29.0	27.4	27.1	26.4	25.4
3	46.9	47.7	29.8	18.2	30.1	30.7	29.8	28.5	28.3	27.4	26.4
4 or more ¹¹	44.7	43.5	24.3	21.5	26.6	23.7	24.2	23.7	23.4	22.9	21.9
Percent distribution ¹²											
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Period of gestation											
Under 9 weeks	36.1	44.6	51.7	50.3	51.6	54.0	57.6	58.1	60.5	61.4	62.1
9–10 weeks	29.4	28.4	26.2	26.6	25.3	23.1	20.2	19.8	18.0	17.6	17.1
11–12 weeks	17.9	14.9	12.2	12.5	11.7	10.9	10.2	10.2	9.7	9.3	9.3
13–15 weeks	6.9	5.0	5.1	5.9	6.4	6.3	6.2	6.2	6.2	6.3	6.3
16–20 weeks	8.0	6.1	3.9	3.9	4.0	4.3	4.3	4.3	4.2	4.0	3.8
21 weeks and over	1.7	1.0	0.9	0.8	1.0	1.4	1.5	1.4	1.4	1.4	1.4
Previous induced abortions											
0	---	81.9	67.6	60.1	57.1	55.1	53.7	54.7	55.3	55.0	54.9
1	---	14.9	23.5	25.7	26.9	26.9	27.1	26.4	25.7	25.8	25.8
2	---	2.5	6.6	9.8	10.1	10.9	11.5	11.3	11.2	11.3	11.4
3 or more	---	0.7	2.3	4.4	5.9	7.1	7.7	7.6	7.8	7.9	7.9

See footnotes at end of table.

Table 14 (page 2 of 2). Legal abortions and legal abortion ratios, by selected patient characteristics: United States, selected years 1973–2005

[Data are based on reporting by state health departments and by hospitals and other medical facilities]

-- Data not available.

¹In 1998 and 1999, Alaska, California, New Hampshire, and Oklahoma did not report abortion data to CDC. For comparison, in 1997, the 48 corresponding reporting areas reported about 900,000 legal abortions.

²In 2000, 2001, and 2002, Alaska, California, and New Hampshire did not report abortion data to CDC.

³In 2003 and 2004, California, New Hampshire, and West Virginia did not report abortion data to CDC.

⁴In 2005 California, Louisiana, and New Hampshire did not report abortion data to CDC.

⁵No surveys were conducted in 1983, 1986, 1989, 1990, 1993, 1994, 1997, 1998, 2001, 2002, or 2003. Data for these years were estimated by interpolation. See [Appendix I, Guttmacher Institute](#).

⁶For calculation of ratios by each characteristic, abortions with characteristic unknown were distributed in proportion to abortions with characteristic known.

⁷For 1989 and later years, white race includes women of Hispanic ethnicity.

⁸Before 1989, black race includes races other than white.

⁹Data from 20–22 states, the District of Columbia (DC), and New York City (NYC) were included in 1991–1993. The number of reporting areas increased to 25 states, DC, and NYC in 1994–2004. States were excluded either because they did not collect data on Hispanic origin or due to incomplete reporting of Hispanic data (greater than 15% unknown Hispanic origin). See [Appendix I, Abortion Surveillance](#).

¹⁰For 1973–1975, data indicate number of living children.

¹¹For 1975, data refer to four previous live births, not four or more. For five or more previous live births, the ratio is 47.3.

¹²For calculation of percent distribution by each characteristic, abortions with characteristic unknown were excluded.

NOTES: The number of areas reporting adequate data (less than or equal to 15% missing) for each characteristic varies from year to year. See [Appendix I, Abortion Surveillance](#). For methodological differences between these two data sources, see [Appendix I, Abortion Surveillance; Guttmacher Institute Abortion Provider Survey](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC, National Center for Chronic Disease Prevention and Health Promotion: Abortion Surveillance, 1973, 1975, 1979–1980. Atlanta, GA: Public Health Service, 1975, 1977, 1983; CDC MMWR Surveillance Summaries. Abortion Surveillance, United States, 1984 and 1985, Vol. 38, No. SS–2, 1989; 1990, Vol. 42, No. SS–6, 1993; 1995, Vol. 47, No. SS–2, 1998; 1997, Vol. 49, No. SS–11, 2000; 1998, Vol. 51, No. SS–3, 2002; 1999, Vol. 51, No. SS–9, 2002; 2000, Vol. 52, No. SS–12, 2003; 2001, Vol. 53, No. SS–9, 2004; 2002, Vol. 54, No. SS–7, 2005; 2003, Vol. 55, No. SS–11, 2006; 2004, Vol. 56, No. SS–09, 2007; 2005, Vol. 57, No. SS–13, 2008. Guttmacher Institute Abortion Provider Survey. Finer LB, Henshaw SK. Abortion incidence and services in the United States in 2000. *Perspect Sex Reprod Health* 2003;35(1)6–15. Finer LB, Henshaw SK. Estimates of U.S. abortion incidence, 2001–2003. Guttmacher Institute. August 2006. Jones RK, Zolna MRS, Henshaw SK, Finer LB. Abortion in the United States: Incidence and access to services, 2005. *Perspect Sex Reprod Health* 2008;40(1)6–16. Available from: <http://www.guttmacher.org/journals/toc/psrh4001toc.html>.

Table 15 (page 1 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002

[Data are based on household interviews of samples of women of childbearing age]

Race, Hispanic origin, and year ¹	Age in years				
	15–44	15–19	20–24	25–34	35–44
Number of women in population in thousands					
All women: ²					
1982	54,099	9,521	10,629	19,644	14,305
1988	57,900	9,179	9,413	21,726	17,582
1995	60,201	8,961	9,041	20,758	21,440
2002	61,561	9,834	9,840	19,522	22,365
Not Hispanic or Latina:					
White only:					
1982	41,279	7,010	8,081	14,945	11,243
1988	42,575	6,531	6,630	15,929	13,486
1995	42,154	5,865	6,020	14,471	15,798
2002	39,498	6,069	5,938	12,073	15,418
Black or African American only:					
1982	6,825	1,383	1,456	2,392	1,593
1988	7,408	1,362	1,322	2,760	1,965
1995	8,060	1,334	1,305	2,780	2,641
2002	8,250	1,409	1,396	2,587	2,857
Hispanic or Latina: ³					
1982	4,393	886	811	1,677	1,018
1988	5,557	999	1,003	2,104	1,451
1995	6,702	1,150	1,163	2,450	1,940
2002	9,107	1,521	1,632	3,249	2,705
Percent of women in population using contraception					
All women: ²					
1982	55.7	24.2	55.8	66.7	61.6
1988	60.3	32.1	59.0	66.3	68.3
1995	64.2	29.8	63.5	71.1	72.3
2002	61.9	31.5	60.7	68.6	69.9
Not Hispanic or Latina:					
White only:					
1982	57.3	23.6	58.7	67.8	63.5
1988	63.0	34.0	62.6	67.7	71.5
1995	66.2	30.5	65.4	72.9	73.6
2002	64.6	35.0	66.3	69.9	71.4
Black or African American only:					
1982	51.6	29.8	52.3	63.5	52.0
1988	56.8	35.7	61.8	63.5	58.7
1995	62.3	36.1	67.6	66.8	68.3
2002	57.6	32.9	50.8	67.9	63.8
Hispanic or Latina: ³					
1982	50.6	*	*36.8	67.2	59.0
1988	50.4	*18.3	40.8	67.4	54.3
1995	59.0	26.1	50.6	69.2	70.8
2002	59.0	20.4	57.4	66.2	72.9

See footnotes at end of table.

Table 15 (page 2 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002

[Data are based on household interviews of samples of women of childbearing age]

Method of contraception and year	Age in years				
	15–44	15–19	20–24	25–34	35–44
Female sterilization					
Percent of contracepting women					
1982	23.2	—	*4.5	22.1	43.5
1988	27.6	*	*4.6	25.0	47.6
1995	27.8	*	4.0	23.8	45.0
2002	27.0	—	3.6	21.7	45.8
Male sterilization					
1982	10.9	*	*3.6	10.1	19.9
1988	11.7	*	*	10.2	20.8
1995	10.9	—	*	7.8	19.5
2002	10.2	—	*	7.2	18.2
Implant ⁴					
1982	...	...	...	...	...
1988	...	...	...	...	...
1995	1.3	*	3.7	*1.3	*
2002	1.2	*	*	*1.9	*
Injectable ⁴					
1982	...	...	...	...	...
1988	...	...	...	...	...
1995	3.0	9.7	6.1	2.9	*0.8
2002	5.4	13.9	10.2	5.3	*1.8
Birth control pill					
1982	28.0	63.9	55.1	25.7	*3.7
1988	30.8	58.8	68.2	32.6	4.3
1995	27.0	43.8	52.1	33.4	8.7
2002	31.0	53.8	52.5	34.8	15.0
Intrauterine device					
1982	7.1	*	*4.2	9.7	6.9
1988	2.0	—	*	2.1	3.1
1995	0.8	—	*	*0.8	1.1
2002	2.2	*	1.8	3.7	*
Diaphragm					
1982	8.1	*6.0	10.2	10.3	4.0
1988	5.7	*	*3.7	7.3	6.0
1995	1.9	*	*	1.7	2.8
2002	0.6	—	*	*	*
Condom					
1982	12.0	20.8	10.7	11.4	11.3
1988	14.6	32.8	14.5	13.7	11.2
1995	23.4	45.8	33.7	23.7	15.3
2002	23.8	44.6	36.0	23.1	15.6
Periodic abstinence—calendar rhythm					
1982	3.3	2.0	3.1	3.3	3.7
1988	1.7	*	1.1	1.8	2.0
1995	3.3	*	*1.5	3.7	3.9
2002	2.0	*	*2.3	*1.7	*2.4
Periodic abstinence—natural family planning					
1982	0.6	—	*	0.9	*
1988	0.6	—	*	0.7	0.7
1995	*0.5	—	*	*0.7	*
2002	*0.4	—	-	*	*
Withdrawal					
1982	2.0	2.9	3.0	1.8	1.3
1988	2.2	3.0	3.4	2.8	0.8
1995	6.1	13.2	7.1	6.0	4.5
2002	8.8	15.0	11.9	10.7	4.7
Other methods ⁵					
1982	4.9	2.6	5.4	4.8	5.3
1988	3.2	*	1.8	3.8	3.5
1995	3.2	*	3.2	3.1	3.4
2002	1.7	*	*	*1.5	*1.8

See footnotes at end of table.

Table 15 (page 3 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002

[Data are based on household interviews of samples of women of childbearing age]

Method of contraception and year	Not Hispanic or Latina ¹		
	White only	Black or African American only	Hispanic or Latina ³
Female sterilization			
Percent of contracepting women			
1982	22.0	30.0	23.0
1988	25.6	37.8	31.7
1995	24.5	39.9	36.6
2002	23.9	39.2	33.8
Male sterilization			
1982	13.0	*1.5	*
1988	14.3	*0.9	*
1995	13.7	*1.8	*4.0
2002	12.9	*	4.7
Implant ⁴			
1982	...	...	...
1988	...	...	...
1995	*1.0	*2.4	*2.0
2002	*0.8	*	*3.1
Injectable ⁴			
1982	...	...	...
1988	...	...	...
1995	2.4	5.4	4.7
2002	4.2	9.4	7.3
Birth control pill			
1982	26.4	37.9	30.2
1988	29.5	38.2	33.4
1995	28.7	23.7	23.0
2002	34.9	23.1	22.1
Intrauterine device			
1982	5.8	9.3	19.2
1988	1.5	3.2	*5.0
1995	0.7	*	*
2002	1.7	*	5.3
Diaphragm			
1982	9.2	*3.2	*
1988	6.6	*2.0	*
1995	2.3	*	*
2002	*	*	—
Condom			
1982	13.1	6.3	*6.9
1988	15.2	10.1	13.7
1995	22.5	24.9	21.2
2002	21.7	29.6	24.1
Periodic abstinence—calendar rhythm			
1982	3.2	2.9	3.9
1988	1.6	1.9	*
1995	3.3	*1.7	3.2
2002	2.3	*	*
Periodic abstinence—natural family planning			
1982	0.7	0.3	—
1988	0.7	*	*
1995	0.7	*	*
2002	*	*	*
Withdrawal			
1982	2.1	1.3	2.6
1988	2.0	1.4	4.5
1995	6.4	3.3	5.7
2002	9.5	4.9	6.3
Other methods ⁵			
1982	4.6	7.3	5.0
1988	3.0	4.4	2.6
1995	3.3	3.8	*2.2
2002	*1.7	*1.9	*1.2

See footnotes at end of table.

Table 15 (page 4 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002

[Data are based on household interviews of samples of women of childbearing age]

– Quantity zero.

- - - Data not available.

. . . Data not applicable.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

¹Starting with 1995 data, race-specific estimates are tabulated according to 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. Starting with 1995 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1995, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1995 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Race](#).

²Includes women of other or unknown race not shown separately.

³Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

⁴Data collected starting with the 1995 survey.

⁵In 2002, includes female condom, foam, cervical cap, Today sponge®, suppository or insert, jelly or cream, and other methods. See [Appendix II, Contraception](#), for the list of other methods reported in previous surveys.

NOTES: Survey collects up to four methods of contraception used in the month of interview. Percents may not add to the total because more than one method could have been used in the month of interview. These data replace estimates of most effective method used and may differ from previous editions of *Health, United States*. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Survey of Family Growth.

Table 16. Breastfeeding among mothers 15–44 years of age, by year of baby’s birth and selected characteristics of mother: United States, average annual 1986–1988 through 1999–2001

[Data are based on household interviews of samples of women of childbearing age]

<i>Selected characteristics of mother</i>	1986–1988	1989–1991	1992–1994	1995–1998	1999–2001
	Percent of babies breastfed				
Total	54.1	53.3	57.6	64.4	66.5
Age at baby’s birth					
Under 20 years	28.4	34.7	41.0	49.5	47.3
20–24 years	48.2	44.3	50.0	55.9	59.3
25–29 years	58.2	56.4	57.4	68.1	63.5
30–44 years	68.6	66.0	70.2	72.8	80.0
Race and Hispanic origin ¹					
Not Hispanic or Latina:					
White	59.1	58.4	61.7	66.5	68.7
Black or African American	22.3	22.4	26.1	47.9	45.3
Hispanic or Latina	55.6	57.0	63.8	71.2	76.0
Education ²					
No high school diploma or GED	31.8	36.5	44.6	50.6	46.6
High school diploma or GED	47.4	45.5	51.1	55.9	61.6
Some college, no bachelor’s degree	62.2	61.4	64.3	70.1	75.6
Bachelor’s degree or higher	78.4	80.6	82.5	82.0	81.3
Geographic region ³					
Northeast	51.3	53.5	56.5	61.6	66.9
Midwest	52.3	49.6	51.7	61.7	61.9
South	44.6	43.6	48.6	58.1	60.9
West	71.4	69.5	77.3	78.1	78.9
	Percent of babies who were breastfed 3 months or more				
Total	34.6	31.8	33.6	45.8	48.4
Age at baby’s birth					
Under 20 years	18.5	*10.5	*11.7	30.0	30.0
20–24 years	26.1	24.1	25.1	36.6	41.8
25–29 years	36.9	32.3	35.6	46.3	43.7
30–44 years	50.1	46.8	46.7	57.5	62.4
Race and Hispanic origin ¹					
Not Hispanic or Latina:					
White	37.7	35.2	36.6	47.8	49.7
Black or African American	11.6	11.5	13.3	29.6	33.7
Hispanic or Latina	38.2	33.9	35.0	49.7	54.3
Education ²					
No high school diploma or GED	21.8	17.6	25.2	33.9	37.0
High school diploma or GED	28.2	28.0	27.4	36.9	43.1
Some college, no bachelor’s degree	38.7	33.1	38.7	49.6	52.8
Bachelor’s degree or higher	55.0	56.1	59.3	64.5	64.1
Geographic region ³					
Northeast	29.9	37.2	36.4	48.2	48.8
Midwest	30.3	31.5	30.1	42.0	42.8
South	27.7	20.1	26.2	38.9	44.4
West	52.4	42.9	45.3	58.2	59.2

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

¹Persons of Hispanic origin may be of any race. All race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are for persons who reported only one racial group. See [Appendix II, Race](#).

²Educational attainment is presented only for women 22–44 years of age. Education is as of year of interview. GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

³See [Appendix II, Geographic region and division](#).

NOTES: Data are based on single births to mothers 15–44 years of age at interview, including those births that occurred when the mothers were younger than 15 years of age. Data on breastfeeding during 1986–1994 are based on responses to questions in the National Survey of Family Growth (NSFG) Cycle 5, conducted in 1995. Data for 1995–2001 are based on the NSFG Cycle 6 conducted in 2002. See [Appendix I, National Survey of Family Growth](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Survey of Family Growth, Cycle 5 (1995), Cycle 6 (2002).

Table 17 (page 1 of 2). Infant, neonatal, and postneonatal mortality rates, by detailed race and Hispanic origin of mother: United States, selected years 1983–2005

[Data are based on linked birth and death certificates for infants]

<i>Race and Hispanic origin of mother</i>	1983 ¹	1985 ¹	1990 ¹	1995 ²	2000 ²	2003 ²	2004 ²	2005 ²
Infant ³ deaths per 1,000 live births								
All mothers	10.9	10.4	8.9	7.6	6.9	6.8	6.8	6.9
White	9.3	8.9	7.3	6.3	5.7	5.7	5.7	5.7
Black or African American	19.2	18.6	16.9	14.6	13.5	13.5	13.2	13.3
American Indian or Alaska Native	15.2	13.1	13.1	9.0	8.3	8.7	8.4	8.1
Asian or Pacific Islander ⁴	8.3	7.8	6.6	5.3	4.9	4.8	4.7	4.9
Hispanic or Latina ^{5,6}	9.5	8.8	7.5	6.3	5.6	5.6	5.5	5.6
Mexican	9.1	8.5	7.2	6.0	5.4	5.5	5.5	5.5
Puerto Rican	12.9	11.2	9.9	8.9	8.2	8.2	7.8	8.3
Cuban	7.5	8.5	7.2	5.3	4.6	4.6	4.6	4.4
Central and South American	8.5	8.0	6.8	5.5	4.6	5.0	4.6	4.7
Other and unknown Hispanic or Latina	10.6	9.5	8.0	7.4	6.9	6.7	6.7	6.4
Not Hispanic or Latina:								
White ⁶	9.2	8.6	7.2	6.3	5.7	5.7	5.7	5.8
Black or African American ⁶	19.1	18.3	16.9	14.7	13.6	13.6	13.6	13.6
Neonatal ³ deaths per 1,000 live births								
All mothers	7.1	6.8	5.7	4.9	4.6	4.6	4.5	4.5
White	6.1	5.8	4.6	4.1	3.8	3.9	3.8	3.8
Black or African American	12.5	12.3	11.1	9.6	9.1	9.2	8.9	8.9
American Indian or Alaska Native	7.5	6.1	6.1	4.0	4.4	4.5	4.3	4.0
Asian or Pacific Islander ⁴	5.2	4.8	3.9	3.4	3.4	3.4	3.2	3.4
Hispanic or Latina ^{5,6}	6.2	5.7	4.8	4.1	3.8	3.9	3.8	3.9
Mexican	5.9	5.4	4.5	3.9	3.6	3.8	3.7	3.8
Puerto Rican	8.7	7.6	6.9	6.1	5.8	5.7	5.3	5.9
Cuban	*5.0	6.2	5.3	*3.6	*3.2	3.4	*2.8	*3.1
Central and South American	5.8	5.6	4.4	3.7	3.3	3.6	3.4	3.2
Other and unknown Hispanic or Latina	6.4	5.6	5.0	4.8	4.6	4.7	4.7	4.3
Not Hispanic or Latina:								
White ⁶	5.9	5.6	4.5	4.0	3.8	3.8	3.7	3.7
Black or African American ⁶	12.0	11.9	11.0	9.6	9.2	9.3	9.1	9.1
Postneonatal ³ deaths per 1,000 live births								
All mothers	3.8	3.6	3.2	2.6	2.3	2.2	2.3	2.3
White	3.2	3.1	2.7	2.2	1.9	1.9	1.9	2.0
Black or African American	6.7	6.3	5.9	5.0	4.3	4.3	4.3	4.3
American Indian or Alaska Native	7.7	7.0	7.0	5.1	3.9	4.2	4.2	4.0
Asian or Pacific Islander ⁴	3.1	2.9	2.7	1.9	1.4	1.4	1.5	1.5
Hispanic or Latina ^{5,6}	3.3	3.2	2.7	2.1	1.8	1.7	1.7	1.8
Mexican	3.2	3.2	2.7	2.1	1.8	1.7	1.7	1.7
Puerto Rican	4.2	3.5	3.0	2.8	2.4	2.5	2.5	2.4
Cuban	*2.5	*2.3	*1.9	*1.7	*	*	*1.7	*1.4
Central and South American	2.6	2.4	2.4	1.9	1.4	1.4	1.2	1.5
Other and unknown Hispanic or Latina	4.2	3.9	3.0	2.6	2.3	1.9	2.0	2.1
Not Hispanic or Latina:								
White ⁶	3.2	3.0	2.7	2.2	1.9	1.9	2.0	2.1
Black or African American ⁶	7.0	6.4	5.9	5.0	4.4	4.3	4.5	4.5

See footnotes at end of table.

Table 17 (page 2 of 2). Infant, neonatal, and postneonatal mortality rates, by detailed race and Hispanic origin of mother: United States, selected years 1983–2005

[Data are based on linked birth and death certificates for infants]

<i>Race and Hispanic origin of mother</i>	1983–1985 ^{1,7}	1986–1988 ^{1,7}	1989–1991 ^{1,7}	1995–1997 ^{2,7}	1999–2001 ^{2,7}	2003–2005 ^{2,7}
Infant ³ deaths per 1,000 live births						
All mothers	10.6	9.8	9.0	7.4	6.9	6.8
White	9.0	8.2	7.4	6.1	5.7	5.7
Black or African American	18.7	17.9	17.1	14.1	13.6	13.3
American Indian or Alaska Native	13.9	13.2	12.6	9.2	9.1	8.4
Asian or Pacific Islander ⁴	8.3	7.3	6.6	5.1	4.8	4.8
Hispanic or Latina ^{5,6}	9.2	8.3	7.5	6.1	5.6	5.6
Mexican	8.8	7.9	7.2	5.9	5.4	5.5
Puerto Rican	12.3	11.1	10.4	8.5	8.4	8.1
Cuban	8.0	7.3	6.2	5.3	4.5	4.5
Central and South American	8.2	7.5	6.6	5.3	4.8	4.8
Other and unknown Hispanic or Latina	9.8	9.0	8.2	7.1	6.7	6.6
Not Hispanic or Latina:						
White ⁶	8.8	8.1	7.3	6.1	5.7	5.7
Black or African American ⁶	18.5	17.9	17.2	14.2	13.7	13.6
Neonatal ³ deaths per 1,000 live births						
All mothers	6.9	6.3	5.7	4.8	4.6	4.6
White	5.9	5.2	4.7	4.0	3.8	3.8
Black or African American	12.2	11.7	11.1	9.4	9.2	9.0
American Indian or Alaska Native	6.7	5.9	5.9	4.4	4.5	4.3
Asian or Pacific Islander ⁴	5.2	4.5	3.9	3.3	3.2	3.3
Hispanic or Latina ^{5,6}	6.0	5.3	4.8	4.0	3.8	3.9
Mexican	5.7	5.0	4.5	3.8	3.6	3.8
Puerto Rican	8.3	7.2	7.0	5.7	5.9	5.7
Cuban	5.9	5.3	4.6	3.7	3.1	3.1
Central and South American	5.7	4.9	4.4	3.7	3.3	3.4
Other and unknown Hispanic or Latina	6.1	5.8	5.2	4.6	4.4	4.6
Not Hispanic or Latina:						
White ⁶	5.7	5.1	4.6	4.0	3.8	3.7
Black or African American ⁶	11.8	11.4	11.1	9.4	9.2	9.2
Postneonatal ³ deaths per 1,000 live births						
All mothers	3.7	3.5	3.3	2.5	2.3	2.3
White	3.1	3.0	2.7	2.1	1.9	1.9
Black or African American	6.4	6.2	6.0	4.7	4.4	4.3
American Indian or Alaska Native	7.2	7.3	6.7	4.8	4.5	4.1
Asian or Pacific Islander ⁴	3.1	2.8	2.6	1.8	1.6	1.5
Hispanic or Latina ^{5,6}	3.2	3.0	2.7	2.1	1.8	1.7
Mexican	3.2	2.9	2.7	2.1	1.8	1.7
Puerto Rican	4.0	3.9	3.4	2.8	2.5	2.4
Cuban	2.2	2.0	1.6	1.5	1.4	1.4
Central and South American	2.5	2.6	2.2	1.7	1.5	1.4
Other and unknown Hispanic or Latina	3.7	3.2	3.0	2.5	2.3	2.0
Not Hispanic or Latina:						
White ⁶	3.1	3.0	2.7	2.2	1.9	2.0
Black or African American ⁶	6.7	6.5	6.1	4.8	4.5	4.4

* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

¹Rates based on unweighted birth cohort data.

²Rates based on a period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

³Infant (under 1 year of age), neonatal (under 28 days), and postneonatal (28 days–11 months).

⁴Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth file](#).

⁵Persons of Hispanic origin may be of any race.

⁶Prior to 1995, data are shown only for states with an Hispanic-origin item on their birth certificates. See [Appendix II, Hispanic origin](#).

⁷Average annual mortality rate.

NOTES: The race groups white, black, American Indian or Alaska Native, and Asian or Pacific Islander include persons of Hispanic and non-Hispanic origin. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf.

Table 18. Infant mortality rates, by birthweight: United States, selected years 1983–2005

[Data are based on linked birth and death certificates for infants]

<i>Birthweight</i>	1983 ¹	1985 ¹	1990 ¹	1995 ²	2000 ²	2003 ²	2004 ²	2005 ²
	Infant deaths per 1,000 live births ³							
All birthweights	10.9	10.4	8.9	7.6	6.9	6.8	6.8	6.9
Less than 2,500 grams	95.9	93.9	78.1	65.3	60.2	59.4	57.9	57.6
Less than 1,500 grams	400.6	387.7	317.6	270.7	246.9	253.1	245.2	245.7
Less than 500 grams	890.3	895.9	898.2	904.9	847.9	866.2	850.1	857.2
500–999 grams	584.2	559.2	440.1	351.0	313.8	319.0	314.6	305.1
1,000–1,499 grams	162.3	145.4	97.9	69.6	60.9	56.9	55.7	58.1
1,500–1,999 grams	58.4	54.0	43.8	33.5	28.7	28.0	27.4	27.0
2,000–2,499 grams	22.5	20.9	17.8	13.7	11.9	11.0	11.1	10.9
2,500 grams or more	4.7	4.3	3.7	3.0	2.5	2.3	2.3	2.3
2,500–2,999 grams	8.8	7.9	6.7	5.5	4.6	4.1	4.2	4.2
3,000–3,499 grams	4.4	4.3	3.7	2.9	2.4	2.2	2.1	2.2
3,500–3,999 grams	3.2	3.0	2.6	2.0	1.7	1.6	1.5	1.5
4,000 grams or more	3.3	3.2	2.4	2.0	1.6	1.6	1.5	1.6
4,000–4,499 grams	2.9	2.9	2.2	1.8	1.5	1.3	1.4	1.5
4,500–4,999 grams	3.9	3.8	2.5	2.2	2.1	2.4	1.5	2.2
5,000 grams or more ⁴	14.4	14.7	9.8	8.5	*6.1	*6.4	*4.9	*4.6

* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator.

¹Rates based on unweighted birth cohort data.²Rates based on a period file using weighted data; unknown birthweight imputed when period of gestation is known and proportionately distributed when period of gestation is unknown. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).³For calculation of birthweight-specific infant mortality rates, unknown birthweight has been distributed in proportion to known birthweight separately for live births (denominator) and infant deaths (numerator).⁴In 1989, a birthweight-gestational age consistency check instituted for the natality file resulted in a decrease in the number of deaths to infants coded with birthweights of 5,000 grams or more and a discontinuity in the mortality trend for infants weighing 5,000 grams or more at birth. Starting with 1989 data, the rates are believed to be more accurate.NOTES: National linked files do not exist for 1992–1994. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

Table 19. Infant mortality rates, fetal mortality rates, and perinatal mortality rates, by race: United States, selected years 1950–2006

[Data are based on death certificates, fetal death records, and birth certificates]

Race and year	Neonatal ¹				Fetal mortality rate ²	Late fetal mortality rate ³	Perinatal mortality rate ⁴
	Infant ¹	Under 28 days	Under 7 days	Postneonatal ¹			
All races							
Deaths per 1,000 live births							
1950 ⁵	29.2	20.5	17.8	8.7	18.4	14.9	32.5
1960 ⁵	26.0	18.7	16.7	7.3	15.8	12.1	28.6
1970	20.0	15.1	13.6	4.9	14.0	9.5	23.0
1980	12.6	8.5	7.1	4.1	9.1	6.2	13.2
1990	9.2	5.8	4.8	3.4	7.5	4.3	9.0
1995	7.6	4.9	4.0	2.7	7.0	3.6	7.6
2000	6.9	4.6	3.7	2.3	6.6	3.3	7.0
2001	6.8	4.5	3.6	2.3	6.5	3.3	6.9
2002	7.0	4.7	3.7	2.3	6.4	3.2	6.9
2003	6.9	4.6	3.7	2.2	6.3	3.1	6.8
2004	6.8	4.5	3.6	2.3	6.3	3.1	6.7
2005	6.9	4.5	3.6	2.3	6.2	3.0	6.6
2006	6.7	4.5	3.5	2.2	---	---	---
Race of child: ⁶ White							
1950 ⁵	26.8	19.4	17.1	7.4	16.6	13.3	30.1
1960 ⁵	22.9	17.2	15.6	5.7	13.9	10.8	26.2
1970	17.8	13.8	12.5	4.0	12.3	8.6	21.0
1980	11.0	7.5	6.2	3.5	8.1	5.7	11.9
Race of mother: ⁷ White							
1980	10.9	7.4	6.1	3.5	8.1	5.7	11.8
1990	7.6	4.8	3.9	2.8	6.4	3.8	7.7
1995	6.3	4.1	3.3	2.2	5.9	3.3	6.5
2000	5.7	3.8	3.0	1.9	5.6	2.9	5.9
2001	5.7	3.8	3.0	1.9	5.5	2.9	5.9
2002	5.8	3.9	3.1	1.9	5.5	2.8	5.9
2003	5.7	3.9	3.1	1.8	5.3	2.7	5.8
2004	5.7	3.8	3.0	1.9	5.4	2.8	5.8
2005	5.7	3.8	3.0	1.9	5.3	2.7	5.7
2006	5.6	3.7	2.9	1.8	---	---	---
Race of child: ⁶ Black or African American							
1950 ⁵	43.9	27.8	23.0	16.1	32.1	---	---
1960 ⁵	44.3	27.8	23.7	16.5	---	---	---
1970	32.6	22.8	20.3	9.9	23.2	---	34.5
1980	21.4	14.1	11.9	7.3	14.4	8.9	20.7
Race of mother: ⁷ Black or African American							
1980	22.2	14.6	12.3	7.6	14.7	9.1	21.3
1990	18.0	11.6	9.7	6.4	13.3	6.7	16.4
1995	15.1	9.8	8.2	5.3	12.7	5.7	13.8
2000	14.1	9.4	7.6	4.7	12.4	5.4	13.0
2001	14.0	9.2	7.6	4.8	12.1	5.3	12.8
2002	14.4	9.5	7.8	4.8	11.9	5.2	12.8
2003	14.0	9.4	7.5	4.6	12.1	5.1	12.5
2004	13.8	9.1	7.3	4.7	11.6	5.0	12.2
2005	13.7	9.1	7.3	4.7	11.4	4.9	12.1
2006	13.3	8.8	7.0	4.5	---	---	---

--- Data not available.

¹Infant (under 1 year of age), neonatal (under 28 days), early neonatal (under 7 days), and postneonatal (28 days–11 months).

²Number of fetal deaths of 20 weeks or more gestation per 1,000 live births plus fetal deaths.

³Number of fetal deaths of 28 weeks or more gestation (late fetal deaths) per 1,000 live births plus late fetal deaths.

⁴Number of late fetal deaths plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

⁵Includes births and deaths of persons who were not residents of the 50 states and the District of Columbia.

⁶Infant deaths, live births, and fetal deaths are tabulated by race of child. See [Appendix II, Race](#).

⁷Infant deaths are tabulated by race of decedent; fetal deaths and live births are tabulated by race of mother. See [Appendix II, Race](#).

NOTES: Infant mortality rates in this table are based on infant deaths from the mortality file (numerator) and live births from the natality file (denominator). Inconsistencies in reporting race for the same infant between the birth and death certificate can result in underestimated infant mortality rates for races other than white or black. Infant mortality rates for minority population groups are available from the Linked Birth/Infant Death Data Set and are presented in Tables 17–18 and 21–22. Some numbers in this table have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System: Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009 and unpublished numbers.

Table 20 (page 1 of 2). Infant mortality rates, by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005

[Data are based on linked birth and death certificates for infants]

State	Not Hispanic or Latina								
	All races			White			Black or African American		
	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²
	Infant ³ deaths per 1,000 live births								
United States	9.0	6.9	6.8	7.3	5.7	5.7	17.2	13.6	13.6
Alabama	11.4	9.3	9.0	8.6	6.8	6.8	16.8	14.7	13.6
Alaska	9.2	6.8	6.5	7.2	5.1	5.3	*	*	*
Arizona	8.8	6.7	6.7	8.2	6.5	6.0	17.3	14.4	11.2
Arkansas	9.8	8.3	8.3	8.1	7.5	7.2	15.2	12.8	13.6
California	7.6	5.4	5.2	6.9	4.7	4.6	15.4	11.4	11.4
Colorado	8.7	6.0	6.3	8.0	5.2	5.2	16.7	13.7	16.3
Connecticut	7.9	6.4	5.5	5.9	4.9	3.9	17.0	14.3	12.7
Delaware	11.2	9.6	9.0	8.2	7.9	6.5	20.1	14.9	16.8
District of Columbia	20.3	11.4	12.2	*8.2	*	*3.4	23.9	15.3	17.2
Florida	9.4	7.2	7.2	7.2	5.7	5.8	16.2	13.0	12.9
Georgia	11.9	8.7	8.4	8.4	6.3	6.1	17.9	13.4	13.3
Hawaii	7.0	7.2	6.7	5.5	6.3	3.9	*13.6	*	*15.5
Idaho	8.9	6.6	6.1	8.9	6.2	6.1	*	*	*
Illinois	10.7	7.8	7.5	7.6	5.9	5.9	20.5	15.8	15.3
Indiana	9.4	7.7	7.9	8.4	7.0	7.1	17.3	13.9	15.1
Iowa	8.2	5.8	5.4	7.8	5.5	5.1	15.8	*11.4	*11.0
Kansas	8.5	7.0	7.1	7.8	6.4	6.7	15.4	14.7	14.3
Kentucky	8.7	6.7	6.8	8.1	6.4	6.4	14.4	10.8	10.9
Louisiana ⁴	10.2	9.8	9.8	7.5	6.9	7.1	14.3	13.7	13.9
Maine	6.6	5.1	5.9	6.2	5.0	5.8	*	*	*
Maryland	9.1	7.7	8.0	6.3	5.3	5.2	15.0	12.7	13.7
Massachusetts	7.0	4.8	4.9	5.9	4.0	4.0	14.2	10.5	10.0
Michigan	10.5	8.1	8.0	7.7	6.0	6.2	20.7	16.9	16.4
Minnesota	7.3	5.5	4.8	6.4	4.7	4.3	18.5	10.8	8.9
Mississippi	11.5	10.5	10.7	7.9	7.0	7.0	15.2	14.7	15.6
Missouri	9.7	7.7	7.6	8.0	6.3	6.6	18.0	15.6	13.8
Montana	9.0	6.9	6.3	8.0	6.4	5.7	*	*	*
Nebraska	8.1	7.0	5.9	7.2	6.2	5.1	18.3	15.0	14.0
Nevada	8.6	6.0	5.9	7.8	5.1	5.6	16.9	13.7	12.2
New Hampshire ⁴	7.1	4.9	5.0	7.2	4.5	4.8	*	*	*
New Jersey	8.4	6.1	5.4	6.1	4.0	3.7	17.8	13.6	11.9
New Mexico	8.4	6.4	6.1	8.1	6.0	6.9	*17.2	*15.8	*
New York	9.5	6.1	6.0	6.3	4.8	4.6	18.4	11.2	11.8
North Carolina	10.7	8.4	8.6	8.0	6.4	6.3	16.9	15.1	15.8
North Dakota	8.0	7.8	6.4	7.3	6.8	6.0	*	*	*
Ohio	9.0	7.7	7.8	7.7	6.3	6.4	16.2	15.3	15.6
Oklahoma ⁴	8.0	8.0	7.9	7.3	7.4	7.5	12.7	14.5	13.0
Oregon	8.0	5.5	5.7	7.4	5.6	5.5	21.3	*10.4	*8.6
Pennsylvania	9.2	7.3	7.3	7.2	5.9	5.8	19.1	14.4	13.6
Rhode Island	8.7	6.7	6.2	7.5	5.3	4.5	*13.6	*12.6	*10.8
South Carolina	11.8	9.0	9.0	8.4	6.0	6.4	17.2	14.9	14.2
South Dakota	9.5	6.4	7.2	7.5	5.4	6.2	*	*	*
Tennessee	10.2	9.0	8.9	7.8	7.0	7.0	18.2	17.0	16.3
Texas	7.9	5.9	6.5	6.9	5.5	5.9	14.1	11.1	12.4
Utah	7.0	5.3	4.9	6.8	5.0	4.5	*	*	*
Vermont	6.6	5.5	5.4	6.3	5.5	5.3	*	*	*
Virginia	9.9	7.2	7.5	7.4	5.5	6.0	18.0	13.6	13.7
Washington	8.0	5.5	5.4	7.4	5.2	5.0	15.1	9.5	9.0
West Virginia	9.1	7.9	7.7	8.8	7.7	7.5	*15.7	*11.7	*12.0
Wisconsin	8.4	6.9	6.3	7.4	5.6	5.1	17.0	17.9	16.4
Wyoming	8.4	6.5	6.9	8.0	6.3	6.8	*	*	*

See footnotes at end of table.

Table 20 (page 2 of 2). Infant mortality rates, by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005

[Data are based on linked birth and death certificates for infants]

State	Hispanic or Latina ⁵			American Indian or Alaska Native ⁶			Asian or Pacific Islander ⁶		
	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²
	Infant ³ deaths per 1,000 live births								
United States	7.5	5.5	5.6	12.6	8.9	8.4	6.6	4.8	4.8
Alabama	*	*7.0	7.7	*	*	*	*	*	*
Alaska	8.0	*	*	15.7	11.2	9.2	*	*	*
Arizona	8.0	6.0	6.7	11.4	9.4	8.3	*8.5	*5.3	6.7
Arkansas	*	*4.5	6.0	*	*	*	*	*	*
California	7.0	5.1	5.0	11.0	7.6	6.2	6.4	4.5	4.2
Colorado	8.5	6.2	7.0	*16.5	*11.8	*	*7.8	*6.2	*5.7
Connecticut	7.9	7.1	7.4	*	*	*	*	*3.7	*
Delaware	*	*7.9	*6.1	*	*	*	*	*	*
District of Columbia	*8.8	*7.5	*7.2	*	*	*	*	*	*
Florida	7.1	5.2	5.2	*	*5.8	*	*6.2	5.1	5.9
Georgia	9.0	6.0	5.5	*	*	*	*8.2	6.8	5.8
Hawaii	10.7	*6.0	7.9	*	*	*	7.1	7.3	7.2
Idaho	*7.2	8.8	6.2	*	*	*	*	*	*
Illinois	9.2	6.4	6.2	*	*	*	6.0	6.5	4.5
Indiana	*7.2	6.4	6.8	*	*	*	*	*	*
Iowa	*11.9	*6.7	*5.2	*	*	*	*	*	*
Kansas	8.7	7.1	6.2	*	*	*	*	*	*5.6
Kentucky	*	*4.8	7.6	*	*	*	*	*	*
Louisiana ⁷	---	*6.0	*5.7	*	*	*	*	*8.1	*
Maine	*	*	*	*	*	*	*	*	*
Maryland	7.2	5.7	5.8	*	*	*	7.5	*4.5	4.3
Massachusetts	8.3	6.0	6.5	*	*	*	5.7	3.7	3.8
Michigan	7.9	6.7	7.6	*10.7	*	*	*6.1	4.9	5.1
Minnesota	*8.4	6.5	4.3	17.3	*10.3	*8.6	*5.1	6.1	3.8
Mississippi	*	*	*	*	*	*	*	*	*
Missouri	*9.1	7.2	6.6	*	*	*	*9.1	*4.5	*6.1
Montana	*	*	*	16.7	*9.9	*9.3	*	*	*
Nebraska	*8.8	7.2	5.7	*18.2	*15.8	*	*	*	*
Nevada	7.0	5.1	4.5	*	*	*	*	*4.7	*5.8
New Hampshire ⁷	---	*	*	*	*	*	*	*	*
New Jersey	7.5	6.3	5.2	*	*	*	5.6	3.3	5.0
New Mexico	7.8	6.3	5.3	9.8	6.8	7.6	*	*	*
New York	9.4	5.5	5.5	*15.2	*	*	6.4	3.4	3.9
North Carolina	*7.5	5.6	6.6	12.2	10.6	10.2	*6.3	5.9	5.9
North Dakota	*	*	*	*13.8	*13.4	*8.6	*	*	*
Ohio	8.0	7.6	6.5	*	*	*	*4.8	*4.8	*4.5
Oklahoma ⁷	---	5.7	6.0	7.8	7.6	7.9	*	*	*
Oregon	8.5	5.1	5.5	*15.7	*	*11.0	*8.4	*3.7	*5.8
Pennsylvania	10.9	8.6	7.6	*	*	*	7.8	*4.0	4.9
Rhode Island	*7.2	8.0	7.4	*	*	*	*	*	*
South Carolina	*	*4.6	7.3	*	*	*	*	*	*
South Dakota	*	*	*	19.9	11.6	12.7	*	*	*
Tennessee	*	6.2	6.5	*	*	*	*	*	*8.1
Texas	7.0	5.1	5.6	*	*	*	6.8	4.0	4.3
Utah	*7.0	6.5	5.8	*10.0	*	*	*10.7	*8.4	*7.7
Vermont	*	*	*	*	*	*	*	*	*
Virginia	7.6	4.8	5.4	*	*	*	6.0	4.6	4.5
Washington	7.6	5.1	4.9	19.6	10.6	9.5	6.2	4.8	4.8
West Virginia	*	*	*	*	*	*	*	*	*
Wisconsin	*7.3	6.2	6.1	*11.9	*11.5	*8.2	*6.7	*5.2	*6.6
Wyoming	*	*	*	*	*	*	*	*	*

* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

--- Data not available.

¹Rates based on unweighted birth cohort data.

²Rates based on period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

³Under 1 year of age.

⁴Rates for white and black are substituted for non-Hispanic white and non-Hispanic black for Louisiana for 1989, Oklahoma for 1989–1990, and New Hampshire for 1989–1991.

⁵Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

⁶Includes persons of Hispanic origin.

⁷Rates for Hispanic origin exclude data from states not reporting Hispanic origin on the birth certificate for 1 or more years in a 3-year period.

NOTES: Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994.

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

Table 21 (page 1 of 2). Neonatal mortality rates, by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005

[Data are based on linked birth and death certificates for infants]

State	Not Hispanic or Latina								
	All races			White			Black or African American		
	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²
	Neonatal ³ deaths per 1,000 live births								
United States	5.7	4.6	4.6	4.6	3.8	3.7	11.1	9.2	9.2
Alabama	7.5	5.9	5.4	5.7	4.2	4.0	11.1	9.4	8.5
Alaska	4.1	3.1	3.2	3.7	*2.9	*2.6	*	*	*
Arizona	5.3	4.3	4.5	4.9	4.2	4.0	11.0	9.6	7.4
Arkansas	5.4	4.9	5.1	4.5	4.2	4.3	8.5	8.1	8.9
California	4.6	3.6	3.5	4.1	3.1	3.0	9.2	7.5	7.2
Colorado	5.0	4.2	4.6	4.7	3.5	3.8	10.9	10.5	11.9
Connecticut	5.7	4.8	4.0	4.2	3.8	2.8	12.5	10.1	8.3
Delaware	7.5	7.0	6.4	5.8	5.8	4.5	12.4	11.1	12.1
District of Columbia	14.1	8.3	8.6	*5.2	*	*	16.7	10.9	11.9
Florida	6.2	4.8	4.7	4.7	3.6	3.5	10.5	8.7	8.4
Georgia	7.9	5.8	5.6	5.5	4.1	3.9	12.0	9.2	9.2
Hawaii	4.3	5.0	4.7	3.5	5.3	*3.1	*	*	*
Idaho	5.3	4.5	3.9	5.2	4.1	4.0	*	*	*
Illinois	7.0	5.3	5.1	5.1	4.2	4.1	12.7	10.0	10.0
Indiana	6.0	5.1	5.3	5.2	4.6	4.6	11.5	8.6	10.7
Iowa	4.8	3.7	3.4	4.5	3.5	3.2	*10.5	*8.4	*6.4
Kansas	4.9	4.6	4.6	4.6	4.0	4.4	8.3	10.3	9.6
Kentucky	5.0	4.2	4.0	4.6	4.0	3.7	8.9	6.3	7.0
Louisiana ⁴	6.3	6.3	5.8	4.8	4.3	4.0	8.5	8.9	8.5
Maine	4.5	3.8	4.4	4.2	3.7	4.3	*	*	*
Maryland	5.9	5.6	5.8	3.9	3.8	3.7	10.2	9.2	10.1
Massachusetts	4.9	3.7	3.7	4.1	3.0	3.0	10.4	8.0	7.5
Michigan	6.9	5.6	5.6	4.9	4.2	4.3	14.0	11.4	11.6
Minnesota	4.3	3.6	3.2	3.9	3.2	2.9	10.7	6.4	5.5
Mississippi	7.1	6.6	6.2	4.9	4.2	3.5	9.5	9.5	9.7
Missouri	6.0	5.1	5.1	5.0	4.1	4.4	10.6	10.7	9.4
Montana	4.6	4.5	3.5	4.2	4.3	3.4	*	*	*
Nebraska	4.5	4.8	3.7	4.2	4.3	3.3	*9.8	*10.9	*9.4
Nevada	4.3	3.6	3.7	3.8	2.9	3.6	*8.3	7.4	7.7
New Hampshire ⁴	4.3	3.4	3.9	4.4	3.1	3.6	*	*	*
New Jersey	5.8	4.3	3.8	4.5	2.9	2.6	11.4	9.3	8.2
New Mexico	5.0	4.0	3.6	4.8	3.5	4.1	*	*	*
New York	6.5	4.3	4.2	4.3	3.4	3.4	12.6	7.8	8.0
North Carolina	7.3	5.9	6.0	5.3	4.4	4.2	11.9	11.0	11.4
North Dakota	5.0	5.1	4.8	4.7	4.5	4.5	*	*	*
Ohio	5.5	5.3	5.3	4.8	4.2	4.2	9.8	10.4	10.7
Oklahoma ⁴	4.4	4.8	4.6	4.1	4.6	4.3	6.3	8.5	8.8
Oregon	4.4	3.6	3.8	4.0	3.6	3.7	*11.6	*	*
Pennsylvania	6.2	5.2	5.2	4.9	4.3	4.0	12.5	9.6	9.5
Rhode Island	6.4	5.1	4.8	5.3	3.8	3.5	*9.8	*10.2	*7.6
South Carolina	7.7	6.2	6.1	5.4	3.9	4.2	11.3	10.6	9.8
South Dakota	5.1	3.4	4.3	4.5	3.0	4.1	*	*	*
Tennessee	6.5	5.8	5.7	4.9	4.3	4.0	11.8	11.4	11.7
Texas	4.7	3.6	4.2	4.1	3.3	3.7	8.5	6.7	8.0
Utah	3.7	3.5	3.4	3.6	3.4	3.1	*	*	*
Vermont	4.1	3.5	3.8	3.9	3.6	3.7	*	*	*
Virginia	6.8	4.9	5.2	4.8	3.6	3.9	13.0	9.6	9.6
Washington	4.3	3.5	3.4	3.8	3.3	2.9	9.7	6.0	5.6
West Virginia	5.8	5.1	4.8	5.6	5.0	4.7	*9.7	*9.8	*
Wisconsin	5.1	4.6	4.3	4.6	3.9	3.5	9.1	11.3	10.3
Wyoming	3.9	4.3	4.6	3.8	4.3	4.6	*	*	*

See footnotes at end of table.

Table 21 (page 2 of 2). Neonatal mortality rates, by race and Hispanic origin of mother, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005

[Data are based on linked birth and death certificates for infants]

State	Hispanic or Latina ⁵			American Indian or Alaska Native ⁶			Asian or Pacific Islander ⁶		
	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²	1989–1991 ¹	2000–2002 ²	2003–2005 ²
	Neonatal ³ deaths per 1,000 live births								
United States	4.8	3.8	3.9	5.9	4.4	4.3	3.9	3.3	3.3
Alabama	*	*4.6	*4.4	*	*	*	*	*	*
Alaska	*	*	*	*5.7	*3.9	*4.2	*	*	*
Arizona	5.0	4.1	4.8	5.4	4.4	4.2	*	*	*4.3
Arkansas	*	*3.1	*3.8	*	*	*	*	*	*
California	4.4	3.5	3.5	6.3	*4.0	*3.1	3.6	3.0	2.9
Colorado	4.4	4.6	5.3	*	*	*	*	*4.7	*4.0
Connecticut	5.3	5.3	6.1	*	*	*	*	*	*
Delaware	*	*	*4.4	*	*	*	*	*	*
District of Columbia	*	*	*	*	*	*	*	*	*
Florida	5.1	3.6	3.5	*	*	*	*4.4	3.8	3.9
Georgia	*5.7	4.0	3.8	*	*	*	*5.3	5.4	4.1
Hawaii	*6.6	*3.8	*5.7	*	*	*	4.2	4.9	4.8
Idaho	*	6.8	*3.8	*	*	*	*	*	*
Illinois	6.4	4.4	4.3	*	*	*	3.9	4.8	3.3
Indiana	*4.7	4.8	4.9	*	*	*	*	*	*
Iowa	*	*4.9	*3.7	*	*	*	*	*	*
Kansas	*5.4	4.9	3.4	*	*	*	*	*	*
Kentucky	*	*	*5.5	*	*	*	*	*	*
Louisiana ⁷	---	*	*	*	*	*	*	*7.1	*
Maine	*	*	*	*	*	*	*	*	*
Maryland	*4.7	4.2	3.8	*	*	*	*4.5	*3.6	*3.4
Massachusetts	5.8	4.6	4.9	*	*	*	*3.9	*2.7	*2.8
Michigan	5.2	4.7	5.1	*	*	*	*	*3.8	3.7
Minnesota	*	4.6	*2.9	*4.9	*	*	*3.2	*4.2	*2.4
Mississippi	*	*	*	*	*	*	*	*	*
Missouri	*	*5.2	4.6	*	*	*	*	*	*4.0
Montana	*	*	*	*7.6	*5.9	*	*	*	*
Nebraska	*	*4.6	*3.6	*	*	*	*	*	*
Nevada	*4.1	3.3	2.6	*	*	*	*	*	*4.0
New Hampshire ⁷	---	*	*	*	*	*	*	*	*
New Jersey	5.1	4.3	3.7	*	*	*	*3.4	2.2	3.4
New Mexico	4.9	4.3	3.3	4.9	*3.5	*3.5	*	*	*
New York	6.4	3.9	3.8	*	*	*	4.1	2.3	2.7
North Carolina	*5.5	3.8	4.7	*7.7	*8.1	*8.2	*	*4.4	*4.4
North Dakota	*	*	*	*	*	*7.5	*	*	*
Ohio	*5.4	5.3	4.8	*	*	*	*	*4.0	*3.3
Oklahoma ⁷	---	*3.3	4.0	*3.7	3.9	3.6	*	*	*
Oregon	6.5	3.6	3.8	*	*	*	*5.3	*	*3.9
Pennsylvania	7.3	5.8	5.5	*	*	*	*5.2	*2.7	3.7
Rhode Island	*4.9	*6.0	*5.8	*	*	*	*	*	*
South Carolina	*	*3.6	4.7	*	*	*	*	*	*
South Dakota	*	*	*	*8.2	*4.7	*5.6	*	*	*
Tennessee	*	*3.8	5.0	*	*	*	*	*	*4.7
Texas	4.2	3.2	3.8	*	*	*	4.0	2.5	2.8
Utah	*3.6	4.1	4.2	*	*	*	*5.0	*	*5.3
Vermont	*	*	*	*	*	*	*	*	*
Virginia	*4.8	3.5	4.0	*	*	*	*4.1	3.2	3.6
Washington	4.9	3.2	3.7	*8.5	*4.1	*4.6	*2.7	3.2	2.9
West Virginia	*	*	*	*	*	*	*	*	*
Wisconsin	*3.9	4.4	4.4	*	*	*	*	*3.8	*5.3
Wyoming	*	*	*	*	*	*	*	*	*

* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

--- Data not available.

¹Rates based on unweighted birth cohort data.

²Rates based on period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

³Infants under 28 days of age.

⁴Rates for white and black are substituted for non-Hispanic white and non-Hispanic black for Louisiana for 1989, Oklahoma for 1989–1990, and New Hampshire for 1989–1991.

⁵Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

⁶Includes persons of Hispanic origin.

⁷Rates for Hispanic origin exclude data from states not reporting Hispanic origin on the birth certificate for 1 or more years in a 3-year period.

NOTES: Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994.

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

Table 22. Infant mortality rates and international rankings: Selected countries and territories, selected years 1960–2006

[Data are based on reporting by countries]

Country ²	1960	1970	1980	1990	2000	2005	2006	International rankings ¹	
								1960	2006
Infant ³ deaths per 1,000 live births									
Australia	20.2	17.9	10.7	8.2	5.2	5.0	4.7	5	20
Austria	37.5	25.9	14.3	7.8	4.8	4.2	3.6	24	9
Belgium	23.9	21.1	12.1	6.5	4.8	3.7	---	11	---
Bulgaria	45.1	27.3	20.2	14.8	13.3	---	---	30	---
Canada	27.3	18.8	10.4	6.8	5.3	5.4	---	15	---
Chile	120.3	82.2	33.0	16.0	8.9	7.9	7.6	36	29
Costa Rica	77.9	68.4	19.9	15.0	10.3	9.8	9.6	35	30
Cuba	37.3	38.7	19.6	10.7	7.2	6.2	5.3	23	24
Czech Republic	20.0	20.2	16.9	10.8	4.1	3.4	3.3	4	7
Denmark	21.5	14.2	8.4	7.5	5.3	4.4	3.8	8	12
England and Wales	22.4	18.5	12.0	7.9	5.6	5.0	5.0	9	21
Finland	21.0	13.2	7.6	5.6	3.8	3.0	2.8	6	4
France	27.7	18.2	10.0	7.3	4.5	3.8	3.8	16	12
Germany ⁴	35.0	22.5	12.4	7.0	4.4	3.9	3.8	22	12
Greece	40.1	29.6	17.9	9.7	5.4	3.8	3.7	25	10
Hong Kong	41.5	19.2	11.2	5.9	2.9	2.4	1.8	26	1
Hungary	47.6	35.9	23.2	14.8	9.2	6.2	5.7	31	25
Ireland	29.3	19.5	11.1	8.2	6.2	4.0	3.7	18	10
Israel ⁵	31.0	18.9	15.6	9.9	5.4	4.6	4.3	20	16
Italy	43.3	29.0	14.6	8.2	4.5	4.7	---	27	---
Japan	30.7	13.1	7.5	4.6	3.2	2.8	2.6	19	2
Netherlands	17.9	12.7	8.6	7.1	5.1	4.9	4.4	2	17
New Zealand	22.6	16.7	13.0	8.4	6.3	5.0	5.2	10	23
Northern Ireland	27.2	22.9	13.4	7.5	5.0	6.1	5.1	14	22
Norway	18.9	12.7	8.1	6.9	3.8	3.1	3.2	3	6
Poland	54.8	36.7	25.5	19.3	8.1	6.4	6.0	32	26
Portugal	77.5	55.5	24.2	11.0	5.5	3.5	3.3	34	7
Puerto Rico	43.3	28.6	19.0	13.4	9.9	9.2	---	27	---
Romania	75.7	49.4	29.3	26.9	18.6	15.0	13.9	33	32
Russian Federation ⁶	---	---	22.0	17.6	15.2	11.0	10.2	---	31
Scotland	26.4	19.6	12.1	7.7	5.7	5.2	4.5	13	19
Singapore	34.8	21.4	11.7	6.7	2.5	2.1	2.6	21	2
Slovakia	28.6	25.7	20.9	12.0	8.6	7.2	6.6	17	27
Spain	43.7	28.1	12.3	7.6	4.4	3.8	3.8	29	12
Sweden	16.6	11.0	6.9	6.0	3.4	2.4	2.8	1	4
Switzerland	21.1	15.1	9.1	6.8	4.9	4.2	4.4	7	17
United States	26.0	20.0	12.6	9.2	6.9	6.9	6.7	12	28

--- Data not available.

¹Rankings are from lowest to highest infant mortality rates (IMR). Countries with the same IMR receive the same rank. The country with the next highest IMR is assigned the rank it would have received had the lower-ranked countries not been tied, i.e., skip a rank. Some of the variation in IMRs is due to differences among countries in distinguishing between fetal and infant deaths.

²Refers to countries, territories, cities, or geographic areas with at least 1 million population and with complete counts of live births and infant deaths according to the United Nations Demographic Yearbook.

³Under 1 year of age.

⁴Rates for 1990 and earlier years were calculated by combining information from the Federal Republic of Germany and the German Democratic Republic.

⁵Includes data for East Jerusalem and Israeli residents in certain other territories under occupation by Israeli military forces since June 1967.

⁶Excludes infants born alive after less than 28 weeks gestation, of less than 1,000 grams in weight and 35 centimeters in length, who die within 7 days of birth.

NOTE: Some rates for selected countries and selected years were revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Organisation for Economic Co-operation and Development (OECD): OECD Health Data 2008, A Comparative Analysis of 30 Countries, <http://www.oecd.org/els/health/>; United Nations: 2000 Demographic Yearbook, United Nations Publication, Sales No. E/F.02.XIII.1, New York, 2002; World Health Organization Statistical Information System (WHOSIS), <http://www3.who.int/whosis/>; United States and Puerto Rico: CDC/NCHS. Vital Statistics of the United States, vol. II, mortality part A (selected years). Public Health Service. Washington, DC; Sweden: Statistics Sweden; Costa Rica: Dirección General de Estadísticas y Censos. Elaboración y estimación, Centro Centroamericano de Población, Universidad de Costa Rica, <http://www.ccp.ucr.ac.cr/observa/index1.htm>; Bulgaria, Romania and Russian Federation: European health for all database. WHO Regional Office for Europe, <http://www.euro.who.int/>. Chile: Instituto Nacional de Dirección General de Estadísticas, Departamento de Demografía. Gobierno de Chile. Israel: Central Bureau Statistics of Israel, <http://www.cbs.gov.il/engindex.htm>.

Table 23 (page 1 of 2). Life expectancy at birth and at 65 years of age, by sex: Selected countries and territories, selected years 1980–2005

[Data are based on reporting by countries]

Country	Male						Female					
	1980	1990	1995	2000	2002	2005	1980	1990	1995	2000	2002	2005
At birth												
Life expectancy in years												
Australia	71.0	73.9	75.0	76.6	77.4	78.5	78.1	80.1	80.8	82.0	82.6	83.3
Austria	69.0	72.2	73.3	75.1	75.8	76.7	76.1	78.8	79.9	81.1	81.7	82.2
Belgium	69.9	72.7	73.5	74.6	75.1	76.2	76.7	79.5	80.4	81.0	81.2	81.9
Bulgaria	68.5	68.3	67.4	68.5	68.9	---	73.9	75.0	74.9	75.1	75.6	---
Canada	71.7	74.4	75.1	76.7	77.2	78.0	78.9	80.8	81.1	81.9	82.1	82.7
Chile	---	71.1	71.8	72.6	72.9	74.8	---	76.9	77.8	78.6	78.9	81.2
Costa Rica	71.9	74.8	74.0	75.3	76.2	76.8	77.0	79.3	78.7	80.3	81.0	81.6
Cuba ¹	72.2	74.6	75.4	74.7	74.7	75.9	---	76.9	77.7	79.0	79.2	80.1
Czech Republic ²	66.9	67.6	69.7	71.7	72.1	72.9	74.0	75.5	76.8	78.5	78.7	79.2
Denmark	71.2	72.0	72.7	74.5	74.8	76.0	77.3	77.8	77.9	79.2	79.4	80.5
England and Wales	70.8	73.1	74.3	75.6	76.1	77.2	76.8	78.6	79.5	80.3	80.7	81.5
Finland	69.2	71.0	72.8	74.2	74.9	75.6	77.6	79.0	80.4	81.2	81.6	82.5
France	70.2	72.8	73.9	75.3	75.7	76.7	78.4	80.9	81.8	83.0	83.0	83.7
Germany ³	69.6	72.0	73.3	75.1	75.7	76.7	76.2	78.5	79.9	81.2	81.3	82.0
Greece	72.2	74.6	75.0	75.5	76.2	76.8	76.8	79.5	80.3	80.5	81.1	81.7
Hong Kong	71.6	74.6	76.0	78.0	78.6	78.8	77.9	80.3	81.5	83.9	84.5	84.6
Hungary	65.5	65.1	65.3	67.4	68.4	68.6	72.7	73.7	74.5	75.9	76.7	76.9
Ireland	70.1	72.1	72.8	74.0	75.2	77.3	75.6	77.7	78.3	79.2	80.5	81.7
Israel ¹	72.2	75.1	75.5	76.7	77.5	78.6	75.8	78.5	79.5	80.9	81.5	82.4
Italy	70.6	73.9	75.1	77.0	77.4	---	77.4	80.4	81.6	82.9	83.2	---
Japan	73.4	75.9	76.4	77.7	78.3	78.6	78.8	81.9	82.9	84.6	85.2	85.5
Netherlands	72.5	73.8	74.6	75.5	76.0	77.2	79.2	80.1	80.4	80.5	80.7	81.6
New Zealand	70.0	72.4	74.4	76.3	76.7	77.9	76.3	78.3	79.7	81.1	81.2	81.9
Northern Ireland	68.3	72.1	73.5	74.8	75.6	76.1	75.0	78.0	78.9	79.8	80.4	81.0
Norway	72.3	73.4	74.8	76.0	76.4	77.8	79.3	79.9	80.9	81.5	81.6	82.7
Poland	66.0	66.2	67.6	69.7	70.4	70.8	74.4	75.2	76.4	78.0	78.7	79.4
Portugal	67.9	70.6	71.7	73.2	73.8	74.9	74.9	77.5	79.0	80.2	80.6	81.3
Puerto Rico	70.8	69.1	69.6	72.3	73.7	74.3	76.9	77.2	78.9	81.0	82.0	82.4
Romania	66.6	66.6	65.5	67.8	67.4	68.8	71.9	73.1	73.5	74.8	74.8	75.8
Russian Federation	61.4	63.8	58.3	59.2	58.9	59.0	73.0	74.4	71.7	72.4	72.0	72.4
Scotland	69.0	71.1	72.1	73.1	73.5	76.6	75.2	76.7	77.7	78.6	78.9	79.5
Singapore	69.8	73.1	74.2	76.1	76.5	77.6	74.7	77.6	78.6	80.1	81.1	82.5
Slovakia ²	66.8	66.6	68.4	69.1	69.8	70.1	74.3	75.4	76.3	77.4	77.7	77.9
Spain	72.3	73.4	74.4	75.8	76.3	77.0	78.4	80.6	81.8	82.9	83.2	83.7
Sweden	72.8	74.8	76.2	77.4	77.7	78.4	78.8	80.4	81.4	82.0	82.1	82.8
Switzerland	72.3	74.0	75.4	77.0	77.9	78.7	79.0	80.9	81.9	82.8	83.2	84.0
United States	70.0	71.8	72.5	74.1	74.3	74.9	77.4	78.8	78.9	79.3	79.5	79.9

See footnotes at end of table.

Table 23 (page 2 of 2). Life expectancy at birth and at 65 years of age, by sex: Selected countries and territories, selected years 1980–2005

[Data are based on reporting by countries]

Country	Male						Female					
	1980	1990	1995	2000	2002	2005	1980	1990	1995	2000	2002	2005
At 65 years	Life expectancy in years											
Australia	13.7	15.2	15.7	16.9	17.4	18.1	17.9	19.0	19.5	20.4	20.8	21.4
Austria	12.9	14.3	14.9	16.0	16.3	17.0	16.3	17.8	18.6	19.4	19.7	20.3
Belgium	12.9	14.3	14.8	15.6	15.8	16.6	16.9	18.8	19.3	19.7	19.7	20.2
Bulgaria	12.7	12.9	12.8	12.8	13.1	---	14.7	15.4	15.4	15.4	15.8	---
Canada	14.5	15.7	16.0	16.8	17.2	17.9	18.9	19.9	20.0	20.4	20.6	21.1
Chile	---	14.6	14.9	15.3	15.4	15.9	---	17.6	18.1	18.6	18.8	20.0
Costa Rica	16.1	17.2	16.7	17.2	17.9	18.1	18.1	19.5	18.7	19.7	20.5	20.7
Cuba ¹	---	---	---	16.7	16.8	17.1	---	---	---	19.0	19.3	19.6
Czech Republic ²	11.2	11.7	12.7	13.8	13.9	14.4	14.4	15.3	16.2	17.3	17.3	17.7
Denmark	13.6	14.0	14.1	15.2	15.4	16.1	17.6	17.9	17.6	18.3	18.2	19.1
England and Wales	12.9	14.1	14.8	15.8	16.3	17.1	16.9	17.9	18.3	19.0	19.2	19.9
Finland	12.5	13.8	14.6	15.5	15.8	16.8	16.5	17.8	18.7	19.5	19.8	21.0
France	13.6	15.5	16.1	16.8	17.0	17.7	18.2	19.8	20.6	21.4	21.3	22.0
Germany ³	12.8	14.0	14.8	15.8	16.2	16.9	16.3	17.7	18.7	19.6	19.6	20.1
Greece	14.6	15.7	16.1	16.2	16.7	17.2	16.8	18.0	18.4	18.3	18.8	19.4
Hong Kong	13.9	15.3	16.2	17.3	17.8	17.8	13.9	18.8	19.5	21.5	22.0	22.9
Hungary	11.6	12.0	12.1	12.7	13.1	13.1	14.6	15.3	15.8	16.5	17.0	16.9
Ireland	12.6	13.3	13.5	14.6	15.4	16.8	15.7	17.0	17.2	18.0	18.9	20.0
Israel ¹	14.4	15.9	16.0	16.9	17.3	18.2	15.8	17.8	18.0	19.3	19.7	20.2
Italy	13.3	15.1	15.8	16.7	17.0	---	17.1	18.9	19.9	20.7	21.0	---
Japan	14.6	16.2	16.5	17.5	18.0	18.1	17.7	20.0	20.9	22.4	23.0	23.2
Netherlands	13.7	14.4	14.7	15.3	15.6	16.4	18.0	18.9	19.0	19.2	19.3	20.0
New Zealand	13.2	14.7	15.6	16.7	16.9	17.8	17.0	18.3	19.1	20.0	20.0	20.5
Northern Ireland	11.9	13.7	14.4	15.3	15.9	16.6	15.8	17.5	18.0	18.5	18.9	19.5
Norway	14.3	14.6	15.1	16.1	16.2	17.2	18.2	18.7	19.2	19.9	19.8	20.9
Poland	12.0	12.4	12.9	13.6	14.0	14.4	15.5	16.1	16.6	17.5	17.9	18.6
Portugal	13.1	14.0	14.7	15.4	15.7	16.1	16.1	17.1	18.1	18.9	19.2	19.4
Puerto Rico	---	---	---	---	---	---	---	---	---	---	---	---
Romania	12.6	13.3	12.9	13.5	13.0	13.4	14.2	15.3	15.4	15.9	15.8	16.2
Russian Federation	11.6	12.1	10.9	11.1	10.9	11.0	15.6	15.9	15.1	15.2	15.1	15.4
Scotland	12.3	13.1	13.8	14.7	15.1	15.8	16.2	16.7	17.3	17.8	18.1	18.6
Singapore	12.6	14.5	14.6	15.8	16.0	16.9	15.4	16.9	17.3	19.0	19.2	20.4
Slovakia ²	12.3	12.2	12.7	12.9	13.3	13.2	15.4	15.7	16.1	16.5	16.9	16.9
Spain	14.6	15.5	16.2	16.7	16.9	17.3	17.8	19.3	20.2	20.8	21.0	21.3
Sweden	14.3	15.3	16.0	16.7	16.9	17.4	17.9	19.0	19.6	20.0	20.0	20.6
Switzerland	14.4	15.3	16.2	17.0	17.6	18.1	18.2	19.7	20.4	20.9	21.3	21.7
United States	14.1	15.1	15.6	16.0	16.2	16.8	18.3	18.9	18.9	19.0	19.1	19.5

--- Data not available.

¹Estimates are for 2006 instead of 2005.

²In 1993, Czechoslovakia was divided into two nations, the Czech Republic and Slovakia. Data for years prior to 1993 are from the Czech and Slovak regions of Czechoslovakia.

³Until 1990, estimates refer to the Federal Republic of Germany; from 1995 onwards, data refer to Germany after reunification.

NOTES: Since calculation of life expectancy (LE) estimates varies among countries, ranks are not presented; comparisons among countries and their interpretation should be made with caution. See [Appendix II, Life expectancy](#). Some estimates for selected countries and selected years were revised and differ from the previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Organisation for Economic Co-operation and Development (OECD) Health Data 2008, A Comparative Analysis of 30 Countries, <http://www.oecd.org/els/health/>; European health for all database, World Health Organization Regional Office for Europe, <http://www.who.dk/hfadb>; CDC/NCHS. Vital statistics of the United States (selected years). Public Health Service. Washington, DC. <http://www.cdc.gov/nchs/fastats/lifexpec.htm>; Puerto Rico: Commonwealth of Puerto Rico, Department of Health, Auxiliary Secretariat for Planning, Evaluation, Statistics, and Information Systems: Unpublished data; England and Wales, Northern Ireland, and Scotland: Government Actuary's Department, London <http://www.gad.gov.uk>; Hong Kong: Government of Hong Kong, Special Administrative Region, Department of Health, <http://www.dh.gov.hk/eindex.html>; Costa Rica: Instituto Nacional de Dirección General de Estadística y Censos (INEC) y Centro Centroamericano de Población (CCP) <http://www.ccp.ucr.ac.cr/observa/series/serie3.htm>; Chile: Instituto Nacional de Dirección General de Estadísticas e Información de Salud; Puerto Rico (1999–2001): Pan American Health Organization, Special Program for Health Analysis. Regional Initiative for Health Basic Data, Technical Information Health System, Washington, DC 2008. Cuba and Singapore (2000–2001): WHO Statistical Information System (WHOSIS) http://www3.who.int/whosis/core/core_select.cfm. Singapore: Ministry of Health, Singapore <http://www.moh.gov.sg/mohcorp/default.aspx>.

Table 24. Life expectancy at birth, at 65 years of age, and at 75 years of age, by race and sex: United States, selected years 1900–2006

[Data are based on death certificates]

Specified age and year	All races			White			Black or African American ¹		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
At birth									
Remaining life expectancy in years									
1900 ^{2,3}	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5
1950 ³	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9
1960 ³	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3
1970	70.8	67.1	74.7	71.7	68.0	75.6	64.1	60.0	68.3
1980	73.7	70.0	77.4	74.4	70.7	78.1	68.1	63.8	72.5
1990	75.4	71.8	78.8	76.1	72.7	79.4	69.1	64.5	73.6
1995	75.8	72.5	78.9	76.5	73.4	79.6	69.6	65.2	73.9
1998	76.7	73.8	79.5	77.3	74.5	80.0	71.3	67.6	74.8
1999	76.7	73.9	79.4	77.3	74.6	79.9	71.4	67.8	74.7
2000	76.8	74.1	79.3	77.3	74.7	79.9	71.8	68.2	75.1
2001	76.9	74.2	79.4	77.4	74.8	79.9	72.0	68.4	75.2
2002	76.9	74.3	79.5	77.4	74.9	79.9	72.1	68.6	75.4
2003	77.1	74.5	79.6	77.6	75.0	80.0	72.3	68.8	75.6
2004	77.5	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.0
2005	77.4	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.1
2006	77.7	75.1	80.2	78.2	75.7	80.6	73.2	69.7	76.5
At 65 years									
1950 ³	13.9	12.8	15.0	---	12.8	15.1	13.9	12.9	14.9
1960 ³	14.3	12.8	15.8	14.4	12.9	15.9	13.9	12.7	15.1
1970	15.2	13.1	17.0	15.2	13.1	17.1	14.2	12.5	15.7
1980	16.4	14.1	18.3	16.5	14.2	18.4	15.1	13.0	16.8
1990	17.2	15.1	18.9	17.3	15.2	19.1	15.4	13.2	17.2
1995	17.4	15.6	18.9	17.6	15.7	19.1	15.6	13.6	17.1
1998	17.8	16.0	19.2	17.8	16.1	19.3	16.1	14.3	17.4
1999	17.7	16.1	19.1	17.8	16.1	19.2	16.0	14.3	17.3
2000	17.6	16.0	19.0	17.7	16.1	19.1	16.1	14.1	17.5
2001	17.7	16.2	19.0	17.8	16.3	19.1	16.2	14.2	17.6
2002	17.8	16.2	19.1	17.9	16.3	19.2	16.3	14.4	17.7
2003	17.9	16.4	19.2	18.0	16.5	19.3	16.4	14.5	17.9
2004	18.2	16.7	19.5	18.3	16.8	19.5	16.7	14.8	18.2
2005	18.2	16.8	19.5	18.3	16.9	19.5	16.8	14.9	18.2
2006	18.5	17.0	19.7	18.6	17.1	19.8	17.1	15.1	18.6
At 75 years									
1980	10.4	8.8	11.5	10.4	8.8	11.5	9.7	8.3	10.7
1990	10.9	9.4	12.0	11.0	9.4	12.0	10.2	8.6	11.2
1995	11.0	9.7	11.9	11.1	9.7	12.0	10.2	8.8	11.1
1998	11.3	10.0	12.2	11.3	10.0	12.2	10.5	9.2	11.3
1999	11.2	10.0	12.1	11.2	10.0	12.1	10.4	9.2	11.1
2000	11.0	9.8	11.8	11.0	9.8	11.9	10.4	9.0	11.3
2001	11.1	9.9	11.9	11.1	9.9	11.9	10.5	9.1	11.4
2002	11.0	9.9	11.9	11.1	9.9	11.9	10.5	9.2	11.4
2003	11.1	10.0	11.9	11.1	10.0	11.9	10.6	9.3	11.5
2004	11.4	10.3	12.2	11.4	10.3	12.2	10.8	9.5	11.7
2005	11.3	10.2	12.1	11.4	10.3	12.1	10.8	9.5	11.7
2006	11.6	10.5	12.3	11.5	10.5	12.3	11.1	9.8	12.0

--- Data not available.

¹Data shown for 1900–1960 are for the nonwhite population.

²Death registration area only. The death registration area increased from 10 states and the District of Columbia (D.C.) in 1900 to the coterminous United States in 1933. See [Appendix II, Registration area](#).

³Includes deaths of persons who were not residents of the 50 states and D.C.

NOTES: Populations for computing life expectancy for 1991–1999 are 1990-based postcensal estimates of U.S. resident population. See [Appendix I, Population Census and Population Estimates](#). In 1997, life table methodology was revised to construct complete life tables by single years of age that extend to age 100 (Anderson RN. Method for constructing complete annual U.S. life tables. NCHS. Vital Health Stat 2(129). 1999). Previously, abridged life tables were constructed for 5-year age groups ending with 85 years and over. Life table values for 2000 and later years were computed using a slight modification of the new life table method due to a change in the age detail of populations received from the U.S. Census Bureau. Values for data years 2000–2006 are based on a newly revised methodology that uses vital statistics death rates for ages under 66 and modeled probabilities of death for ages 66 to 100 based on blended vital statistics and Medicare probabilities of dying and may differ from figures previously published. The revised methodology is similar to that developed for the 1999–2001 decennial life tables. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office, 1968; Arias, E. United States life tables, 2005. National vital statistics reports; Hyattsville, MD: NCHS. 2009, forthcoming. Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 25 (page 1 of 2). Age-adjusted death rates, by race, Hispanic origin, and state: United States, average annual 1979–1981, 1989–1991, and 2004–2006

[Data are based on death certificates]

State	All persons			White	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Hispanic or Latino ¹	White, not Hispanic or Latino
	1979–1981	1989–1991	2004–2006	2004–2006	2004–2006	2004–2006	2004–2006	2004–2006	2004–2006
Age-adjusted death rate per 100,000 population ²									
United States	1,022.8	942.2	791.1	777.8	1,006.2	652.9	436.7	579.5	789.3
Alabama	1,091.2	1,037.9	990.7	956.2	1,133.4	*	389.0	335.5	960.6
Alaska	1,087.4	944.6	754.8	712.3	686.1	1,087.7	465.3	488.9	718.5
Arizona	951.5	873.5	759.7	756.3	878.3	840.3	398.6	705.9	758.3
Arkansas	1,017.0	996.3	923.6	898.9	1,143.8	*	444.5	336.5	907.2
California	975.5	911.0	708.5	729.2	990.1	*	451.1	567.0	759.9
Colorado	941.1	856.1	730.6	733.9	823.8	519.8	428.0	702.5	730.9
Connecticut	961.5	857.5	694.8	690.1	794.5	*	315.3	533.7	688.7
Delaware	1,069.7	1,001.9	808.7	785.0	981.3	*	312.2	578.0	786.4
District of Columbia	1,243.1	1,255.3	962.9	609.9	1,199.7	*	464.5	264.7	633.7
Florida	960.8	870.9	745.8	727.2	956.6	*	337.7	595.5	751.2
Georgia	1,094.3	1,037.4	906.4	873.3	1,039.1	*	380.8	303.4	885.7
Hawaii	801.2	752.2	613.8	634.1	444.8	*	609.3	1,072.3	647.5
Idaho	936.7	856.6	755.0	756.6	540.3	876.7	431.4	593.5	758.2
Illinois	1,063.7	973.8	790.5	763.2	1,050.9	*	362.7	447.4	776.6
Indiana	1,048.3	962.0	850.9	838.5	1,054.9	*	349.0	443.8	844.0
Iowa	919.9	848.2	729.7	727.3	975.3	*	371.6	400.0	729.8
Kansas	940.1	867.2	796.4	783.8	1,095.0	*	383.5	520.6	783.3
Kentucky	1,088.9	1,024.5	944.9	939.3	1,088.6	*	426.5	585.2	940.8
Louisiana	1,132.6	1,074.6	970.6	911.5	1,147.2	*	448.4	380.9	920.7
Maine	1,002.9	918.7	792.4	792.1	619.7	*	410.8	321.4	791.2
Maryland	1,063.3	985.2	790.6	749.6	958.0	*	372.2	329.5	760.9
Massachusetts	982.6	884.8	723.0	728.6	781.5	*	352.8	474.4	729.2
Michigan	1,050.2	966.0	804.7	773.7	1,047.7	*	366.6	694.3	773.1
Minnesota	892.9	825.2	678.4	670.6	835.5	1,084.2	506.4	406.0	671.0
Mississippi	1,108.7	1,071.4	1,003.4	946.2	1,143.4	*	511.1	282.5	950.6
Missouri	1,033.7	952.4	865.4	845.0	1,103.1	*	425.4	557.8	847.3
Montana	1,013.6	890.2	783.7	763.1	*	1,224.6	446.9	608.5	763.5
Nebraska	930.6	867.9	743.1	733.5	989.4	1,205.8	440.5	495.1	735.9
Nevada	1,077.4	1,017.4	872.5	890.4	937.9	636.8	495.2	472.1	928.4
New Hampshire	982.3	891.7	727.9	732.6	532.3	*	292.6	320.4	733.2
New Jersey	1,047.5	956.0	738.9	727.6	946.0	*	334.0	461.1	747.2
New Mexico	967.1	891.9	788.5	789.2	755.7	787.9	351.9	767.9	781.0
New York	1,051.8	973.7	712.9	716.9	774.8	*	374.9	551.6	717.9
North Carolina	1,050.4	986.0	867.3	829.8	1,048.1	863.2	376.7	268.3	838.3
North Dakota	922.4	818.4	699.5	679.0	*	*	*	*	657.6
Ohio	1,070.6	967.4	843.9	824.0	1,062.5	*	317.3	465.8	824.9
Oklahoma	1,025.6	961.4	958.7	952.5	1,153.5	*	486.3	541.5	961.1
Oregon	953.9	893.0	770.0	775.2	878.8	*	450.4	436.7	782.5
Pennsylvania	1,076.4	963.4	803.4	785.1	1,041.6	*	346.0	512.0	786.2
Rhode Island	990.8	889.6	735.4	735.7	820.5	*	406.9	398.8	740.9
South Carolina	1,104.6	1,030.0	893.0	843.6	1,060.6	*	422.7	434.3	847.6
South Dakota	941.9	846.4	745.9	705.6	858.7	1,436.4	*	431.5	706.9
Tennessee	1,045.5	1,011.8	948.9	922.9	1,152.8	*	418.5	301.1	928.1
Texas	1,014.9	947.6	823.3	810.6	1,063.3	*	396.8	663.7	844.8
Utah	924.9	823.2	733.7	735.9	816.6	760.2	541.1	553.2	742.5
Vermont	990.2	908.6	722.4	725.3	*	*	*	*	728.6
Virginia	1,054.0	963.1	795.4	769.4	987.3	*	402.8	382.7	776.0
Washington	947.7	869.4	729.3	736.5	862.2	883.7	469.6	471.0	742.4
West Virginia	1,100.3	1,031.5	958.9	960.2	1,064.2	*	*	233.5	964.0
Wisconsin	956.4	879.1	744.0	729.2	1,047.4	*	468.7	384.2	732.5
Wyoming	1,016.1	897.4	806.3	800.5	818.6	*	*	734.0	800.4

See footnotes at end of table.

Table 25 (page 2 of 2). Age-adjusted death rates, by race, Hispanic origin, and state: United States, average annual 1979–1981, 1989–1991, and 2004–2006

[Data are based on death certificates]

* Data for states with population under 10,000 in the middle year of a 3-year period or fewer than 50 deaths for the 3-year period are considered unreliable and are not shown. Data for American Indian or Alaska Native category in states with more than 10% misclassification of American Indian or Alaska Native deaths on death certificates or without information on misclassification are also not shown (Support Services International, Inc. Methodology for adjusting IHS mortality data for miscoding race-ethnicity of American Indian or Alaska Native on state death certificates. Report submitted to Indian Health Service. 1996). American Indian or Alaska Native data for the United States population should be used with caution because it includes states with more than 10% misclassification of American Indian or Alaska Native deaths on death certificates and states without information on misclassification. See [Appendix II, Race, Mortality File](#).

¹Caution should be used when comparing death rates by Hispanic origin and race among states. Estimates of death rates may be affected by several factors including possible misreporting of race and Hispanic origin on the death certificate, migration patterns between United States and country of origin for persons who were born outside the United States, and possible biases in population estimates. See [Appendix I, National Vital Statistics System, Mortality File](#) and [Appendix II, Hispanic origin; Race](#).

²Average annual death rates, age-adjusted using the year 2000 standard population. Prior to 2001, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2001 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#). Denominators for rates are resident population estimates for the middle year of each 3-year period, multiplied by 3. See [Appendix I, Population Census and Population Estimates](#).

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia (D.C.) reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from state population estimates prepared by the U.S. Census Bureau 1980 from April 1, 1980 MARS Census File; 1990 from April 1, 1990 MARS Census File; 2005 from bridged-race Vintage 2005 file. Estimates of the July 1, 2005, resident populations of the United States by state and county, race, age, sex, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. 2006.

Table 26 (page 1 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and cause of death</i> ¹	1950 ^{2,3}	1960 ^{2,3}	1970 ³	1980 ³	1990	2000 ⁴	2004 ⁴	2005 ⁴	2006 ⁴
All persons									
	Age-adjusted death rate per 100,000 population ⁵								
All causes	1,446.0	1,339.2	1,222.6	1,039.1	938.7	869.0	800.8	798.8	776.5
Diseases of heart	588.8	559.0	492.7	412.1	321.8	257.6	217.0	211.1	200.2
Ischemic heart disease	---	---	---	345.2	249.6	186.8	150.2	144.4	134.9
Cerebrovascular diseases	180.7	177.9	147.7	96.2	65.3	60.9	50.0	46.6	43.6
Malignant neoplasms	193.9	193.9	198.6	207.9	216.0	199.6	185.8	183.8	180.7
Trachea, bronchus, and lung	15.0	24.1	37.1	49.9	59.3	56.1	53.2	52.6	51.5
Colon, rectum, and anus	---	30.3	28.9	27.4	24.5	20.8	18.0	17.5	17.2
Chronic lower respiratory diseases	---	---	---	28.3	37.2	44.2	41.1	43.2	40.5
Influenza and pneumonia	48.1	53.7	41.7	31.4	36.8	23.7	19.8	20.3	17.8
Chronic liver disease and cirrhosis	11.3	13.3	17.8	15.1	11.1	9.5	9.0	9.0	8.8
Diabetes mellitus	23.1	22.5	24.3	18.1	20.7	25.0	24.5	24.6	23.3
Human immunodeficiency virus (HIV) disease	---	---	---	---	10.2	5.2	4.5	4.2	4.0
Unintentional injuries	78.0	62.3	60.1	46.4	36.3	34.9	37.7	39.1	39.8
Motor vehicle-related injuries	24.6	23.1	27.6	22.3	18.5	15.4	15.2	15.2	15.0
Poisoning	2.5	1.7	2.8	1.9	2.3	4.5	7.1	7.9	9.1
Suicide ⁶	13.2	12.5	13.1	12.2	12.5	10.4	10.9	10.9	10.9
Homicide ⁶	5.1	5.0	8.8	10.4	9.4	5.9	5.9	6.1	6.2
Male									
All causes	1,674.2	1,609.0	1,542.1	1,348.1	1,202.8	1,053.8	955.7	951.1	924.8
Diseases of heart	699.0	687.6	634.0	538.9	412.4	320.0	267.9	260.9	248.5
Ischemic heart disease	---	---	---	459.7	328.2	241.4	194.1	187.4	176.5
Cerebrovascular diseases	186.4	186.1	157.4	102.2	68.5	62.4	50.4	46.9	43.9
Malignant neoplasms	208.1	225.1	247.6	271.2	280.4	248.9	227.7	225.1	220.1
Trachea, bronchus, and lung	24.6	43.6	67.5	85.2	91.1	76.7	70.1	69.0	67.0
Colon, rectum, and anus	---	31.8	32.3	32.8	30.4	25.1	21.5	20.9	20.5
Prostate	28.6	28.7	28.8	32.8	38.4	30.4	25.4	24.5	23.5
Chronic lower respiratory diseases	---	---	---	49.9	55.4	55.8	49.5	51.2	47.6
Influenza and pneumonia	55.0	65.8	54.0	42.1	47.8	28.9	23.7	23.9	21.2
Chronic liver disease and cirrhosis	15.0	18.5	24.8	21.3	15.9	13.4	12.5	12.4	12.1
Diabetes mellitus	18.8	19.9	23.0	18.1	21.7	27.8	28.2	28.4	27.4
Human immunodeficiency virus (HIV) disease	---	---	---	---	18.5	7.9	6.6	6.2	5.9
Unintentional injuries	101.8	85.5	87.4	69.0	52.9	49.3	52.1	54.2	55.2
Motor vehicle-related injuries	38.5	35.4	41.5	33.6	26.5	21.7	21.4	21.7	21.4
Poisoning	3.3	2.3	3.9	2.7	3.5	6.6	9.5	10.7	12.4
Suicide ⁶	21.2	20.0	19.8	19.9	21.5	17.7	18.0	18.0	18.0
Homicide ⁶	7.9	7.5	14.3	16.6	14.8	9.0	9.2	9.6	9.7
Female									
All causes	1,236.0	1,105.3	971.4	817.9	750.9	731.4	679.2	677.6	657.8
Diseases of heart	486.6	447.0	381.6	320.8	257.0	210.9	177.3	172.3	162.2
Ischemic heart disease	---	---	---	263.1	193.9	146.5	116.7	111.7	103.1
Cerebrovascular diseases	175.8	170.7	140.0	91.7	62.6	59.1	48.9	45.6	42.6
Malignant neoplasms	182.3	168.7	163.2	166.7	175.7	167.6	157.4	155.6	153.6
Trachea, bronchus, and lung	5.8	7.5	13.1	24.4	37.1	41.3	40.9	40.5	40.0
Colon, rectum, and anus	---	29.1	26.5	23.8	20.6	17.7	15.3	14.8	14.7
Breast	31.9	31.7	32.1	31.9	33.3	26.8	24.4	24.1	23.5
Chronic lower respiratory diseases	---	---	---	14.9	26.6	37.4	36.0	38.1	35.9
Influenza and pneumonia	41.9	43.8	32.7	25.1	30.5	20.7	17.3	17.9	15.5
Chronic liver disease and cirrhosis	7.8	8.7	11.9	9.9	7.1	6.2	5.8	5.8	5.8
Diabetes mellitus	27.0	24.7	25.1	18.0	19.9	23.0	21.7	21.6	20.1
Human immunodeficiency virus (HIV) disease	---	---	---	---	2.2	2.5	2.4	2.3	2.2
Unintentional injuries	54.0	40.0	35.1	26.1	21.5	22.0	24.5	25.0	25.5
Motor vehicle-related injuries	11.5	11.7	14.9	11.8	11.0	9.5	9.3	8.9	8.8
Poisoning	1.7	1.1	1.8	1.3	1.2	2.5	4.7	5.1	5.9
Suicide ⁶	5.6	5.6	7.4	5.7	4.8	4.0	4.5	4.4	4.5
Homicide ⁶	2.4	2.6	3.7	4.4	4.0	2.8	2.5	2.5	2.5

See footnotes at end of table.

Table 26 (page 2 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and cause of death</i> ¹	1950 ^{2,3}	1960 ^{2,3}	1970 ³	1980 ³	1990	2000 ⁴	2004 ⁴	2005 ⁴	2006 ⁴
White ⁷									
Age-adjusted death rate per 100,000 population ⁵									
All causes	1,410.8	1,311.3	1,193.3	1,012.7	909.8	849.8	786.3	785.3	764.4
Diseases of heart	586.0	559.0	492.2	409.4	317.0	253.4	213.3	207.8	197.0
Ischemic heart disease	---	---	---	347.6	249.7	185.6	149.2	143.8	134.2
Cerebrovascular diseases	175.5	172.7	143.5	93.2	62.8	58.8	48.0	44.7	41.7
Malignant neoplasms	194.6	193.1	196.7	204.2	211.6	197.2	184.4	182.6	179.9
Trachea, bronchus, and lung	15.2	24.0	36.7	49.2	58.6	56.2	53.6	53.1	52.1
Colon, rectum, and anus	---	30.9	29.2	27.4	24.1	20.3	17.6	16.9	16.7
Chronic lower respiratory diseases	---	---	---	29.3	38.3	46.0	43.2	45.4	42.6
Influenza and pneumonia	44.8	50.4	39.8	30.9	36.4	23.5	19.6	20.2	17.7
Chronic liver disease and cirrhosis	11.5	13.2	16.6	13.9	10.5	9.6	9.2	9.2	9.1
Diabetes mellitus	22.9	21.7	22.9	16.7	18.8	22.8	22.3	22.5	21.2
Human immunodeficiency virus (HIV) disease	---	---	---	---	8.3	2.8	2.3	2.2	2.1
Unintentional injuries	77.0	60.4	57.8	45.3	35.5	35.1	38.8	40.1	41.0
Motor vehicle-related injuries	24.4	22.9	27.1	22.6	18.5	15.6	15.6	15.6	15.4
Poisoning	2.4	1.6	2.4	1.8	2.1	4.5	7.6	8.4	9.7
Suicide ⁶	13.9	13.1	13.8	13.0	13.4	11.3	12.0	12.0	12.1
Homicide ⁶	2.6	2.7	4.7	6.7	5.5	3.6	3.6	3.7	3.7
Black or African American ⁷									
All causes	1,722.1	1,577.5	1,518.1	1,314.8	1,250.3	1,121.4	1,027.3	1,016.5	982.0
Diseases of heart	588.7	548.3	512.0	455.3	391.5	324.8	280.6	271.3	257.7
Ischemic heart disease	---	---	---	334.5	267.0	218.3	179.8	171.3	161.6
Cerebrovascular diseases	233.6	235.2	197.1	129.1	91.6	81.9	69.9	65.2	61.6
Malignant neoplasms	176.4	199.1	225.3	256.4	279.5	248.5	227.2	222.7	217.4
Trachea, bronchus, and lung	11.1	23.7	41.3	59.7	72.4	64.0	59.8	58.4	56.8
Colon, rectum, and anus	---	22.8	26.1	28.3	30.6	28.2	24.7	24.8	24.3
Chronic lower respiratory diseases	---	---	---	19.2	28.1	31.6	28.2	30.6	28.1
Influenza and pneumonia	76.7	81.1	57.2	34.4	39.4	25.6	22.3	21.7	19.6
Chronic liver disease and cirrhosis	9.0	13.6	28.1	25.0	16.5	9.4	7.9	7.7	7.0
Diabetes mellitus	23.5	30.9	38.8	32.7	40.5	49.5	48.0	46.9	45.1
Human immunodeficiency virus (HIV) disease	---	---	---	---	26.7	23.3	20.4	19.4	18.6
Unintentional injuries	79.9	74.0	78.3	57.6	43.8	37.7	36.3	38.7	38.3
Motor vehicle-related injuries	26.0	24.2	31.1	20.2	18.8	15.7	14.8	14.5	14.6
Poisoning	2.8	2.9	5.8	3.1	4.1	6.0	6.9	8.2	9.4
Suicide ⁶	4.5	5.0	6.2	6.5	7.1	5.5	5.3	5.2	5.1
Homicide ⁶	28.3	26.0	44.0	39.0	36.3	20.5	20.1	21.1	21.6
American Indian or Alaska Native ⁷									
All causes	---	---	---	867.0	716.3	709.3	650.0	663.4	642.1
Diseases of heart	---	---	---	240.6	200.6	178.2	148.0	141.8	139.4
Ischemic heart disease	---	---	---	173.6	139.1	129.1	106.5	96.2	97.4
Cerebrovascular diseases	---	---	---	57.8	40.7	45.0	35.3	34.8	29.4
Malignant neoplasms	---	---	---	113.7	121.8	127.8	124.9	123.2	119.4
Trachea, bronchus, and lung	---	---	---	20.7	30.9	32.3	36.0	34.1	31.2
Colon, rectum, and anus	---	---	---	9.5	12.0	13.4	12.1	12.0	11.2
Chronic lower respiratory diseases	---	---	---	14.2	25.4	32.8	28.5	29.1	27.4
Influenza and pneumonia	---	---	---	44.4	36.1	22.3	17.6	20.4	14.2
Chronic liver disease and cirrhosis	---	---	---	45.3	24.1	24.3	22.7	22.6	22.1
Diabetes mellitus	---	---	---	29.6	34.1	41.5	39.2	41.5	39.6
Human immunodeficiency virus (HIV) disease	---	---	---	---	1.8	2.2	2.9	2.7	2.4
Unintentional injuries	---	---	---	99.0	62.6	51.3	53.1	54.7	56.7
Motor vehicle-related injuries	---	---	---	54.5	32.5	27.3	26.0	24.8	26.7
Poisoning	---	---	---	2.3	3.2	4.7	8.5	9.4	10.4
Suicide ⁶	---	---	---	11.9	11.7	9.8	12.2	11.7	11.6
Homicide ⁶	---	---	---	15.5	10.4	6.8	7.0	7.7	7.5

See footnotes at end of table.

Table 26 (page 3 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and cause of death</i> ¹	1950 ^{2,3}	1960 ^{2,3}	1970 ³	1980 ³	1990	2000 ⁴	2004 ⁴	2005 ⁴	2006 ⁴
Asian or Pacific Islander ⁷									
Age-adjusted death rate per 100,000 population ⁵									
All causes	---	---	---	589.9	582.0	506.4	443.9	440.2	428.6
Diseases of heart	---	---	---	202.1	181.7	146.0	117.8	113.3	108.5
Ischemic heart disease	---	---	---	168.2	139.6	109.6	84.1	81.0	77.1
Cerebrovascular diseases	---	---	---	66.1	56.9	52.9	41.3	38.6	37.0
Malignant neoplasms	---	---	---	126.1	134.2	121.9	110.5	110.5	106.5
Trachea, bronchus, and lung	---	---	---	28.4	30.2	28.1	26.2	25.7	25.2
Colon, rectum, and anus	---	---	---	16.4	14.4	12.7	11.3	11.2	10.9
Chronic lower respiratory diseases	---	---	---	12.9	19.4	18.6	14.7	14.9	14.4
Influenza and pneumonia	---	---	---	24.0	31.4	19.7	16.0	15.5	14.7
Chronic liver disease and cirrhosis	---	---	---	6.1	5.2	3.5	3.2	3.6	3.5
Diabetes mellitus	---	---	---	12.6	14.6	16.4	16.6	16.6	15.8
Human immunodeficiency virus (HIV) disease	---	---	---	---	2.2	0.6	0.7	0.6	0.6
Unintentional injuries	---	---	---	27.0	23.9	17.9	16.7	17.9	16.9
Motor vehicle-related injuries	---	---	---	13.9	14.0	8.6	7.8	7.6	7.5
Poisoning	---	---	---	0.5	0.7	0.7	1.1	1.3	1.4
Suicide ⁶	---	---	---	7.8	6.7	5.5	5.8	5.2	5.6
Homicide ⁶	---	---	---	5.9	5.0	3.0	2.5	2.9	2.8
Hispanic or Latino ^{7,8}									
All causes	---	---	---	---	692.0	665.7	586.7	590.7	564.0
Diseases of heart	---	---	---	---	217.1	196.0	158.4	157.3	144.1
Ischemic heart disease	---	---	---	---	173.3	153.2	119.2	118.0	106.4
Cerebrovascular diseases	---	---	---	---	45.2	46.4	38.2	35.7	34.2
Malignant neoplasms	---	---	---	---	136.8	134.9	121.9	122.8	118.0
Trachea, bronchus, and lung	---	---	---	---	26.5	24.8	22.4	22.4	20.7
Colon, rectum, and anus	---	---	---	---	14.7	14.1	12.6	12.4	12.6
Chronic lower respiratory diseases	---	---	---	---	19.3	21.1	18.4	19.3	17.3
Influenza and pneumonia	---	---	---	---	29.7	20.6	17.1	16.8	15.0
Chronic liver disease and cirrhosis	---	---	---	---	18.3	16.5	14.0	13.9	13.3
Diabetes mellitus	---	---	---	---	28.2	36.9	32.1	33.6	29.9
Human immunodeficiency virus (HIV) disease	---	---	---	---	16.3	6.7	5.3	4.7	4.5
Unintentional injuries	---	---	---	---	34.6	30.1	29.8	31.3	31.5
Motor vehicle-related injuries	---	---	---	---	19.5	14.7	14.4	14.7	14.6
Poisoning	---	---	---	---	3.2	4.1	4.6	5.2	5.7
Suicide ⁶	---	---	---	---	7.8	5.9	5.9	5.6	5.3
Homicide ⁶	---	---	---	---	16.2	7.5	7.2	7.5	7.3

See footnotes at end of table.

Table 26 (page 4 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death ¹	1950 ^{2,3}	1960 ^{2,3}	1970 ³	1980 ³	1990	2000 ⁴	2004 ⁴	2005 ⁴	2006 ⁴
White, not Hispanic or Latino ⁸									
Age-adjusted death rate per 100,000 population ⁵									
All causes	---	---	---	---	914.5	855.5	797.1	796.6	777.0
Diseases of heart	---	---	---	---	319.7	255.5	216.3	210.7	200.3
Ischemic heart disease	---	---	---	---	251.9	186.6	150.9	145.2	136.0
Cerebrovascular diseases	---	---	---	---	63.5	59.0	48.3	45.0	41.9
Malignant neoplasms	---	---	---	---	215.4	200.6	188.6	187.0	184.6
Trachea, bronchus, and lung	---	---	---	---	60.3	58.2	56.0	55.5	54.7
Colon, rectum, and anus	---	---	---	---	24.6	20.5	17.9	17.2	17.0
Chronic lower respiratory diseases	---	---	---	---	39.2	47.2	44.9	47.2	44.4
Influenza and pneumonia	---	---	---	---	36.5	23.5	19.6	20.4	17.8
Chronic liver disease and cirrhosis	---	---	---	---	9.9	9.0	8.7	8.7	8.6
Diabetes mellitus	---	---	---	---	18.3	21.8	21.5	21.5	20.4
Human immunodeficiency virus (HIV) disease	---	---	---	---	7.4	2.2	1.9	1.8	1.7
Unintentional injuries	---	---	---	---	35.0	35.3	39.7	41.0	42.1
Motor vehicle-related injuries	---	---	---	---	18.2	15.6	15.6	15.5	15.3
Poisoning	---	---	---	---	2.0	4.6	8.1	9.0	10.5
Suicide ⁶	---	---	---	---	13.8	12.0	12.9	12.9	13.2
Homicide ⁶	---	---	---	---	4.0	2.8	2.7	2.7	2.7

--- Data not available.

¹Underlying cause of death code numbers are based on the applicable revision of the *International Classification of Diseases* (ICD) for data years shown. For the period 1980–1998, causes were coded using ICD–9 codes that are most nearly comparable with the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

²Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

³Underlying cause of death was coded according to the Sixth Revision of the *International Classification of Diseases* (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

⁴Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁵Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁶Figures for 2001 (in excel spreadsheet on the web) include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes.

⁷The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁸Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Data for 1950 have been revised and differ from previous editions of *Health, United States*. Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 27 (page 1 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death ²	Crude	Age-adjusted ¹					
	2006 ³	1980	1990	2000 ³	2004 ³	2005 ³	2006 ³
All persons							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes	7,442.3	10,448.4	9,085.5	7,578.1	7,270.6	7,299.8	7,214.3
Diseases of heart	1,138.0	2,238.7	1,617.7	1,253.0	1,128.9	1,110.4	1,077.8
Ischemic heart disease	720.3	1,729.3	1,153.6	841.8	720.6	701.8	675.5
Cerebrovascular diseases	199.3	357.5	259.6	223.3	198.1	193.3	190.2
Malignant neoplasms	1,585.7	2,108.8	2,003.8	1,674.1	1,543.4	1,525.2	1,490.5
Trachea, bronchus, and lung	409.5	548.5	561.4	443.1	402.8	392.9	378.7
Colorectal	134.2	190.0	164.7	141.9	127.3	124.7	126.1
Prostate ⁴	55.6	84.9	96.8	63.6	55.8	55.1	54.8
Breast ⁵	309.5	463.2	451.6	332.6	302.1	296.2	286.7
Chronic lower respiratory diseases	181.4	169.1	187.4	188.1	173.7	181.2	171.0
Influenza and pneumonia	78.8	160.2	141.5	87.1	79.1	83.6	76.4
Chronic liver disease and cirrhosis	157.4	300.3	196.9	164.1	153.9	152.6	149.9
Diabetes mellitus	186.6	134.4	155.9	178.4	178.4	179.9	176.5
Human immunodeficiency virus (HIV) disease	124.5	---	383.8	174.6	143.4	133.6	126.0
Unintentional injuries	1,165.4	1,543.5	1,162.1	1,026.5	1,098.0	1,132.7	1,167.5
Motor vehicle-related injuries	561.4	912.9	716.4	574.3	567.6	564.4	561.2
Poisoning	329.9	68.0	81.2	163.6	257.8	287.3	332.5
Suicide ⁶	349.2	392.0	393.1	334.5	353.0	347.3	348.7
Homicide ⁶	281.0	425.5	417.4	266.5	264.8	276.8	281.8
Male							
All causes	9,275.6	13,777.2	11,973.5	9,572.2	9,143.1	9,206.1	9,092.6
Diseases of heart	1,561.5	3,352.1	2,356.0	1,766.0	1,583.4	1,561.6	1,517.5
Ischemic heart disease	1,043.1	2,715.1	1,766.3	1,255.4	1,070.5	1,044.3	1,009.2
Cerebrovascular diseases	216.5	396.7	286.6	244.6	219.6	213.7	212.0
Malignant neoplasms	1,650.2	2,360.8	2,214.6	1,810.8	1,663.3	1,639.7	1,595.2
Trachea, bronchus, and lung	472.6	821.1	764.8	554.9	490.3	476.3	454.5
Colorectal	150.1	214.9	194.3	167.3	149.7	146.2	145.4
Prostate	55.6	84.9	96.8	63.6	55.8	55.1	54.8
Chronic lower respiratory diseases	185.6	235.1	224.8	206.0	188.4	195.8	182.4
Influenza and pneumonia	90.1	202.5	180.0	102.8	93.6	97.8	88.9
Chronic liver disease and cirrhosis	217.9	415.0	283.9	236.9	219.0	216.1	210.9
Diabetes mellitus	219.3	140.4	170.4	203.8	212.6	216.5	213.2
Human immunodeficiency virus (HIV) disease	175.9	---	686.2	258.9	205.1	192.0	178.3
Unintentional injuries	1,672.9	2,342.7	1,715.1	1,475.6	1,547.4	1,608.5	1,659.2
Motor vehicle-related injuries	802.6	1,359.7	1,018.4	796.4	789.1	795.9	790.9
Poisoning	461.0	96.4	123.6	242.1	353.1	395.6	461.6
Suicide ⁶	553.0	605.6	634.8	539.1	553.0	548.0	549.0
Homicide ⁶	454.5	675.0	658.0	410.5	414.3	439.0	447.1
Female							
All causes	5,609.1	7,350.3	6,333.1	5,644.6	5,435.8	5,425.7	5,364.7
Diseases of heart	714.5	1,246.0	948.5	774.6	699.9	682.6	660.6
Ischemic heart disease	397.5	852.1	600.3	457.6	391.8	379.0	360.6
Cerebrovascular diseases	182.0	324.0	235.9	203.9	178.1	174.4	169.8
Malignant neoplasms	1,521.1	1,896.8	1,826.6	1,555.3	1,437.6	1,424.3	1,398.6
Trachea, bronchus, and lung	346.4	310.4	382.2	342.1	323.2	316.9	309.7
Colorectal	118.2	168.7	138.7	118.7	106.8	104.9	108.4
Breast	309.5	463.2	451.6	332.6	302.1	296.2	286.7
Chronic lower respiratory diseases	177.2	114.0	155.9	172.3	160.4	168.2	160.5
Influenza and pneumonia	67.4	122.0	106.2	72.3	65.3	70.0	64.7
Chronic liver disease and cirrhosis	97.0	194.5	115.1	94.5	91.3	91.6	91.3
Diabetes mellitus	153.9	128.5	142.3	154.4	146.0	145.1	141.7
Human immunodeficiency virus (HIV) disease	73.2	---	87.8	92.0	82.7	76.2	74.5
Unintentional injuries	658.0	755.3	607.4	573.2	641.1	648.0	666.1
Motor vehicle-related injuries	320.3	470.4	411.6	348.5	341.1	327.1	325.4
Poisoning	198.9	40.2	39.1	85.0	161.0	177.2	201.0
Suicide ⁶	145.6	184.2	153.3	129.1	150.9	144.1	145.7
Homicide ⁶	107.5	181.3	174.3	118.9	110.2	108.7	110.4

See footnotes at end of table.

Table 27 (page 2 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death ²	Crude		Age-adjusted ¹				
	2006 ³	1980	1990	2000 ³	2004 ³	2005 ³	2006 ³
White ⁷							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes	7,039.4	9,554.1	8,159.5	6,949.5	6,743.7	6,775.6	6,713.1
Diseases of heart	1,078.6	2,100.8	1,490.3	1,149.4	1,031.0	1,011.7	985.9
Ischemic heart disease	718.5	1,682.7	1,113.4	805.3	690.4	672.0	648.2
Cerebrovascular diseases	171.1	300.7	213.1	187.1	165.4	160.4	158.1
Malignant neoplasms	1,606.7	2,035.9	1,929.3	1,627.8	1,502.0	1,485.9	1,456.6
Trachea, bronchus, and lung	424.2	529.9	544.2	436.3	398.3	389.4	374.8
Colorectal	131.5	186.8	157.8	134.1	120.5	117.3	118.9
Prostate ⁴	50.9	74.8	86.6	54.3	48.4	47.0	47.3
Breast ⁵	299.9	460.2	441.7	315.6	282.1	275.1	269.0
Chronic lower respiratory diseases	191.9	165.4	182.3	185.3	174.3	182.2	172.0
Influenza and pneumonia	74.2	130.8	116.9	77.7	71.5	76.3	70.4
Chronic liver disease and cirrhosis	167.8	257.3	175.8	162.7	157.2	156.7	155.3
Diabetes mellitus	167.4	115.7	133.7	155.6	155.2	156.3	152.8
Human immunodeficiency virus (HIV) disease	64.2	---	309.0	94.7	74.5	69.8	64.6
Unintentional injuries	1,196.9	1,520.4	1,139.7	1,031.8	1,134.9	1,170.9	1,209.8
Motor vehicle-related injuries	573.3	939.9	726.7	586.1	587.6	585.7	580.5
Poisoning	355.6	64.9	74.4	167.2	280.0	310.6	360.6
Suicide ⁶	383.1	414.5	417.7	362.0	386.0	381.2	383.5
Homicide ⁶	156.8	271.7	234.9	156.6	157.0	159.7	160.1
Black or African American ⁷							
All causes	11,256.2	17,873.4	16,593.0	12,897.1	11,922.4	11,890.7	11,646.3
Diseases of heart	1,762.6	3,619.9	2,891.8	2,275.2	2,090.5	2,046.0	1,969.3
Ischemic heart disease	905.5	2,305.1	1,676.1	1,300.1	1,119.0	1,080.2	1,034.5
Cerebrovascular diseases	385.3	883.2	656.4	507.0	452.0	441.7	431.8
Malignant neoplasms	1,778.7	2,946.1	2,894.8	2,294.7	2,107.3	2,069.7	2,003.1
Trachea, bronchus, and lung	431.9	776.0	811.3	593.0	529.3	511.8	496.4
Colorectal	174.9	232.3	241.8	222.4	196.6	199.6	198.9
Prostate ⁴	102.4	200.3	223.5	171.0	143.0	144.8	140.0
Breast ⁵	423.7	524.2	592.9	500.0	477.7	485.7	450.1
Chronic lower respiratory diseases	178.5	203.7	240.6	232.7	201.8	211.0	197.6
Influenza and pneumonia	120.6	384.9	330.8	161.2	141.2	145.3	127.6
Chronic liver disease and cirrhosis	115.4	644.0	371.8	185.6	148.4	138.4	127.0
Diabetes mellitus	332.7	305.3	361.5	383.4	378.8	379.9	375.4
Human immunodeficiency virus (HIV) disease	526.2	---	1,014.7	763.3	637.8	594.4	566.8
Unintentional injuries	1,188.9	1,751.5	1,392.7	1,152.8	1,095.5	1,134.6	1,170.7
Motor vehicle-related injuries	561.7	750.2	699.5	580.8	543.8	532.3	541.6
Poisoning	279.4	99.4	144.3	196.6	216.7	253.8	296.1
Suicide ⁶	190.6	238.0	261.4	208.7	200.6	194.0	187.3
Homicide ⁶	1,067.2	1,580.8	1,612.9	941.6	918.7	967.8	998.6
American Indian or Alaska Native ⁷							
All causes	8,117.3	13,390.9	9,506.2	7,758.2	8,405.4	8,624.4	8,517.6
Diseases of heart	878.1	1,819.9	1,391.0	1,030.1	975.8	1,010.2	1,008.6
Ischemic heart disease	521.7	1,208.2	901.8	709.3	628.3	625.2	614.2
Cerebrovascular diseases	155.5	269.3	223.3	198.1	171.4	209.4	178.2
Malignant neoplasms	850.3	1,101.3	1,141.1	995.7	1,068.4	1,084.3	983.9
Trachea, bronchus, and lung	184.9	181.1	268.1	227.8	264.1	268.2	225.3
Colorectal	76.9	78.8	82.4	93.8	92.1	109.7	88.1
Prostate ⁴	27.4	66.7	42.0	44.5	37.1	37.6	38.8
Breast ⁵	156.4	205.5	213.4	174.1	186.0	149.2	172.9
Chronic lower respiratory diseases	120.1	89.3	129.0	151.8	148.6	155.3	144.6
Influenza and pneumonia	93.7	307.9	206.3	124.0	116.1	113.6	101.6
Chronic liver disease and cirrhosis	433.5	1,190.3	535.1	519.4	480.5	498.9	479.2
Diabetes mellitus	280.8	305.5	292.3	305.6	323.5	347.3	324.8
Human immunodeficiency virus (HIV) disease	68.7	---	70.1	68.4	93.8	89.9	76.1
Unintentional injuries	1,971.3	3,541.0	2,183.9	1,700.1	1,732.9	1,875.6	1,885.1
Motor vehicle-related injuries	1,111.7	2,102.4	1,301.5	1,032.2	968.3	1,004.9	1,021.7
Poisoning	352.7	92.9	119.5	180.1	312.1	333.8	358.5
Suicide ⁶	533.3	515.0	495.9	403.1	511.6	498.6	487.8
Homicide ⁶	357.8	628.9	434.2	278.5	304.7	337.5	328.3

See footnotes at end of table.

Table 27 (page 3 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death ²	Crude		Age-adjusted ¹				
	2006 ³	1980	1990	2000 ³	2004 ³	2005 ³	2006 ³
Asian or Pacific Islander ⁷							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes	3,400.4	5,378.4	4,705.2	3,811.1	3,452.1	3,533.2	3,450.6
Diseases of heart	452.1	952.8	702.2	567.9	474.9	513.8	471.8
Ischemic heart disease	289.5	697.7	486.6	381.1	303.4	326.5	305.7
Cerebrovascular diseases	156.4	266.9	233.5	199.4	167.5	162.8	163.9
Malignant neoplasms	884.7	1,218.6	1,166.4	1,033.8	949.9	945.3	912.7
Trachea, bronchus, and lung	161.6	238.2	204.7	185.8	176.0	169.2	171.3
Colorectal	79.2	115.9	105.1	91.6	87.7	78.7	81.2
Prostate ⁴	14.8	17.0	32.4	18.8	15.1	20.4	18.3
Breast ⁵	177.4	222.2	216.5	200.8	193.4	178.4	173.3
Chronic lower respiratory diseases	34.4	56.4	72.8	56.5	36.5	36.0	37.4
Influenza and pneumonia	35.3	79.3	74.0	48.6	36.1	40.3	36.8
Chronic liver disease and cirrhosis	44.3	85.6	72.4	44.8	38.3	43.6	44.3
Diabetes mellitus	76.6	83.1	74.0	77.0	78.3	78.1	80.8
Human immunodeficiency virus (HIV) disease	15.5	---	77.0	19.9	21.9	16.6	15.4
Unintentional injuries	415.4	742.7	636.6	425.7	415.0	413.7	411.0
Motor vehicle-related injuries	246.8	472.6	445.5	263.4	254.4	242.1	243.9
Poisoning	48.4	*	17.6	25.9	33.8	42.0	46.6
Suicide ⁶	194.7	217.1	200.6	168.6	175.5	164.6	185.1
Homicide ⁶	124.5	201.1	205.8	113.1	98.8	130.8	121.7
Hispanic or Latino ^{7,8}							
All causes	5,197.1	---	7,963.3	6,037.6	5,654.0	5,757.9	5,601.9
Diseases of heart	487.8	---	1,082.0	821.3	733.1	727.0	686.8
Ischemic heart disease	293.0	---	756.6	564.6	483.3	483.2	446.2
Cerebrovascular diseases	136.3	---	238.0	207.8	187.9	184.9	184.5
Malignant neoplasms	724.6	---	1,232.2	1,098.2	1,013.7	1,017.5	987.7
Trachea, bronchus, and lung	78.4	---	193.7	152.1	136.3	138.1	125.0
Colorectal	63.3	---	100.2	101.4	91.2	86.4	91.5
Prostate ⁴	22.2	---	47.7	42.9	38.8	41.7	43.8
Breast ⁵	156.0	---	299.3	230.7	203.4	197.3	203.2
Chronic lower respiratory diseases	39.9	---	78.8	68.5	64.1	62.2	56.9
Influenza and pneumonia	55.6	---	130.1	76.0	67.8	69.5	65.1
Chronic liver disease and cirrhosis	148.1	---	329.1	252.1	212.5	210.3	201.4
Diabetes mellitus	120.9	---	177.8	215.6	192.3	202.2	181.1
Human immunodeficiency virus (HIV) disease	111.6	---	600.1	209.4	154.9	139.3	129.0
Unintentional injuries	1,050.4	---	1,190.6	920.1	917.6	980.1	993.0
Motor vehicle-related injuries	614.3	---	740.8	540.2	547.7	569.2	564.7
Poisoning	190.2	---	121.9	145.9	157.9	179.5	195.6
Suicide ⁶	193.7	---	256.2	188.5	200.3	193.2	185.1
Homicide ⁶	378.4	---	720.8	335.1	328.8	343.0	335.3

See footnotes at end of table.

Table 27 (page 4 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death ²	Crude		Age-adjusted ¹				
	2006 ³	1980	1990	2000 ³	2004 ³	2005 ³	2006 ³
White, not Hispanic or Latino ⁸	Years lost before age 75 per 100,000 population under 75 years of age						
All causes	7,375.6	---	8,022.5	6,960.5	6,832.9	6,853.3	6,813.8
Diseases of heart	1,199.7	---	1,504.0	1,175.1	1,064.9	1,046.4	1,024.0
Ischemic heart disease	805.9	---	1,127.2	824.7	713.8	694.4	673.5
Cerebrovascular diseases	176.9	---	210.1	183.0	161.1	155.5	152.5
Malignant neoplasms	1,788.5	---	1,974.1	1,668.4	1,549.7	1,534.3	1,505.9
Trachea, bronchus, and lung	498.0	---	566.8	460.3	425.1	416.3	402.4
Colorectal	145.4	---	162.1	136.2	123.4	120.8	121.8
Prostate ⁴	57.1	---	89.2	54.9	49.2	47.3	47.6
Breast ⁵	328.1	---	451.5	322.3	290.0	283.6	275.5
Chronic lower respiratory diseases	224.0	---	188.1	193.8	184.1	194.0	183.4
Influenza and pneumonia	77.4	---	112.3	76.4	71.3	76.8	70.4
Chronic liver disease and cirrhosis	169.7	---	162.4	150.9	148.3	147.8	147.4
Diabetes mellitus	175.8	---	131.2	150.2	152.0	151.5	150.1
Human immunodeficiency virus (HIV) disease	52.6	---	271.2	76.0	59.7	56.6	51.5
Unintentional injuries	1,214.6	---	1,114.7	1,041.4	1,170.6	1,199.6	1,246.4
Motor vehicle-related injuries	556.7	---	715.7	588.8	588.6	579.9	575.4
Poisoning	388.5	---	68.3	169.4	305.2	338.2	397.9
Suicide ⁶	421.5	---	433.0	389.2	419.8	416.6	422.7
Homicide ⁶	104.7	---	162.0	113.2	110.3	109.1	109.9

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

¹Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

²Underlying cause of death code numbers are based on the applicable revision of the *International Classification of Diseases (ICD)* for data years shown. For the period 1980–1998, causes were coded using ICD–9 codes that are most nearly comparable with the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Rate for male population only.

⁵Rate for female population only.

⁶Figures for 2001 (in Excel spreadsheet on the Web) include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes.

⁷The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁸Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). See [Appendix II, Years of potential life lost \(YPLL\)](#) for definition and method of calculation. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia (D.C.) reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National vital statistics system; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1990–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau.

Table 28 (page 1 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and rank order</i>	<i>1980</i>		<i>2006</i>	
	<i>Cause of death</i>	<i>Deaths</i>	<i>Cause of death</i>	<i>Deaths</i>
All persons				
...	All causes	1,989,841	All causes	2,426,264
1.	Diseases of heart	761,085	Diseases of heart	631,636
2.	Malignant neoplasms	416,509	Malignant neoplasms	559,888
3.	Cerebrovascular diseases	170,225	Cerebrovascular diseases	137,119
4.	Unintentional injuries	105,718	Chronic lower respiratory diseases	124,583
5.	Chronic obstructive pulmonary diseases	56,050	Unintentional injuries	121,599
6.	Pneumonia and influenza	54,619	Diabetes mellitus	72,449
7.	Diabetes mellitus	34,851	Alzheimer's disease	72,432
8.	Chronic liver disease and cirrhosis	30,583	Influenza and pneumonia	56,326
9.	Atherosclerosis	29,449	Nephritis, nephrotic syndrome and nephrosis	45,344
10.	Suicide	26,869	Septicemia	34,234
Male				
...	All causes	1,075,078	All causes	1,201,942
1.	Diseases of heart	405,661	Diseases of heart	315,706
2.	Malignant neoplasms	225,948	Malignant neoplasms	290,069
3.	Unintentional injuries	74,180	Unintentional injuries	78,941
4.	Cerebrovascular diseases	69,973	Chronic lower respiratory diseases	59,260
5.	Chronic obstructive pulmonary diseases	38,625	Cerebrovascular diseases	54,524
6.	Pneumonia and influenza	27,574	Diabetes mellitus	36,006
7.	Suicide	20,505	Suicide	26,308
8.	Chronic liver disease and cirrhosis	19,768	Influenza and pneumonia	25,650
9.	Homicide	18,779	Nephritis, nephrotic syndrome and nephrosis	22,094
10.	Diabetes mellitus	14,325	Alzheimer's disease	21,151
Female				
...	All causes	914,763	All causes	1,224,322
1.	Diseases of heart	355,424	Diseases of heart	315,930
2.	Malignant neoplasms	190,561	Malignant neoplasms	269,819
3.	Cerebrovascular diseases	100,252	Cerebrovascular diseases	82,595
4.	Unintentional injuries	31,538	Chronic lower respiratory diseases	65,323
5.	Pneumonia and influenza	27,045	Alzheimer's disease	51,281
6.	Diabetes mellitus	20,526	Unintentional injuries	42,658
7.	Atherosclerosis	17,848	Diabetes mellitus	36,443
8.	Chronic obstructive pulmonary diseases	17,425	Influenza and pneumonia	30,676
9.	Chronic liver disease and cirrhosis	10,815	Nephritis, nephrotic syndrome and nephrosis	23,250
10.	Certain conditions originating in the perinatal period	9,815	Septicemia	18,712
White				
...	All causes	1,738,607	All causes	2,077,549
1.	Diseases of heart	683,347	Diseases of heart	545,974
2.	Malignant neoplasms	368,162	Malignant neoplasms	482,575
3.	Cerebrovascular diseases	148,734	Cerebrovascular diseases	115,864
4.	Unintentional injuries	90,122	Chronic lower respiratory diseases	114,993
5.	Chronic obstructive pulmonary diseases	52,375	Unintentional injuries	103,853
6.	Pneumonia and influenza	48,369	Alzheimer's disease	67,088
7.	Diabetes mellitus	28,868	Diabetes mellitus	57,204
8.	Atherosclerosis	27,069	Influenza and pneumonia	49,401
9.	Chronic liver disease and cirrhosis	25,240	Nephritis, nephrotic syndrome and nephrosis	35,793
10.	Suicide	24,829	Suicide	30,138
Black or African American				
...	All causes	233,135	All causes	289,971
1.	Diseases of heart	72,956	Diseases of heart	72,253
2.	Malignant neoplasms	45,037	Malignant neoplasms	63,082
3.	Cerebrovascular diseases	20,135	Cerebrovascular diseases	17,045
4.	Unintentional injuries	13,480	Unintentional injuries	13,917
5.	Homicide	10,172	Diabetes mellitus	12,813
6.	Certain conditions originating in the perinatal period	6,961	Homicide	9,032
7.	Pneumonia and influenza	5,648	Nephritis, nephrotic syndrome and nephrosis	8,397
8.	Diabetes mellitus	5,544	Chronic lower respiratory diseases	7,730
9.	Chronic liver disease and cirrhosis	4,790	Human immunodeficiency virus (HIV) disease	6,854
10.	Nephritis, nephrotic syndrome, and nephrosis	3,416	Septicemia	6,108

See footnotes at end of table.

Table 28 (page 2 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2006	
	Cause of death	Deaths	Cause of death	Deaths
American Indian or Alaska Native				
...	All causes	6,923	All causes	14,037
1.	Diseases of heart	1,494	Diseases of heart	2,736
2.	Unintentional injuries	1,290	Malignant neoplasms	2,447
3.	Malignant neoplasms	770	Unintentional injuries	1,704
4.	Chronic liver disease and cirrhosis	410	Diabetes mellitus	811
5.	Cerebrovascular diseases	322	Chronic liver disease and cirrhosis	596
6.	Pneumonia and influenza	257	Cerebrovascular diseases	548
7.	Homicide	217	Chronic lower respiratory diseases	508
8.	Diabetes mellitus	210	Suicide	395
9.	Certain conditions originating in the perinatal period	199	Nephritis, nephrotic syndrome and nephrosis	288
10.	Suicide	181	Influenza and pneumonia	267
Asian or Pacific Islander				
...	All causes	11,071	All causes	44,707
1.	Diseases of heart	3,265	Malignant neoplasms	11,784
2.	Malignant neoplasms	2,522	Diseases of heart	10,673
3.	Cerebrovascular diseases	1,028	Cerebrovascular diseases	3,662
4.	Unintentional injuries	810	Unintentional injuries	2,125
5.	Pneumonia and influenza	342	Diabetes mellitus	1,621
6.	Suicide	249	Chronic lower respiratory diseases	1,352
7.	Certain conditions originating in the perinatal period	246	Influenza and pneumonia	1,347
8.	Diabetes mellitus	227	Nephritis, nephrotic syndrome and nephrosis	866
9.	Homicide	211	Suicide	813
10.	Chronic obstructive pulmonary diseases	207	Alzheimer's disease	720
Hispanic or Latino				
...	---	---	All causes	133,004
1.	---	---	Diseases of heart	28,921
2.	---	---	Malignant neoplasms	26,633
3.	---	---	Unintentional injuries	12,052
4.	---	---	Cerebrovascular diseases	7,005
5.	---	---	Diabetes mellitus	6,287
6.	---	---	Chronic liver disease and cirrhosis	3,592
7.	---	---	Homicide	3,524
8.	---	---	Chronic lower respiratory diseases	3,310
9.	---	---	Influenza and pneumonia	2,966
10.	---	---	Certain conditions originating in the perinatal period	2,804
White male				
...	All causes	933,878	All causes	1,022,328
1.	Diseases of heart	364,679	Diseases of heart	272,117
2.	Malignant neoplasms	198,188	Malignant neoplasms	250,322
3.	Unintentional injuries	62,963	Unintentional injuries	66,843
4.	Cerebrovascular diseases	60,095	Chronic lower respiratory diseases	54,043
5.	Chronic obstructive pulmonary diseases	35,977	Cerebrovascular diseases	45,198
6.	Pneumonia and influenza	23,810	Diabetes mellitus	29,060
7.	Suicide	18,901	Suicide	23,767
8.	Chronic liver disease and cirrhosis	16,407	Influenza and pneumonia	22,310
9.	Diabetes mellitus	12,125	Alzheimer's disease	19,654
10.	Atherosclerosis	10,543	Nephritis, nephrotic syndrome and nephrosis	17,715
Black or African American male				
...	All causes	130,138	All causes	148,602
1.	Diseases of heart	37,877	Diseases of heart	36,230
2.	Malignant neoplasms	25,861	Malignant neoplasms	32,556
3.	Unintentional injuries	9,701	Unintentional injuries	9,605
4.	Cerebrovascular diseases	9,194	Homicide	7,677
5.	Homicide	8,274	Cerebrovascular diseases	7,424
6.	Certain conditions originating in the perinatal period	3,869	Diabetes mellitus	5,772
7.	Pneumonia and influenza	3,386	Human immunodeficiency virus (HIV) disease	4,443
8.	Chronic liver disease and cirrhosis	3,020	Chronic lower respiratory diseases	4,136
9.	Chronic obstructive pulmonary diseases	2,429	Nephritis, nephrotic syndrome and nephrosis	3,812
10.	Diabetes mellitus	2,010	Certain conditions originating in the perinatal period	2,811

See footnotes at end of table.

Table 28 (page 3 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and rank order</i>	<i>1980</i>		<i>2006</i>	
	<i>Cause of death</i>	<i>Deaths</i>	<i>Cause of death</i>	<i>Deaths</i>
American Indian or Alaska Native male				
...	All causes	4,193	All causes	7,630
1.	Unintentional injuries	946	Diseases of heart	1,532
2.	Diseases of heart	917	Malignant neoplasms	1,217
3.	Malignant neoplasms	408	Unintentional injuries	1,184
4.	Chronic liver disease and cirrhosis	239	Diabetes mellitus	362
5.	Cerebrovascular diseases	163	Chronic liver disease and cirrhosis	330
6.	Homicide	162	Suicide	309
7.	Pneumonia and influenza	148	Chronic lower respiratory diseases	234
8.	Suicide	147	Cerebrovascular diseases	231
9.	Certain conditions originating in the perinatal period	107	Homicide	206
10.	Diabetes mellitus	86	Influenza and pneumonia	137
Asian or Pacific Islander male				
...	All causes	6,809	All causes	23,382
1.	Diseases of heart	2,174	Malignant neoplasms	5,974
2.	Malignant neoplasms	1,485	Diseases of heart	5,827
3.	Unintentional injuries	556	Cerebrovascular diseases	1,671
4.	Cerebrovascular diseases	521	Unintentional injuries	1,309
5.	Pneumonia and influenza	227	Chronic lower respiratory diseases	847
6.	Suicide	159	Diabetes mellitus	812
7.	Chronic obstructive pulmonary diseases	158	Influenza and pneumonia	717
8.	Homicide	151	Suicide	563
9.	Certain conditions originating in the perinatal period	128	Nephritis, nephrotic syndrome and nephrosis	432
10.	Diabetes mellitus	103	Homicide	320
Hispanic or Latino male				
...	---	---	All causes	74,250
1.	---	---	Diseases of heart	15,518
2.	---	---	Malignant neoplasms	13,856
3.	---	---	Unintentional injuries	9,102
4.	---	---	Cerebrovascular diseases	3,269
5.	---	---	Diabetes mellitus	3,140
6.	---	---	Homicide	3,004
7.	---	---	Chronic liver disease and cirrhosis	2,527
8.	---	---	Suicide	1,813
9.	---	---	Chronic lower respiratory diseases	1,708
10.	---	---	Certain conditions originating in the perinatal period	1,565
White female				
...	All causes	804,729	All causes	1,055,221
1.	Diseases of heart	318,668	Diseases of heart	273,857
2.	Malignant neoplasms	169,974	Malignant neoplasms	232,253
3.	Cerebrovascular diseases	88,639	Cerebrovascular diseases	70,666
4.	Unintentional injuries	27,159	Chronic lower respiratory diseases	60,950
5.	Pneumonia and influenza	24,559	Alzheimer's disease	47,434
6.	Diabetes mellitus	16,743	Unintentional injuries	37,010
7.	Atherosclerosis	16,526	Diabetes mellitus	28,144
8.	Chronic obstructive pulmonary diseases	16,398	Influenza and pneumonia	27,091
9.	Chronic liver disease and cirrhosis	8,833	Nephritis, nephrotic syndrome and nephrosis	18,078
10.	Certain conditions originating in the perinatal period	6,512	Septicemia	14,923
Black or African American female				
...	All causes	102,997	All causes	141,369
1.	Diseases of heart	35,079	Diseases of heart	36,023
2.	Malignant neoplasms	19,176	Malignant neoplasms	30,526
3.	Cerebrovascular diseases	10,941	Cerebrovascular diseases	9,621
4.	Unintentional injuries	3,779	Diabetes mellitus	7,041
5.	Diabetes mellitus	3,534	Nephritis, nephrotic syndrome and nephrosis	4,585
6.	Certain conditions originating in the perinatal period	3,092	Unintentional injuries	4,312
7.	Pneumonia and influenza	2,262	Chronic lower respiratory diseases	3,594
8.	Homicide	1,898	Septicemia	3,391
9.	Chronic liver disease and cirrhosis	1,770	Alzheimer's disease	3,265
10.	Nephritis, nephrotic syndrome, and nephrosis	1,722	Influenza and pneumonia	2,825

See footnotes at end of table.

Table 28 (page 4 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2006	
	Cause of death	Deaths	Cause of death	Deaths
American Indian or Alaska Native female				
...	All causes	2,730	All causes	6,407
1.	Diseases of heart	577	Malignant neoplasms	1,230
2.	Malignant neoplasms	362	Diseases of heart	1,204
3.	Unintentional injuries	344	Unintentional injuries	520
4.	Chronic liver disease and cirrhosis	171	Diabetes mellitus	449
5.	Cerebrovascular diseases	159	Cerebrovascular diseases	317
6.	Diabetes mellitus	124	Chronic lower respiratory diseases	274
7.	Pneumonia and influenza	109	Chronic liver disease and cirrhosis	266
8.	Certain conditions originating in the perinatal period	92	Nephritis, nephrotic syndrome and nephrosis	153
9.	Nephritis, nephrotic syndrome, and nephrosis	56	Influenza and pneumonia	130
10.	Homicide	55	Septicemia	108
Asian or Pacific Islander female				
...	All causes	4,262	All causes	21,325
1.	Diseases of heart	1,091	Malignant neoplasms	5,810
2.	Malignant neoplasms	1,037	Diseases of heart	4,846
3.	Cerebrovascular diseases	507	Cerebrovascular diseases	1,991
4.	Unintentional injuries	254	Unintentional injuries	816
5.	Diabetes mellitus	124	Diabetes mellitus	809
6.	Certain conditions originating in the perinatal period	118	Influenza and pneumonia	630
7.	Pneumonia and influenza	115	Chronic lower respiratory diseases	505
8.	Congenital anomalies	104	Alzheimer's disease	475
9.	Suicide	90	Nephritis, nephrotic syndrome and nephrosis	434
10.	Homicide	60	Essential hypertension and hypertensive renal disease	338
Hispanic or Latina female				
...	---	---	All causes	58,754
1.	---	---	Diseases of heart	13,403
2.	---	---	Malignant neoplasms	12,777
3.	---	---	Cerebrovascular diseases	3,736
4.	---	---	Diabetes mellitus	3,147
5.	---	---	Unintentional injuries	2,950
6.	---	---	Chronic lower respiratory diseases	1,602
7.	---	---	Alzheimer's disease	1,587
8.	---	---	Influenza and pneumonia	1,527
9.	---	---	Nephritis, nephrotic syndrome and nephrosis	1,297
10.	---	---	Certain conditions originating in the perinatal period	1,239

... Category not applicable.

--- Data not available.

NOTES: For cause of death codes based on the *International Classification of Diseases, 9th Revision (ICD-9)* in 1980 and *ICD-10* in 2006, see [Appendix II, Cause of death; Tables IV and V](#). Starting in 2006, the category essential (primary) hypertension and hypertensive renal disease was changed to essential hypertension and hypertensive renal disease to reflect the addition of secondary hypertension. In 2006, 25 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. See [Appendix II, Race; Hispanic origin](#).

SOURCES: CDC/NCHS, National Vital Statistics System; *Vital statistics of the United States, Vol II, mortality, part A*, 1980. Washington, DC: Public Health Service. 1985; 2006 annual mortality file. Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 29 (page 1 of 2). Leading causes of death and numbers of deaths, by age: United States, 1980 and 2006

[Data are based on death certificates]

Age and rank order	1980		2006	
	Cause of death	Deaths	Cause of death	Deaths
Under 1 year				
...	All causes	45,526	All causes	28,527
1.	Congenital anomalies	9,220	Congenital malformations, deformations and chromosomal abnormalities	5,819
2.	Sudden infant death syndrome	5,510	Disorders related to short gestation and low birth weight, not elsewhere classified	4,841
3.	Respiratory distress syndrome	4,989	Sudden infant death syndrome	2,323
4.	Disorders relating to short gestation and unspecified low birthweight	3,648	Newborn affected by maternal complications of pregnancy	1,683
5.	Newborn affected by maternal complications of pregnancy	1,572	Unintentional injuries	1,147
6.	Intrauterine hypoxia and birth asphyxia	1,497	Newborn affected by complications of placenta, cord and membranes	1,140
7.	Unintentional injuries	1,166	Respiratory distress of newborn	825
8.	Birth trauma	1,058	Bacterial sepsis of newborn	807
9.	Pneumonia and influenza	1,012	Neonatal hemorrhage	618
10.	Newborn affected by complications of placenta, cord, and membranes	985	Diseases of circulatory system	543
1-4 years				
...	All causes	8,187	All causes	4,631
1.	Unintentional injuries	3,313	Unintentional injuries	1,610
2.	Congenital anomalies	1,026	Congenital malformations, deformations and chromosomal abnormalities	515
3.	Malignant neoplasms	573	Malignant neoplasms	377
4.	Diseases of heart	338	Homicide	366
5.	Homicide	319	Diseases of heart	161
6.	Pneumonia and influenza	267	Influenza and pneumonia	125
7.	Meningitis	223	Septicemia	88
8.	Meningococcal infection	110	Certain conditions originating in the perinatal period	65
9.	Certain conditions originating in the perinatal period	84	In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior	60
10.	Septicemia	71	Cerebrovascular diseases	54
5-14 years				
...	All causes	10,689	All causes	6,149
1.	Unintentional injuries	5,224	Unintentional injuries	2,258
2.	Malignant neoplasms	1,497	Malignant neoplasms	907
3.	Congenital anomalies	561	Homicide	390
4.	Homicide	415	Congenital malformations, deformations and chromosomal abnormalities	344
5.	Diseases of heart	330	Diseases of heart	253
6.	Pneumonia and influenza	194	Suicide	219
7.	Suicide	142	Chronic lower respiratory diseases	115
8.	Benign neoplasms	104	Cerebrovascular diseases	95
9.	Cerebrovascular diseases	95	Septicemia	84
10.	Chronic obstructive pulmonary diseases	85	In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior	76
15-24 years				
...	All causes	49,027	All causes	34,887
1.	Unintentional injuries	26,206	Unintentional injuries	16,229
2.	Homicide	6,537	Homicide	5,717
3.	Suicide	5,239	Suicide	4,189
4.	Malignant neoplasms	2,683	Malignant neoplasms	1,644
5.	Diseases of heart	1,223	Diseases of heart	1,076
6.	Congenital anomalies	600	Congenital malformations, deformations and chromosomal abnormalities	460
7.	Cerebrovascular diseases	418	Cerebrovascular diseases	210
8.	Pneumonia and influenza	348	Human immunodeficiency virus (HIV) disease	206
9.	Chronic obstructive pulmonary diseases	141	Influenza and pneumonia	184
10.	Anemias	133	Pregnancy, childbirth and puerperium	179

See footnotes at end of table.

Table 29 (page 2 of 2). Leading causes of death and numbers of deaths, by age: United States, 1980 and 2006

[Data are based on death certificates]

Age and rank order	1980		2006	
	Cause of death	Deaths	Cause of death	Deaths
25–44 years				
...	All causes	108,658	All causes	125,995
1.	Unintentional injuries	26,722	Unintentional injuries	32,488
2.	Malignant neoplasms	17,551	Malignant neoplasms	17,573
3.	Diseases of heart	14,513	Diseases of heart	15,646
4.	Homicide	10,983	Suicide	11,576
5.	Suicide	9,855	Homicide	7,745
6.	Chronic liver disease and cirrhosis	4,782	Human immunodeficiency virus (HIV) disease	5,192
7.	Cerebrovascular diseases	3,154	Chronic liver disease and cirrhosis	2,867
8.	Diabetes mellitus	1,472	Diabetes mellitus	2,767
9.	Pneumonia and influenza	1,467	Cerebrovascular diseases	2,748
10.	Congenital anomalies	817	Influenza and pneumonia	1,176
45–64 years				
...	All causes	425,338	All causes	466,432
1.	Diseases of heart	148,322	Malignant neoplasms	151,788
2.	Malignant neoplasms	135,675	Diseases of heart	103,572
3.	Cerebrovascular diseases	19,909	Unintentional injuries	31,121
4.	Unintentional injuries	18,140	Diabetes mellitus	17,124
5.	Chronic liver disease and cirrhosis	16,089	Cerebrovascular diseases	16,859
6.	Chronic obstructive pulmonary diseases	11,514	Chronic lower respiratory diseases	16,299
7.	Diabetes mellitus	7,977	Chronic liver disease and cirrhosis	14,929
8.	Suicide	7,079	Suicide	12,009
9.	Pneumonia and influenza	5,804	Nephritis, nephrotic syndrome and nephrosis	6,613
10.	Homicide	4,019	Septicemia	6,292
65 years and over				
...	All causes	1,341,848	All causes	1,759,423
1.	Diseases of heart	595,406	Diseases of heart	510,542
2.	Malignant neoplasms	258,389	Malignant neoplasms	387,515
3.	Cerebrovascular diseases	146,417	Cerebrovascular diseases	117,010
4.	Pneumonia and influenza	45,512	Chronic lower respiratory diseases	106,845
5.	Chronic obstructive pulmonary diseases	43,587	Alzheimer's disease	71,660
6.	Atherosclerosis	28,081	Diabetes mellitus	52,351
7.	Diabetes mellitus	25,216	Influenza and pneumonia	49,346
8.	Unintentional injuries	24,844	Nephritis, nephrotic syndrome and nephrosis	37,377
9.	Nephritis, nephrotic syndrome, and nephrosis	12,968	Unintentional injuries	36,689
10.	Chronic liver disease and cirrhosis	9,519	Septicemia	26,201

... Category not applicable.

NOTES: For cause of death codes based on the *International Classification of Diseases, 9th Revision (ICD-9)* in 1980 and *ICD-10* in 2006, see [Appendix II, Cause of death; Tables IV and V](#).

SOURCES: CDC/NCHS, National Vital Statistics System; *Vital statistics of the United States, Vol II, mortality, part A*, 1980. Washington, DC: Public Health Service. 1985; 2006 annual mortality file.

Table 30 (page 1 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2004–2006

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level ¹	All races			White			Black or African American		
	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006
Both sexes	Age-adjusted death rate per 100,000 standard population ²								
All regions:									
Metropolitan counties:									
Large:									
Central	894.5	869.0	770.9	858.8	836.7	746.9	1,164.2	1,133.6	1,013.2
Fringe	839.3	833.0	757.3	828.0	823.7	752.6	1,059.6	1,040.8	926.6
Medium	865.6	859.0	792.1	846.5	842.2	778.8	1,152.4	1,137.3	1,029.3
Small	887.8	887.9	823.5	866.5	868.8	807.2	1,173.1	1,164.3	1,065.3
Nonmetropolitan counties:									
Micropolitan	913.0	907.1	851.5	892.1	890.0	837.2	1,208.2	1,174.9	1,084.9
Nonmicropolitan	933.0	923.2	871.2	909.6	902.8	853.6	1,191.6	1,162.8	1,073.2
Northeast:									
Metropolitan counties:									
Large:									
Central	909.6	861.7	754.5	881.4	838.6	739.1	1,052.4	1,001.1	880.0
Fringe	827.8	814.0	735.9	823.3	810.8	738.1	1,000.0	986.6	861.1
Medium	851.9	836.2	773.0	842.2	828.6	768.9	1,076.6	1,040.8	915.2
Small	852.0	849.5	787.0	847.8	846.5	784.2	1,106.9	1,072.4	976.3
Nonmetropolitan counties:									
Micropolitan	878.4	854.4	798.0	877.9	855.7	800.5	*	*	*
Nonmicropolitan	893.6	877.4	808.8	892.0	876.3	810.2	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central	951.7	939.6	842.9	880.7	868.9	777.8	1,213.7	1,205.9	1,089.6
Fringe	856.4	856.1	782.8	845.9	846.3	774.8	1,121.2	1,123.1	1,042.6
Medium	876.1	873.5	805.7	857.0	856.1	790.2	1,168.9	1,151.6	1,052.0
Small	860.8	861.5	796.7	847.4	850.8	785.9	1,178.9	1,146.9	1,074.9
Nonmetropolitan counties:									
Micropolitan	868.8	865.2	807.8	863.9	863.0	806.4	1,222.0	1,103.5	982.5
Nonmicropolitan	867.6	852.7	801.5	858.2	845.9	794.2	1,388.1	1,058.9	948.3
South:									
Metropolitan counties:									
Large:									
Central	938.1	926.8	820.1	864.9	859.1	761.7	1,241.9	1,212.8	1,080.5
Fringe	845.3	845.6	763.8	821.9	826.2	750.9	1,071.4	1,048.4	921.9
Medium	891.8	892.4	820.1	852.1	855.8	788.7	1,172.6	1,164.4	1,056.8
Small	943.6	950.5	885.7	907.5	917.9	858.6	1,183.2	1,180.0	1,078.2
Nonmetropolitan counties:									
Micropolitan	974.1	973.3	918.4	933.5	939.3	889.2	1,218.9	1,194.3	1,110.3
Nonmicropolitan	1,005.3	1,003.0	954.0	975.9	978.5	935.8	1,188.4	1,171.2	1,084.3
West:									
Metropolitan counties:									
Large:									
Central	819.2	792.4	707.8	829.4	804.1	725.5	1,107.9	1,077.7	979.1
Fringe	818.6	803.6	741.5	823.2	810.1	752.8	1,060.8	1,006.2	965.0
Medium	814.7	800.5	741.1	826.9	815.8	758.5	1,045.4	996.3	903.5
Small	827.6	815.7	752.7	826.6	815.7	755.1	973.5	990.7	838.5
Nonmetropolitan counties:									
Micropolitan	861.0	851.8	796.8	860.4	854.7	803.2	*	*	*
Nonmicropolitan	867.1	847.4	785.2	845.9	828.6	767.9	*	*	*

See footnotes at end of table.

Table 30 (page 2 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2004–2006

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level ¹	All races			White			Black or African American		
	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006
Male	Age-adjusted death rate per 100,000 standard population ²								
All regions:									
Metropolitan counties:									
Large:									
Central	1,108.6	1,057.6	926.6	1,060.6	1,015.2	894.6	1,503.8	1,436.1	1,268.4
Fringe	1,025.2	998.7	887.8	1,010.9	987.3	881.9	1,329.0	1,281.1	1,119.2
Medium	1,069.9	1,038.5	944.0	1,045.4	1,017.7	926.3	1,469.0	1,409.2	1,263.9
Small	1,104.6	1,079.2	984.6	1,077.4	1,056.1	964.2	1,497.6	1,449.1	1,309.0
Nonmetropolitan counties:									
Micropolitan	1,139.9	1,108.6	1,018.4	1,113.5	1,087.5	1,000.7	1,547.8	1,475.9	1,334.1
Nonmicropolitan	1,172.3	1,132.9	1,046.5	1,143.3	1,108.3	1,025.3	1,529.0	1,457.3	1,328.0
Northeast:									
Metropolitan counties:									
Large:									
Central	1,142.0	1,065.3	917.7	1,102.8	1,034.5	897.4	1,374.4	1,280.7	1,101.7
Fringe	1,018.1	985.3	871.4	1,012.6	982.3	875.7	1,263.0	1,219.0	1,028.8
Medium	1,061.6	1,018.1	929.9	1,049.9	1,009.7	925.8	1,351.2	1,262.4	1,106.8
Small	1,062.7	1,034.1	949.8	1,057.9	1,032.3	947.6	1,376.8	1,280.7	1,160.6
Nonmetropolitan counties:									
Micropolitan	1,093.5	1,042.5	963.6	1,093.7	1,045.6	968.7	*	*	*
Nonmicropolitan	1,096.9	1,056.9	959.9	1,096.1	1,056.6	963.0	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central	1,192.6	1,155.5	1,023.3	1,101.0	1,064.6	940.1	1,559.8	1,525.5	1,371.4
Fringe	1,051.7	1,030.0	917.3	1,038.7	1,018.7	907.3	1,399.4	1,372.7	1,267.8
Medium	1,089.0	1,063.2	967.0	1,065.3	1,043.8	948.4	1,470.0	1,394.4	1,290.3
Small	1,076.0	1,057.3	958.7	1,059.7	1,045.0	947.2	1,463.9	1,401.9	1,272.3
Nonmetropolitan counties:									
Micropolitan	1,092.0	1,063.4	975.9	1,086.0	1,062.0	975.2	1,551.8	1,315.8	1,126.5
Nonmicropolitan	1,094.7	1,050.5	970.1	1,083.0	1,043.3	962.4	1,788.2	1,225.3	1,071.0
South:									
Metropolitan counties:									
Large:									
Central	1,172.0	1,130.9	989.2	1,074.6	1,042.9	914.3	1,616.0	1,542.6	1,360.6
Fringe	1,030.8	1,009.7	892.4	1,000.5	984.8	875.4	1,351.1	1,297.8	1,121.3
Medium	1,106.6	1,081.2	978.0	1,053.0	1,033.8	938.1	1,517.1	1,466.2	1,313.0
Small	1,185.9	1,160.8	1,064.8	1,138.6	1,118.6	1,028.9	1,526.9	1,487.0	1,345.4
Nonmetropolitan counties:									
Micropolitan	1,228.0	1,198.9	1,099.2	1,175.1	1,154.7	1,060.4	1,577.6	1,519.8	1,386.1
Nonmicropolitan	1,275.7	1,240.6	1,151.5	1,239.3	1,210.2	1,127.3	1,530.4	1,478.0	1,352.3
West:									
Metropolitan counties:									
Large:									
Central	996.3	949.8	840.3	1,006.7	962.4	858.5	1,383.8	1,323.2	1,189.1
Fringe	981.1	947.0	862.5	988.0	954.5	874.5	1,228.8	1,171.2	1,108.8
Medium	987.4	952.8	873.1	1,003.1	969.3	887.5	1,230.6	1,165.1	1,038.1
Small	1,003.7	970.5	881.5	1,001.7	971.6	882.9	1,178.9	1,088.1	964.0
Nonmetropolitan counties:									
Micropolitan	1,037.8	1,012.6	931.1	1,036.0	1,013.6	934.9	*	*	*
Nonmicropolitan	1,048.7	1,010.9	915.9	1,023.0	986.8	893.9	*	*	*

See footnotes at end of table.

Table 30 (page 3 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2004–2006

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level ¹	All races			White			Black or African American		
	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006	1996–1998	1999–2001	2004–2006
	Age-adjusted death rate per 100,000 standard population ²								
Female									
All regions:									
Metropolitan counties:									
Large:									
Central	738.9	730.1	650.6	711.3	703.8	631.2	934.4	929.3	833.5
Fringe	705.7	711.1	654.6	696.3	702.7	650.2	875.9	876.4	789.0
Medium	716.8	724.6	671.3	701.9	710.6	660.7	932.0	945.4	856.8
Small	731.2	745.7	696.4	713.7	729.1	682.8	951.9	966.5	886.1
Nonmetropolitan counties:									
Micropolitan	745.9	754.8	715.9	728.8	740.2	703.6	975.6	968.3	902.0
Nonmicropolitan	750.6	759.5	723.3	731.4	741.9	708.2	951.5	953.0	880.7
Northeast:									
Metropolitan counties:									
Large:									
Central	748.4	719.6	635.1	725.6	699.1	621.1	848.3	823.6	731.4
Fringe	696.3	692.6	633.9	692.4	689.3	634.5	827.2	828.1	739.6
Medium	709.1	707.5	656.9	701.4	700.9	653.4	883.4	877.0	767.6
Small	706.7	717.3	665.0	703.2	713.8	662.3	919.9	930.0	832.9
Nonmetropolitan counties:									
Micropolitan	725.0	717.5	670.1	724.3	718.1	671.3	*	*	*
Nonmicropolitan	741.8	738.5	683.4	740.1	737.4	684.1	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central	784.1	786.2	710.2	729.7	730.9	658.9	974.4	984.5	891.4
Fringe	722.9	733.8	680.8	714.5	725.1	674.3	924.6	948.2	882.0
Medium	728.9	739.6	685.3	713.6	724.3	672.3	955.1	972.7	874.7
Small	710.8	721.4	675.4	700.0	712.2	665.8	963.1	952.5	914.8
Nonmetropolitan counties:									
Micropolitan	711.2	721.2	678.3	707.3	718.6	676.6	998.7	948.8	855.7
Nonmicropolitan	696.1	700.0	662.2	688.9	693.9	655.6	1,123.8	955.4	839.4
South:									
Metropolitan counties:									
Large:									
Central	768.6	776.3	688.9	712.1	721.7	641.2	988.2	989.8	884.6
Fringe	705.7	719.6	658.4	686.1	702.4	646.6	882.4	881.0	782.6
Medium	731.2	746.6	689.7	700.1	716.0	662.8	938.9	958.2	874.9
Small	771.0	795.0	744.1	740.9	767.1	721.6	956.5	974.2	889.7
Nonmetropolitan counties:									
Micropolitan	788.4	803.8	769.8	754.8	774.5	745.3	977.3	975.7	914.4
Nonmicropolitan	803.4	821.3	789.6	778.3	799.5	774.1	946.7	955.0	885.1
West:									
Metropolitan counties:									
Large:									
Central	682.6	670.1	599.9	691.8	679.9	615.8	906.0	899.3	813.6
Fringe	696.3	693.8	644.2	699.2	699.1	654.3	920.1	876.5	843.7
Medium	680.5	681.3	632.5	691.6	696.1	651.4	890.3	855.7	778.8
Small	687.3	691.3	642.8	687.2	690.7	645.8	789.8	886.6	710.5
Nonmetropolitan counties:									
Micropolitan	712.6	715.1	676.3	713.8	720.0	683.8	*	*	*
Nonmicropolitan	710.4	704.0	660.8	694.2	690.7	647.8	*	*	*

* Estimates of death rates for the black population in nonmetropolitan counties in the Northeast and West may be unreliable, possibly due to anomalies in population estimates for the black population in nonmetropolitan counties in these regions.
¹Urbanization levels are for county of residence of decedent. The levels were developed by NCHS using information from the Office of Management and Budget, Department of Agriculture, and Census Bureau. More information on this six-level urban-rural classification scheme is available from: http://www.cdc.gov/nchs/r&d/rdc_urbanrural.htm. See [Appendix II, Urbanization](#).
²Average annual death rates are age-adjusted using the year 2000 standard population. In earlier editions of *Health, United States*, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with *Health, United States 2006*, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#). Denominators for rates are population estimates for the middle year of each 3-year period multiplied by 3. The 1997 population estimates used to compute rates for 1996–1998 are intercensal population estimates based on the 2000 census. The 2000 population estimates used to compute rates for 1999–2001 are based on the 2000 census. The 2005 population estimates used to compute rates for 2004–2006 are postcensal population estimates based on the 2000 census. See [Appendix I, Population Census and Population Estimates](#).

NOTES: The race groups, white and black, include persons of Hispanic and non-Hispanic origin. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. In 2006, 25 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race; Hispanic origin](#). Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Compressed Mortality File.

Table 31 (page 1 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ¹	1960 ¹	1970	1980	1990	2000	2005	2006
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ²	1,446.0	1,339.2	1,222.6	1,039.1	938.7	869.0	798.8	776.5
All ages, crude	963.8	954.7	945.3	878.3	863.8	854.0	825.9	810.4
Under 1 year	3,299.2	2,696.4	2,142.4	1,288.3	971.9	736.7	692.5	690.7
1–4 years	139.4	109.1	84.5	63.9	46.8	32.4	29.4	28.4
5–14 years	60.1	46.6	41.3	30.6	24.0	18.0	16.3	15.2
15–24 years	128.1	106.3	127.7	115.4	99.2	79.9	81.4	82.2
25–34 years	178.7	146.4	157.4	135.5	139.2	101.4	104.4	106.3
35–44 years	358.7	299.4	314.5	227.9	223.2	198.9	193.3	190.2
45–54 years	853.9	756.0	730.0	584.0	473.4	425.6	432.0	427.5
55–64 years	1,901.0	1,735.1	1,658.8	1,346.3	1,196.9	992.2	906.9	890.9
65–74 years	4,104.3	3,822.1	3,582.7	2,994.9	2,648.6	2,399.1	2,137.1	2,062.1
75–84 years	9,331.1	8,745.2	8,004.4	6,692.6	6,007.2	5,666.5	5,260.0	5,115.0
85 years and over	20,196.9	19,857.5	16,344.9	15,980.3	15,327.4	15,524.4	13,798.6	13,253.1
Male								
All ages, age-adjusted ²	1,674.2	1,609.0	1,542.1	1,348.1	1,202.8	1,053.8	951.1	924.8
All ages, crude	1,106.1	1,104.5	1,090.3	976.9	918.4	853.0	827.2	814.8
Under 1 year	3,728.0	3,059.3	2,410.0	1,428.5	1,082.8	806.5	762.3	756.3
1–4 years	151.7	119.5	93.2	72.6	52.4	35.9	33.4	30.5
5–14 years	70.9	55.7	50.5	36.7	28.5	20.9	18.6	17.6
15–24 years	167.9	152.1	188.5	172.3	147.4	114.9	117.8	119.3
25–34 years	216.5	187.9	215.3	196.1	204.3	138.6	143.4	146.8
35–44 years	428.8	372.8	402.6	299.2	310.4	255.2	243.0	238.7
45–54 years	1,067.1	992.2	958.5	767.3	610.3	542.8	547.8	541.0
55–64 years	2,395.3	2,309.5	2,282.7	1,815.1	1,553.4	1,230.7	1,131.0	1,110.0
65–74 years	4,931.4	4,914.4	4,873.8	4,105.2	3,491.5	2,979.6	2,612.2	2,516.2
75–84 years	10,426.0	10,178.4	10,010.2	8,816.7	7,888.6	6,972.6	6,349.8	6,177.7
85 years and over	21,636.0	21,186.3	17,821.5	18,801.1	18,056.6	17,501.4	14,889.4	14,309.1
Female								
All ages, age-adjusted ²	1,236.0	1,105.3	971.4	817.9	750.9	731.4	677.6	657.8
All ages, crude	823.5	809.2	807.8	785.3	812.0	855.0	824.6	806.1
Under 1 year	2,854.6	2,321.3	1,863.7	1,141.7	855.7	663.4	619.4	622.0
1–4 years	126.7	98.4	75.4	54.7	41.0	28.7	25.1	26.3
5–14 years	48.9	37.3	31.8	24.2	19.3	15.0	13.9	12.8
15–24 years	89.1	61.3	68.1	57.5	49.0	43.1	42.7	42.8
25–34 years	142.7	106.6	101.6	75.9	74.2	63.5	64.1	64.3
35–44 years	290.3	229.4	231.1	159.3	137.9	143.2	143.6	141.6
45–54 years	641.5	526.7	517.2	412.9	342.7	312.5	319.9	317.7
55–64 years	1,404.8	1,196.4	1,098.9	934.3	878.8	772.2	698.5	687.0
65–74 years	3,333.2	2,871.8	2,579.7	2,144.7	1,991.2	1,921.2	1,736.3	1,677.9
75–84 years	8,399.6	7,633.1	6,677.6	5,440.1	4,883.1	4,814.7	4,520.0	4,388.3
85 years and over	19,194.7	19,008.4	15,518.0	14,746.9	14,274.3	14,719.2	13,297.7	12,759.0
White male ³								
All ages, age-adjusted ²	1,642.5	1,586.0	1,513.7	1,317.6	1,165.9	1,029.4	933.2	908.2
All ages, crude	1,089.5	1,098.5	1,086.7	983.3	930.9	887.8	864.5	852.3
Under 1 year	3,400.5	2,694.1	2,113.2	1,230.3	896.1	667.6	640.0	632.7
1–4 years	135.5	104.9	83.6	66.1	45.9	32.6	30.9	27.5
5–14 years	67.2	52.7	48.0	35.0	26.4	19.8	17.1	16.4
15–24 years	152.4	143.7	170.8	167.0	131.3	105.8	110.4	111.8
25–34 years	185.3	163.2	176.6	171.3	176.1	124.1	130.8	135.4
35–44 years	380.9	332.6	343.5	257.4	268.2	233.6	228.5	224.4
45–54 years	984.5	932.2	882.9	698.9	548.7	496.9	509.3	505.2
55–64 years	2,304.4	2,225.2	2,202.6	1,728.5	1,467.2	1,163.3	1,068.1	1,050.6
65–74 years	4,864.9	4,848.4	4,810.1	4,035.7	3,397.7	2,905.7	2,552.7	2,455.8
75–84 years	10,526.3	10,299.6	10,098.8	8,829.8	7,844.9	6,933.1	6,343.2	6,182.2
85 years and over	22,116.3	21,750.0	18,551.7	19,097.3	18,268.3	17,716.4	15,156.5	14,576.8

See footnotes at end of table.

Table 31 (page 2 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ¹	1960 ¹	1970	1980	1990	2000	2005	2006
Black or African American male ³								
Deaths per 100,000 resident population								
All ages, age-adjusted ²	1,909.1	1,811.1	1,873.9	1,697.8	1,644.5	1,403.5	1,252.9	1,215.6
All ages, crude	1,257.7	1,181.7	1,186.6	1,034.1	1,008.0	834.1	799.2	786.7
Under 1 year	---	5,306.8	4,298.9	2,586.7	2,112.4	1,567.6	1,437.2	1,407.1
1–4 years	1,412.6	208.5	150.5	110.5	85.8	54.5	46.7	47.1
5–14 years	95.1	75.1	67.1	47.4	41.2	28.2	27.0	24.8
15–24 years	289.7	212.0	320.6	209.1	252.2	181.4	172.1	171.3
25–34 years	503.5	402.5	559.5	407.3	430.8	261.0	254.3	254.2
35–44 years	878.1	762.0	956.6	689.8	699.6	453.0	395.5	392.3
45–54 years	1,905.0	1,624.8	1,777.5	1,479.9	1,261.0	1,017.7	948.6	921.9
55–64 years	3,773.2	3,316.4	3,256.9	2,873.0	2,618.4	2,080.1	1,954.3	1,891.8
65–74 years	5,310.3	5,798.7	5,803.2	5,131.1	4,946.1	4,253.5	3,747.3	3,669.2
75–84 years ⁵	10,101.9	8,605.1	9,454.9	9,231.6	9,129.5	8,486.0	7,667.1	7,393.2
85 years and over	---	14,844.8	12,222.3	16,098.8	16,954.9	16,791.0	13,809.8	13,206.0
American Indian or Alaska Native male ³								
All ages, age-adjusted ²	---	---	---	1,111.5	916.2	841.5	775.3	739.9
All ages, crude	---	---	---	597.1	476.4	415.6	481.9	477.1
Under 1 year	---	---	---	1,598.1	1,056.6	700.2	882.4	1,057.8
1–4 years	---	---	---	82.7	77.4	44.9	72.4	58.1
5–14 years	---	---	---	43.7	33.4	20.2	22.7	17.2
15–24 years	---	---	---	311.1	219.8	136.2	145.1	156.1
25–34 years	---	---	---	360.6	256.1	179.1	206.3	194.0
35–44 years	---	---	---	556.8	365.4	295.2	336.6	338.5
45–54 years	---	---	---	871.3	619.9	520.0	588.9	591.9
55–64 years	---	---	---	1,547.5	1,211.3	1,090.4	1,124.1	1,029.5
65–74 years	---	---	---	2,968.4	2,461.7	2,478.3	2,254.1	2,146.7
75–84 years	---	---	---	5,607.0	5,389.2	5,351.2	4,373.3	4,198.0
85 years and over	---	---	---	12,635.2	11,243.9	10,725.8	8,419.0	7,540.2
Asian or Pacific Islander male ³								
All ages, age-adjusted ²	---	---	---	786.5	716.4	624.2	534.4	516.0
All ages, crude	---	---	---	375.3	334.3	332.9	333.9	330.6
Under 1 year	---	---	---	816.5	605.3	529.4	464.5	469.7
1–4 years	---	---	---	50.9	45.0	23.3	20.8	18.1
5–14 years	---	---	---	23.4	20.7	12.9	14.0	11.3
15–24 years	---	---	---	80.8	76.0	55.2	56.9	61.7
25–34 years	---	---	---	83.5	79.6	55.0	55.6	54.2
35–44 years	---	---	---	128.3	130.8	104.9	93.6	88.5
45–54 years	---	---	---	342.3	287.1	249.7	242.4	232.5
55–64 years	---	---	---	881.1	789.1	642.4	545.4	550.7
65–74 years	---	---	---	2,236.1	2,041.4	1,661.0	1,403.8	1,329.2
75–84 years	---	---	---	5,389.5	5,008.6	4,328.2	3,759.2	3,606.4
85 years and over	---	---	---	13,753.6	12,446.3	12,125.3	9,839.1	9,524.7
Hispanic or Latino male ^{3,6}								
All ages, age-adjusted ²	---	---	---	---	886.4	818.1	717.0	675.6
All ages, crude	---	---	---	---	411.6	331.3	334.4	323.9
Under 1 year	---	---	---	---	921.8	637.1	670.2	640.7
1–4 years	---	---	---	---	53.8	31.5	33.2	28.8
5–14 years	---	---	---	---	26.0	17.9	15.3	16.4
15–24 years	---	---	---	---	159.3	107.7	120.4	120.7
25–34 years	---	---	---	---	234.0	120.2	115.5	112.7
35–44 years	---	---	---	---	341.8	211.0	182.0	176.5
45–54 years	---	---	---	---	533.9	439.0	417.4	403.8
55–64 years	---	---	---	---	1,123.7	965.7	875.8	843.6
65–74 years	---	---	---	---	2,368.2	2,287.9	2,029.4	1,910.7
75–84 years	---	---	---	---	5,369.1	5,395.3	4,856.8	4,492.6
85 years and over	---	---	---	---	12,272.1	13,086.2	10,140.5	9,435.5

See footnotes at end of table.

Table 31 (page 3 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ¹	1960 ¹	1970	1980	1990	2000	2005	2006
Deaths per 100,000 resident population								
White, not Hispanic or Latino male ⁶								
All ages, age-adjusted ²	---	---	---	---	1,170.9	1,035.4	945.4	922.8
All ages, crude	---	---	---	---	985.9	978.5	970.6	962.0
Under 1 year	---	---	---	---	865.4	658.7	625.7	621.9
1–4 years	---	---	---	---	43.8	32.4	29.9	26.7
5–14 years	---	---	---	---	25.7	20.0	17.4	16.2
15–24 years	---	---	---	---	123.4	103.5	105.8	107.6
25–34 years	---	---	---	---	165.3	123.0	134.1	141.1
35–44 years	---	---	---	---	257.1	233.9	236.1	233.1
45–54 years	---	---	---	---	544.5	497.7	517.2	515.1
55–64 years	---	---	---	---	1,479.7	1,170.9	1,079.6	1,064.0
65–74 years	---	---	---	---	3,434.5	2,930.5	2,584.5	2,490.3
75–84 years	---	---	---	---	7,920.4	6,977.8	6,420.4	6,278.3
85 years and over	---	---	---	---	18,505.4	17,853.2	15,401.3	14,841.1
White female ³								
All ages, age-adjusted ²	1,198.0	1,074.4	944.0	796.1	728.8	715.3	666.5	648.2
All ages, crude	803.3	800.9	812.6	806.1	846.9	912.3	882.8	863.9
Under 1 year	2,566.8	2,007.7	1,614.6	962.5	690.0	550.5	515.3	516.5
1–4 years	112.2	85.2	66.1	49.3	36.1	25.5	22.9	23.5
5–14 years	45.1	34.7	29.9	22.9	17.9	14.1	12.8	11.9
15–24 years	71.5	54.9	61.6	55.5	45.9	41.1	41.5	41.7
25–34 years	112.8	85.0	84.1	65.4	61.5	55.1	58.0	58.9
35–44 years	235.8	191.1	193.3	138.2	117.4	125.7	130.4	129.0
45–54 years	546.4	458.8	462.9	372.7	309.3	281.4	291.1	291.6
55–64 years	1,293.8	1,078.9	1,014.9	876.2	822.7	730.9	663.9	654.6
65–74 years	3,242.8	2,779.3	2,470.7	2,066.6	1,923.5	1,868.3	1,700.4	1,646.0
75–84 years	8,481.5	7,696.6	6,698.7	5,401.7	4,839.1	4,785.3	4,519.4	4,395.1
85 years and over	19,679.5	19,477.7	15,980.2	14,979.6	14,400.6	14,890.7	13,498.3	12,965.7
Black or African American female ³								
All ages, age-adjusted ²	1,545.5	1,369.7	1,228.7	1,033.3	975.1	927.6	845.7	813.0
All ages, crude	1,002.0	905.0	829.2	733.3	747.9	733.0	703.9	684.0
Under 1 year	---	4,162.2	3,368.8	2,123.7	1,735.5	1,279.8	1,179.7	1,194.6
1–4 years ⁴	1,139.3	173.3	129.4	84.4	67.6	45.3	36.7	39.4
5–14 years	72.8	53.8	43.8	30.5	27.5	20.0	19.4	17.4
15–24 years	213.1	107.5	111.9	70.5	68.7	58.3	51.2	51.3
25–34 years	393.3	273.2	231.0	150.0	159.5	121.8	109.8	106.6
35–44 years	758.1	568.5	533.0	323.9	298.6	271.9	250.0	245.0
45–54 years	1,576.4	1,177.0	1,043.9	768.2	639.4	588.3	568.4	548.1
55–64 years	3,089.4	2,510.9	1,986.2	1,561.0	1,452.6	1,227.2	1,103.6	1,076.3
65–74 years	4,000.2	4,064.2	3,860.9	3,057.4	2,865.7	2,689.6	2,341.5	2,239.7
75–84 years ⁵	8,347.0	6,730.0	6,691.5	6,212.1	5,688.3	5,696.5	5,263.7	5,028.9
85 years and over	---	13,052.6	10,706.6	12,367.2	13,309.5	13,941.3	12,789.9	12,196.7
American Indian or Alaska Native female ³								
All ages, age-adjusted ²	---	---	---	662.4	561.8	604.5	567.7	555.7
All ages, crude	---	---	---	380.1	330.4	346.1	398.8	399.9
Under 1 year	---	---	---	1,352.6	688.7	492.2	752.9	689.9
1–4 years	---	---	---	87.5	37.8	39.8	45.6	50.5
5–14 years	---	---	---	33.5	25.5	17.7	16.8	16.6
15–24 years	---	---	---	90.3	69.0	58.9	67.9	63.5
25–34 years	---	---	---	178.5	102.3	84.8	90.6	92.1
35–44 years	---	---	---	286.0	156.4	171.9	194.1	204.6
45–54 years	---	---	---	491.4	380.9	284.9	366.2	342.4
55–64 years	---	---	---	837.1	805.9	772.1	699.4	686.6
65–74 years	---	---	---	1,765.5	1,679.4	1,899.8	1,780.5	1,657.3
75–84 years	---	---	---	3,612.9	3,073.2	3,850.0	3,602.6	3,746.4
85 years and over	---	---	---	8,567.4	8,201.1	9,118.2	7,065.0	6,633.7

See footnotes at end of table.

Table 31 (page 4 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ¹	1960 ¹	1970	1980	1990	2000	2005	2006
Deaths per 100,000 resident population								
Asian or Pacific Islander female ³								
All ages, age-adjusted ²	---	---	---	425.9	469.3	416.8	369.3	362.6
All ages, crude	---	---	---	222.5	234.3	262.3	282.8	285.6
Under 1 year	---	---	---	755.8	518.2	434.3	395.3	356.9
1–4 years	---	---	---	35.4	32.0	20.0	17.5	21.1
5–14 years	---	---	---	21.5	13.0	11.7	11.9	10.3
15–24 years	---	---	---	32.3	28.8	22.4	26.1	25.4
25–34 years	---	---	---	45.4	37.5	27.6	28.6	28.5
35–44 years	---	---	---	89.7	69.9	65.6	58.1	56.8
45–54 years	---	---	---	214.1	182.7	155.5	142.8	145.2
55–64 years	---	---	---	440.8	483.4	390.9	353.2	332.7
65–74 years	---	---	---	1,027.7	1,089.2	996.4	905.5	897.9
75–84 years	---	---	---	2,833.6	3,127.9	2,882.4	2,529.8	2,525.5
85 years and over	---	---	---	7,923.3	10,254.0	9,052.2	7,792.5	7,560.2
Hispanic or Latina female ^{3,6}								
All ages, age-adjusted ²	---	---	---	---	537.1	546.0	485.3	468.6
All ages, crude	---	---	---	---	285.4	274.6	278.2	274.6
Under 1 year	---	---	---	---	746.6	553.6	555.4	538.3
1–4 years	---	---	---	---	42.1	27.5	24.5	24.0
5–14 years	---	---	---	---	17.3	13.4	12.0	11.8
15–24 years	---	---	---	---	40.6	31.7	36.6	35.2
25–34 years	---	---	---	---	62.9	43.4	41.1	43.1
35–44 years	---	---	---	---	109.3	100.5	90.6	87.1
45–54 years	---	---	---	---	253.3	223.8	216.4	215.3
55–64 years	---	---	---	---	607.5	548.4	493.9	486.5
65–74 years	---	---	---	---	1,453.8	1,423.2	1,291.6	1,222.7
75–84 years	---	---	---	---	3,351.3	3,624.5	3,365.8	3,222.9
85 years and over	---	---	---	---	10,098.7	11,202.8	9,068.4	8,803.5
White, not Hispanic or Latina female ⁶								
All ages, age-adjusted ²	---	---	---	---	734.6	721.5	677.7	660.0
All ages, crude	---	---	---	---	903.6	1,007.3	992.6	974.7
Under 1 year	---	---	---	---	655.3	530.9	496.5	503.7
1–4 years	---	---	---	---	34.0	24.4	22.2	23.2
5–14 years	---	---	---	---	17.6	13.9	12.9	11.8
15–24 years	---	---	---	---	46.0	42.6	42.2	42.9
25–34 years	---	---	---	---	60.6	56.8	62.1	62.5
35–44 years	---	---	---	---	116.8	128.1	137.0	136.3
45–54 years	---	---	---	---	312.1	285.0	298.7	299.8
55–64 years	---	---	---	---	834.5	742.1	677.2	668.0
65–74 years	---	---	---	---	1,940.2	1,891.0	1,729.6	1,677.4
75–84 years	---	---	---	---	4,887.3	4,819.3	4,579.7	4,460.7
85 years and over	---	---	---	---	14,533.1	14,971.7	13,683.1	13,150.7

--- Data not available.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

³The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁴In 1950, rate is for the age group under 5 years.

⁵In 1950, rate is for the age group 75 years and over.

⁶Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office, 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 32 (page 1 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted ⁴	588.8	559.0	492.7	412.1	321.8	257.6	211.1	200.2
All ages, crude	356.8	369.0	362.0	336.0	289.5	252.6	220.0	211.0
Under 1 year	4.1	6.6	13.1	22.8	20.1	13.0	8.7	8.4
1–4 years	1.6	1.3	1.7	2.6	1.9	1.2	0.9	1.0
5–14 years	3.9	1.3	0.8	0.9	0.9	0.7	0.6	0.6
15–24 years	8.2	4.0	3.0	2.9	2.5	2.6	2.7	2.5
25–34 years	20.9	15.6	11.4	8.3	7.6	7.4	8.1	8.2
35–44 years	88.3	74.6	66.7	44.6	31.4	29.2	28.9	28.3
45–54 years	309.2	271.8	238.4	180.2	120.5	94.2	89.7	88.0
55–64 years	804.3	737.9	652.3	494.1	367.3	261.2	214.8	207.3
65–74 years	1,857.2	1,740.5	1,558.2	1,218.6	894.3	665.6	518.9	490.3
75–84 years	4,311.0	4,089.4	3,683.8	2,993.1	2,295.7	1,780.3	1,460.8	1,383.1
85 years and over	9,152.5	9,317.8	7,891.3	7,777.1	6,739.9	5,926.1	4,778.4	4,480.8
Male								
All ages, age-adjusted ⁴	699.0	687.6	634.0	538.9	412.4	320.0	260.9	248.5
All ages, crude	424.7	439.5	422.5	368.6	297.6	249.8	221.1	214.0
Under 1 year	4.7	7.8	15.1	25.5	21.9	13.3	9.4	8.8
1–4 years	1.7	1.4	1.9	2.8	1.9	1.4	1.0	1.1
5–14 years	3.5	1.4	0.9	1.0	0.9	0.8	0.6	0.7
15–24 years	8.3	4.2	3.7	3.7	3.1	3.2	3.6	3.3
25–34 years	24.4	20.1	15.2	11.4	10.3	9.6	10.8	11.2
35–44 years	120.4	112.7	103.2	68.7	48.1	41.4	40.7	39.5
45–54 years	441.2	420.4	376.4	282.6	183.0	140.2	131.5	128.9
55–64 years	1,100.5	1,066.9	987.2	746.8	537.3	371.7	306.9	296.8
65–74 years	2,310.2	2,291.3	2,170.3	1,728.0	1,250.0	898.3	692.3	660.5
75–84 years	4,825.8	4,742.4	4,534.8	3,834.3	2,968.2	2,248.1	1,829.4	1,743.5
85 years and over	9,661.4	9,788.9	8,426.2	8,752.7	7,418.4	6,430.0	5,143.4	4,819.9
Female								
All ages, age-adjusted ⁴	486.6	447.0	381.6	320.8	257.0	210.9	172.3	162.2
All ages, crude	289.7	300.6	304.5	305.1	281.8	255.3	218.9	208.0
Under 1 year	3.4	5.4	10.9	20.0	18.3	12.5	8.0	7.9
1–4 years	1.6	1.1	1.6	2.5	1.9	1.0	0.9	0.9
5–14 years	4.3	1.2	0.8	0.9	0.8	0.5	0.6	0.6
15–24 years	8.2	3.7	2.3	2.1	1.8	2.1	1.7	1.8
25–34 years	17.6	11.3	7.7	5.3	5.0	5.2	5.3	5.1
35–44 years	57.0	38.2	32.2	21.4	15.1	17.2	17.1	17.0
45–54 years	177.8	127.5	109.9	84.5	61.0	49.8	49.2	48.5
55–64 years	507.0	429.4	351.6	272.1	215.7	159.3	129.1	124.1
65–74 years	1,434.9	1,261.3	1,082.7	828.6	616.8	474.0	372.7	346.3
75–84 years	3,873.0	3,582.7	3,120.8	2,497.0	1,893.8	1,475.1	1,210.5	1,136.7
85 years and over	8,798.1	9,016.8	7,591.8	7,350.5	6,478.1	5,720.9	4,610.8	4,322.1
White male ⁵								
All ages, age-adjusted ⁴	701.4	694.5	640.2	539.6	409.2	316.7	258.0	245.2
All ages, crude	434.2	454.6	438.3	384.0	312.7	265.8	234.9	226.9
45–54 years	424.1	413.2	365.7	269.8	170.6	130.7	121.3	119.2
55–64 years	1,082.6	1,056.0	979.3	730.6	516.7	351.8	288.2	278.9
65–74 years	2,309.4	2,297.9	2,177.2	1,729.7	1,230.5	877.8	671.9	636.6
75–84 years	4,908.0	4,839.9	4,617.6	3,883.2	2,983.4	2,247.0	1,831.8	1,743.3
85 years and over	9,952.3	10,135.8	8,818.0	8,958.0	7,558.7	6,560.8	5,288.4	4,947.1
Black or African American male ⁵								
All ages, age-adjusted ⁴	641.5	615.2	607.3	561.4	485.4	392.5	329.8	320.6
All ages, crude	348.4	330.6	330.3	301.0	256.8	211.1	194.8	191.8
45–54 years	624.1	514.0	512.8	433.4	328.9	247.2	237.4	229.8
55–64 years	1,434.0	1,236.8	1,135.4	987.2	824.0	631.2	549.1	526.4
65–74 years	2,140.1	2,281.4	2,237.8	1,847.2	1,632.9	1,268.8	1,041.6	1,044.6
75–84 years ⁶	4,107.9	3,533.6	3,783.4	3,578.8	3,107.1	2,597.6	2,204.1	2,129.9
85 years and over	---	6,037.9	5,367.6	6,819.5	6,479.6	5,633.5	4,230.5	4,073.1

See footnotes at end of table.

Table 32 (page 2 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native male⁵								
All ages, age-adjusted ⁴	---	---	---	320.5	264.1	222.2	173.2	170.2
All ages, crude	---	---	---	130.6	108.0	90.1	93.2	95.8
45–54 years	---	---	---	238.1	173.8	108.5	112.2	119.5
55–64 years	---	---	---	496.3	411.0	285.0	275.0	256.2
65–74 years	---	---	---	1,009.4	839.1	748.2	554.4	573.6
75–84 years	---	---	---	2,062.2	1,788.8	1,655.7	1,123.9	1,176.6
85 years and over	---	---	---	4,413.7	3,860.3	3,318.3	2,509.3	2,066.9
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	286.9	220.7	185.5	141.1	136.3
All ages, crude	---	---	---	119.8	88.7	90.6	83.5	82.4
45–54 years	---	---	---	112.0	70.4	61.1	58.1	55.7
55–64 years	---	---	---	306.7	226.1	182.6	145.3	145.4
65–74 years	---	---	---	852.4	623.5	482.5	374.9	344.3
75–84 years	---	---	---	2,010.9	1,642.2	1,354.7	984.3	963.3
85 years and over	---	---	---	5,923.0	4,617.8	4,154.2	3,052.0	2,985.9
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	270.0	238.2	192.4	175.2
All ages, crude	---	---	---	---	91.0	74.7	72.1	67.7
45–54 years	---	---	---	---	116.4	84.3	77.9	75.6
55–64 years	---	---	---	---	363.0	264.8	219.3	202.3
65–74 years	---	---	---	---	829.9	684.8	561.5	505.6
75–84 years	---	---	---	---	1,971.3	1,733.2	1,469.2	1,308.4
85 years and over	---	---	---	---	4,711.9	4,897.5	3,534.2	3,257.9
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	413.6	319.9	262.2	250.0
All ages, crude	---	---	---	---	336.5	297.5	267.8	260.3
45–54 years	---	---	---	---	172.8	134.3	126.2	124.5
55–64 years	---	---	---	---	521.3	356.3	293.0	284.5
65–74 years	---	---	---	---	1,243.4	885.1	677.6	644.3
75–84 years	---	---	---	---	3,007.7	2,261.9	1,849.3	1,767.4
85 years and over	---	---	---	---	7,663.4	6,606.6	5,374.1	5,032.8
White female⁵								
All ages, age-adjusted ⁴	479.2	441.7	376.7	315.9	250.9	205.6	168.2	158.6
All ages, crude	290.5	306.5	313.8	319.2	298.4	274.5	235.5	224.2
45–54 years	142.4	103.4	91.4	71.2	50.2	40.9	40.8	40.7
55–64 years	460.7	383.0	317.7	248.1	192.4	141.3	114.5	111.4
65–74 years	1,401.6	1,229.8	1,044.0	796.7	583.6	445.2	351.8	325.8
75–84 years	3,926.2	3,629.7	3,143.5	2,493.6	1,874.3	1,452.4	1,193.3	1,123.9
85 years and over	9,086.9	9,280.8	7,839.9	7,501.6	6,563.4	5,801.4	4,691.0	4,402.6
Black or African American female⁵								
All ages, age-adjusted ⁴	538.9	488.9	435.6	378.6	327.5	277.6	228.3	212.5
All ages, crude	289.9	268.5	261.0	249.7	237.0	212.6	185.2	174.3
45–54 years	526.8	360.7	290.9	202.4	155.3	125.0	115.4	111.0
55–64 years	1,210.7	952.3	710.5	530.1	442.0	332.8	272.0	251.3
65–74 years	1,659.4	1,680.5	1,553.2	1,210.3	1,017.5	815.2	614.9	578.3
75–84 years ⁶	3,499.3	2,926.9	2,964.1	2,707.2	2,250.9	1,913.1	1,595.1	1,461.7
85 years and over	---	5,650.0	5,003.8	5,796.5	5,766.1	5,298.7	4,365.6	4,049.4

See footnotes at end of table.

Table 32 (page 3 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native female ⁵								
All ages, age-adjusted ⁴	---	---	---	175.4	153.1	143.6	115.9	113.2
All ages, crude	---	---	---	80.3	77.5	71.9	75.1	75.1
45–54 years	---	---	---	65.2	62.0	40.2	52.0	41.8
55–64 years	---	---	---	193.5	197.0	149.4	122.1	125.2
65–74 years	---	---	---	577.2	492.8	391.8	348.6	322.3
75–84 years	---	---	---	1,364.3	1,050.3	1,044.1	846.8	937.9
85 years and over	---	---	---	2,893.3	2,868.7	3,146.3	2,145.9	1,883.1
Asian or Pacific Islander female ⁵								
All ages, age-adjusted ⁴	---	---	---	132.3	149.2	115.7	91.9	87.3
All ages, crude	---	---	---	57.0	62.0	65.0	66.2	64.9
45–54 years	---	---	---	28.6	17.5	15.9	15.8	15.9
55–64 years	---	---	---	92.9	99.0	68.8	56.9	48.4
65–74 years	---	---	---	313.3	323.9	229.6	194.3	187.4
75–84 years	---	---	---	1,053.2	1,130.9	866.2	682.9	639.8
85 years and over	---	---	---	3,211.0	4,161.2	3,367.2	2,560.3	2,492.6
Hispanic or Latina female ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	177.2	163.7	129.1	118.9
All ages, crude	---	---	---	---	79.4	71.5	66.2	62.6
45–54 years	---	---	---	---	43.5	28.2	26.2	27.3
55–64 years	---	---	---	---	153.2	111.2	92.6	86.9
65–74 years	---	---	---	---	460.4	366.3	305.9	273.0
75–84 years	---	---	---	---	1,259.7	1,169.4	973.4	894.5
85 years and over	---	---	---	---	4,440.3	4,605.8	3,341.3	3,078.3
White, not Hispanic or Latina female ⁷								
All ages, age-adjusted ⁴	---	---	---	---	252.6	206.8	170.3	160.9
All ages, crude	---	---	---	---	320.0	304.9	266.4	254.7
45–54 years	---	---	---	---	50.2	41.9	42.4	42.2
55–64 years	---	---	---	---	193.6	142.9	116.1	113.2
65–74 years	---	---	---	---	584.7	448.5	354.6	329.1
75–84 years	---	---	---	---	1,890.2	1,458.9	1,203.6	1,135.8
85 years and over	---	---	---	---	6,615.2	5,822.7	4,745.1	4,460.8

--- Data not available.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Data for 1950 have been revised and differ from previous editions of *Health, United States*. Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, diseases of heart was coded using ICD–9 codes that are most nearly comparable with diseases of heart codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 33 (page 1 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ⁴	180.7	177.9	147.7	96.2	65.3	60.9	46.6	43.6
All ages, crude	104.0	108.0	101.9	75.0	57.8	59.6	48.4	45.8
Under 1 year	5.1	4.1	5.0	4.4	3.8	3.3	3.1	3.4
1–4 years	0.9	0.8	1.0	0.5	0.3	0.3	0.4	0.3
5–14 years	0.5	0.7	0.7	0.3	0.2	0.2	0.2	0.2
15–24 years	1.6	1.8	1.6	1.0	0.6	0.5	0.5	0.5
25–34 years	4.2	4.7	4.5	2.6	2.2	1.5	1.4	1.3
35–44 years	18.7	14.7	15.6	8.5	6.4	5.8	5.2	5.1
45–54 years	70.4	49.2	41.6	25.2	18.7	16.0	15.0	14.7
55–64 years	194.2	147.3	115.8	65.1	47.9	41.0	33.0	33.3
65–74 years	554.7	469.2	384.1	219.0	144.2	128.6	101.1	96.3
75–84 years	1,499.6	1,491.3	1,254.2	786.9	498.0	461.3	359.0	335.1
85 years and over	2,990.1	3,680.5	3,014.3	2,283.7	1,628.9	1,589.2	1,141.8	1,039.6
Male								
All ages, age-adjusted ⁴	186.4	186.1	157.4	102.2	68.5	62.4	46.9	43.9
All ages, crude	102.5	104.5	94.5	63.4	46.7	46.9	38.8	37.0
Under 1 year	6.4	5.0	5.8	5.0	4.4	3.8	3.5	3.9
1–4 years	1.1	0.9	1.2	0.4	0.3	*	0.5	0.3
5–14 years	0.5	0.7	0.8	0.3	0.2	0.2	0.3	0.3
15–24 years	1.8	1.9	1.8	1.1	0.7	0.5	0.4	0.5
25–34 years	4.2	4.5	4.4	2.6	2.1	1.5	1.5	1.4
35–44 years	17.5	14.6	15.7	8.7	6.8	5.8	5.2	5.3
45–54 years	67.9	52.2	44.4	27.2	20.5	17.5	16.5	16.4
55–64 years	205.2	163.8	138.7	74.6	54.3	47.2	38.5	38.7
65–74 years	589.6	530.7	449.5	258.6	166.6	145.0	113.6	108.0
75–84 years	1,543.6	1,555.9	1,361.6	866.3	551.1	490.8	372.9	345.5
85 years and over	3,048.6	3,643.1	2,895.2	2,193.6	1,528.5	1,484.3	1,023.3	932.4
Female								
All ages, age-adjusted ⁴	175.8	170.7	140.0	91.7	62.6	59.1	45.6	42.6
All ages, crude	105.6	111.4	109.0	85.9	68.4	71.8	57.8	54.4
Under 1 year	3.7	3.2	4.0	3.8	3.1	2.7	2.6	2.9
1–4 years	0.7	0.7	0.7	0.5	0.3	0.4	0.3	0.4
5–14 years	0.4	0.6	0.6	0.3	0.2	0.2	0.2	0.2
15–24 years	1.5	1.6	1.4	0.8	0.6	0.5	0.5	0.5
25–34 years	4.3	4.9	4.7	2.6	2.2	1.5	1.2	1.2
35–44 years	19.9	14.8	15.6	8.4	6.1	5.7	5.1	4.8
45–54 years	72.9	46.3	39.0	23.3	17.0	14.5	13.6	13.0
55–64 years	183.1	131.8	95.3	56.8	42.2	35.3	27.9	28.2
65–74 years	522.1	415.7	333.3	188.7	126.7	115.1	90.5	86.5
75–84 years	1,462.2	1,441.1	1,183.1	740.1	466.2	442.1	349.5	328.0
85 years and over	2,949.4	3,704.4	3,081.0	2,323.1	1,667.6	1,632.0	1,196.1	1,089.8
White male ⁵								
All ages, age-adjusted ⁴	182.1	181.6	153.7	98.7	65.5	59.8	44.7	41.7
All ages, crude	100.5	102.7	93.5	63.1	46.9	48.4	39.7	37.7
45–54 years	53.7	40.9	35.6	21.7	15.4	13.6	12.8	12.8
55–64 years	182.2	139.0	119.9	64.0	45.7	39.7	31.7	31.5
65–74 years	569.7	501.0	420.0	239.8	152.9	133.8	103.0	97.1
75–84 years	1,556.3	1,564.8	1,361.6	852.7	539.2	480.0	364.8	338.5
85 years and over	3,127.1	3,734.8	3,018.1	2,230.8	1,545.4	1,490.7	1,033.7	941.3
Black or African American male ⁵								
All ages, age-adjusted ⁴	228.8	238.5	206.4	142.0	102.2	89.6	70.5	67.1
All ages, crude	122.0	122.9	108.8	73.0	53.0	46.1	40.3	39.3
45–54 years	211.9	166.1	136.1	82.1	68.4	49.5	44.8	43.5
55–64 years	522.8	439.9	343.4	189.7	141.7	115.4	103.7	105.9
65–74 years	783.6	899.2	780.1	472.3	326.9	268.5	224.3	218.7
75–84 years ⁶	1,504.9	1,475.2	1,445.7	1,066.3	721.5	659.2	503.7	471.1
85 years and over	---	2,700.0	1,963.1	1,873.2	1,421.5	1,458.8	983.5	882.0

See footnotes at end of table.

Table 33 (page 2 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native male⁵								
All ages, age-adjusted ⁴	---	---	---	66.4	44.3	46.1	31.3	25.8
All ages, crude	---	---	---	23.1	16.0	16.8	15.8	14.4
45–54 years	---	---	---	*	*	13.3	13.7	16.3
55–64 years	---	---	---	72.0	39.8	48.6	36.0	35.0
65–74 years	---	---	---	170.5	120.3	144.7	113.0	82.9
75–84 years	---	---	---	523.9	325.9	373.3	229.4	174.3
85 years and over	---	---	---	1,384.7	949.8	834.9	466.2	344.5
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	71.4	59.1	58.0	41.5	39.8
All ages, crude	---	---	---	28.7	23.3	27.2	23.8	23.6
45–54 years	---	---	---	17.0	15.6	15.0	14.4	13.4
55–64 years	---	---	---	59.9	51.8	49.3	33.4	36.3
65–74 years	---	---	---	197.9	167.9	135.6	105.0	108.9
75–84 years	---	---	---	619.5	483.9	438.7	337.4	294.9
85 years and over	---	---	---	1,399.0	1,196.6	1,415.6	873.6	865.9
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	46.5	50.5	38.0	35.9
All ages, crude	---	---	---	---	15.6	15.8	14.4	14.3
45–54 years	---	---	---	---	20.0	18.1	17.8	17.0
55–64 years	---	---	---	---	49.2	48.8	40.3	41.1
65–74 years	---	---	---	---	126.4	136.1	106.2	100.1
75–84 years	---	---	---	---	356.6	392.9	294.0	292.8
85 years and over	---	---	---	---	866.3	1,029.9	692.4	581.9
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	66.3	59.9	44.8	41.7
All ages, crude	---	---	---	---	50.6	53.9	44.8	42.6
45–54 years	---	---	---	---	14.9	13.0	12.1	12.1
55–64 years	---	---	---	---	45.1	38.7	30.7	30.3
65–74 years	---	---	---	---	154.5	133.1	102.4	96.5
75–84 years	---	---	---	---	547.3	482.3	368.2	340.5
85 years and over	---	---	---	---	1,578.7	1,505.9	1,050.5	960.2
White female⁵								
All ages, age-adjusted ⁴	169.7	165.0	135.5	89.0	60.3	57.3	44.0	41.1
All ages, crude	103.3	110.1	109.8	88.6	71.6	76.9	61.6	57.9
45–54 years	55.0	33.8	30.5	18.6	13.5	11.2	10.5	10.4
55–64 years	156.9	103.0	78.1	48.6	35.8	30.2	23.8	24.1
65–74 years	498.1	383.3	303.2	172.5	116.1	107.3	83.2	79.3
75–84 years	1,471.3	1,444.7	1,176.8	728.8	456.5	434.2	342.9	321.5
85 years and over	3,017.9	3,795.7	3,167.6	2,362.7	1,685.9	1,646.7	1,208.5	1,102.2
Black or African American female⁵								
All ages, age-adjusted ⁴	238.4	232.5	189.3	119.6	84.0	76.2	60.7	57.0
All ages, crude	128.3	127.7	112.2	77.8	60.7	58.3	49.1	46.5
45–54 years	248.9	166.2	119.4	61.8	44.1	38.1	35.0	31.3
55–64 years	567.7	452.0	272.4	138.4	96.9	76.4	59.8	61.1
65–74 years	754.4	830.5	673.5	361.7	236.7	190.9	153.7	148.9
75–84 years ⁶	1,496.7	1,413.1	1,338.3	917.5	595.0	549.2	450.2	415.6
85 years and over	---	2,578.9	2,210.5	1,891.6	1,495.2	1,556.5	1,156.5	1,060.5

See footnotes at end of table.

Table 33 (page 3 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native female⁵								
All ages, age-adjusted ⁴	---	---	---	51.2	38.4	43.7	37.1	30.9
All ages, crude	---	---	---	22.0	19.3	21.5	23.9	19.8
45–54 years	---	---	---	*	*	14.4	17.7	*
55–64 years	---	---	---	*	40.7	37.9	35.8	16.2
65–74 years	---	---	---	128.3	100.5	79.5	115.2	78.8
75–84 years	---	---	---	404.2	282.0	391.1	287.9	267.6
85 years and over	---	---	---	1,095.5	776.2	931.5	627.3	648.1
Asian or Pacific Islander female⁵								
All ages, age-adjusted ⁴	---	---	---	60.8	54.9	49.1	36.3	34.9
All ages, crude	---	---	---	26.4	24.3	28.7	26.6	26.7
45–54 years	---	---	---	20.3	19.7	13.3	9.9	10.4
55–64 years	---	---	---	43.7	42.1	33.3	27.2	28.8
65–74 years	---	---	---	136.1	124.0	102.8	81.0	80.8
75–84 years	---	---	---	446.6	396.6	386.0	269.2	284.2
85 years and over	---	---	---	1,545.2	1,395.0	1,246.6	928.3	777.0
Hispanic or Latina female^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	43.7	43.0	33.5	32.3
All ages, crude	---	---	---	---	20.1	19.4	17.7	17.5
45–54 years	---	---	---	---	15.2	12.4	12.1	11.8
55–64 years	---	---	---	---	38.5	31.9	27.1	27.8
65–74 years	---	---	---	---	102.6	95.2	75.8	76.9
75–84 years	---	---	---	---	308.5	311.3	262.6	240.6
85 years and over	---	---	---	---	1,055.3	1,108.9	762.5	742.9
White, not Hispanic or Latina female⁷								
All ages, age-adjusted ⁴	---	---	---	---	61.0	57.6	44.4	41.5
All ages, crude	---	---	---	---	77.2	85.5	69.6	65.5
45–54 years	---	---	---	---	13.2	10.9	10.2	10.1
55–64 years	---	---	---	---	35.7	29.9	23.3	23.5
65–74 years	---	---	---	---	116.9	107.6	83.6	79.0
75–84 years	---	---	---	---	461.9	438.3	347.2	325.9
85 years and over	---	---	---	---	1,714.7	1,661.6	1,227.3	1,118.7

--- Data not available.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking a Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, cerebrovascular diseases was coded using ICD–9 codes that are most nearly comparable with cerebrovascular diseases codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 34 (page 1 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted ⁴	193.9	193.9	198.6	207.9	216.0	199.6	183.8	180.7
All ages, crude	139.8	149.2	162.8	183.9	203.2	196.5	188.7	187.0
Under 1 year	8.7	7.2	4.7	3.2	2.3	2.4	1.8	1.8
1–4 years	11.7	10.9	7.5	4.5	3.5	2.7	2.3	2.3
5–14 years	6.7	6.8	6.0	4.3	3.1	2.5	2.5	2.2
15–24 years	8.6	8.3	8.3	6.3	4.9	4.4	4.1	3.9
25–34 years	20.0	19.5	16.5	13.7	12.6	9.8	9.0	9.0
35–44 years	62.7	59.7	59.5	48.6	43.3	36.6	33.2	31.9
45–54 years	175.1	177.0	182.5	180.0	158.9	127.5	118.6	116.3
55–64 years	390.7	396.8	423.0	436.1	449.6	366.7	326.9	321.2
65–74 years	698.8	713.9	754.2	817.9	872.3	816.3	742.7	727.2
75–84 years	1,153.3	1,127.4	1,169.2	1,232.3	1,348.5	1,335.6	1,274.8	1,263.8
85 years and over	1,451.0	1,450.0	1,320.7	1,594.6	1,752.9	1,819.4	1,637.7	1,606.1
Male								
All ages, age-adjusted ⁴	208.1	225.1	247.6	271.2	280.4	248.9	225.1	220.1
All ages, crude	142.9	162.5	182.1	205.3	221.3	207.2	198.9	196.6
Under 1 year	9.7	7.7	4.4	3.7	2.4	2.6	2.1	1.8
1–4 years	12.5	12.4	8.3	5.2	3.7	3.0	2.6	2.5
5–14 years	7.4	7.6	6.7	4.9	3.5	2.7	2.7	2.5
15–24 years	9.7	10.2	10.4	7.8	5.7	5.1	4.8	4.6
25–34 years	17.7	18.8	16.3	13.4	12.6	9.2	8.8	8.6
35–44 years	45.6	48.9	53.0	44.0	38.5	32.7	28.9	27.4
45–54 years	156.2	170.8	183.5	188.7	162.5	130.9	121.6	119.0
55–64 years	413.1	459.9	511.8	520.8	532.9	415.8	369.5	363.6
65–74 years	791.5	890.5	1,006.8	1,093.2	1,122.2	1,001.9	899.1	870.4
75–84 years	1,332.6	1,389.4	1,588.3	1,790.5	1,914.4	1,760.6	1,649.7	1,631.3
85 years and over	1,668.3	1,741.2	1,720.8	2,369.5	2,739.9	2,710.7	2,319.3	2,248.7
Female								
All ages, age-adjusted ⁴	182.3	168.7	163.2	166.7	175.7	167.6	155.6	153.6
All ages, crude	136.8	136.4	144.4	163.6	186.0	186.2	178.8	177.6
Under 1 year	7.6	6.8	5.0	2.7	2.2	2.3	1.5	1.8
1–4 years	10.8	9.3	6.7	3.7	3.2	2.5	2.0	2.1
5–14 years	6.0	6.0	5.2	3.6	2.8	2.2	2.2	2.0
15–24 years	7.6	6.5	6.2	4.8	4.1	3.6	3.3	3.1
25–34 years	22.2	20.1	16.7	14.0	12.6	10.4	9.1	9.5
35–44 years	79.3	70.0	65.6	53.1	48.1	40.4	37.5	36.4
45–54 years	194.0	183.0	181.5	171.8	155.5	124.2	115.8	113.7
55–64 years	368.2	337.7	343.2	361.7	375.2	321.3	287.4	281.8
65–74 years	612.3	560.2	557.9	607.1	677.4	663.6	610.9	605.9
75–84 years	1,000.7	924.1	891.9	903.1	1,010.3	1,058.5	1,020.3	1,012.5
85 years and over	1,299.7	1,263.9	1,096.7	1,255.7	1,372.1	1,456.4	1,324.6	1,305.5
White male ⁵								
All ages, age-adjusted ⁴	210.0	224.7	244.8	265.1	272.2	243.9	222.3	217.9
All ages, crude	147.2	166.1	185.1	208.7	227.7	218.1	210.6	208.7
25–34 years	17.7	18.8	16.2	13.6	12.3	9.2	8.5	8.6
35–44 years	44.5	46.3	50.1	41.1	35.8	30.9	28.4	26.7
45–54 years	150.8	164.1	172.0	175.4	149.9	123.5	115.7	113.6
55–64 years	409.4	450.9	498.1	497.4	508.2	401.9	356.5	352.9
65–74 years	798.7	887.3	997.0	1,070.7	1,090.7	984.3	889.9	862.0
75–84 years	1,367.6	1,413.7	1,592.7	1,779.7	1,883.2	1,736.0	1,646.2	1,631.3
85 years and over	1,732.7	1,791.4	1,772.2	2,375.6	2,715.1	2,693.7	2,322.7	2,258.3
Black or African American male ⁵								
All ages, age-adjusted ⁴	178.9	227.6	291.9	353.4	397.9	340.3	293.7	284.9
All ages, crude	106.6	136.7	171.6	205.5	221.9	188.5	175.4	172.3
25–34 years	18.0	18.4	18.8	14.1	15.7	10.1	11.9	10.0
35–44 years	55.7	72.9	81.3	73.8	64.3	48.4	36.2	36.5
45–54 years	211.7	244.7	311.2	333.0	302.6	214.2	186.1	182.2
55–64 years	490.8	579.7	689.2	812.5	859.2	626.4	568.3	542.9
65–74 years	636.5	938.5	1,168.9	1,417.2	1,613.9	1,363.8	1,183.8	1,156.5
75–84 years ⁶	853.5	1,053.3	1,624.8	2,029.6	2,478.3	2,351.8	2,017.5	1,979.1
85 years and over	---	1,155.2	1,387.0	2,393.9	3,238.3	3,264.8	2,683.7	2,543.3

See footnotes at end of table.

Table 34 (page 2 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native male⁵								
All ages, age-adjusted ⁴	---	---	---	140.5	145.8	155.8	147.6	135.5
All ages, crude	---	---	---	58.1	61.4	67.0	82.2	76.1
25–34 years	---	---	---	*	*	*	*	*
35–44 years	---	---	---	*	22.8	21.4	26.9	15.1
45–54 years	---	---	---	86.9	86.9	70.3	81.7	74.5
55–64 years	---	---	---	213.4	246.2	255.6	269.1	222.8
65–74 years	---	---	---	613.0	530.6	648.0	622.2	583.5
75–84 years	---	---	---	936.4	1,038.4	1,152.5	1,020.7	1,016.8
85 years and over	---	---	---	1,471.2	1,654.4	1,584.2	1,302.6	1,161.0
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	165.2	172.5	150.8	133.0	126.7
All ages, crude	---	---	---	81.9	82.7	85.2	86.7	84.5
25–34 years	---	---	---	6.3	9.2	7.4	7.2	6.9
35–44 years	---	---	---	29.4	27.7	26.1	20.0	19.6
45–54 years	---	---	---	108.2	92.6	78.5	75.9	70.2
55–64 years	---	---	---	298.5	274.6	229.2	199.4	197.2
65–74 years	---	---	---	581.2	687.2	559.4	492.2	459.9
75–84 years	---	---	---	1,147.6	1,229.9	1,086.1	991.4	942.3
85 years and over	---	---	---	1,798.7	1,837.0	1,823.2	1,488.6	1,439.0
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	174.7	171.7	152.7	143.4
All ages, crude	---	---	---	---	65.5	61.3	63.0	60.4
25–34 years	---	---	---	---	8.0	6.9	6.5	6.1
35–44 years	---	---	---	---	22.5	20.1	17.8	16.0
45–54 years	---	---	---	---	96.6	79.4	75.9	71.4
55–64 years	---	---	---	---	294.0	253.1	236.9	224.8
65–74 years	---	---	---	---	655.5	651.2	603.5	574.8
75–84 years	---	---	---	---	1,233.4	1,306.4	1,161.8	1,098.4
85 years and over	---	---	---	---	2,019.4	2,049.7	1,601.5	1,440.1
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	276.7	247.7	227.3	223.4
All ages, crude	---	---	---	---	246.2	244.4	240.7	239.9
25–34 years	---	---	---	---	12.8	9.7	9.0	9.3
35–44 years	---	---	---	---	36.8	32.3	30.5	28.9
45–54 years	---	---	---	---	153.9	127.2	120.3	118.7
55–64 years	---	---	---	---	520.6	412.0	366.1	363.4
65–74 years	---	---	---	---	1,109.0	1,002.1	910.4	883.0
75–84 years	---	---	---	---	1,906.6	1,750.2	1,673.7	1,662.9
85 years and over	---	---	---	---	2,744.4	2,714.1	2,358.3	2,300.2
White female⁵								
All ages, age-adjusted ⁴	182.0	167.7	162.5	165.2	174.0	166.9	155.2	153.6
All ages, crude	139.9	139.8	149.4	170.3	196.1	199.4	191.1	190.1
25–34 years	20.9	18.8	16.3	13.5	11.9	10.1	8.6	9.1
35–44 years	74.5	66.6	62.4	50.9	46.2	38.2	36.0	34.9
45–54 years	185.8	175.7	177.3	166.4	150.9	120.1	110.7	109.5
55–64 years	362.5	329.0	338.6	355.5	368.5	319.7	284.0	279.1
65–74 years	616.5	562.1	554.7	605.2	675.1	665.6	616.2	611.5
75–84 years	1,026.6	939.3	903.5	905.4	1,011.8	1,063.4	1,030.5	1,023.0
85 years and over	1,348.3	1,304.9	1,126.6	1,266.8	1,372.3	1,459.1	1,333.6	1,317.5

See footnotes at end of table.

Table 34 (page 3 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Black or African American female⁵								
All ages, age-adjusted ⁴	174.1	174.3	173.4	189.5	205.9	193.8	179.6	176.1
All ages, crude	111.8	113.8	117.3	136.5	156.1	151.8	149.1	147.7
25–34 years	34.3	31.0	20.9	18.3	18.7	13.5	12.6	12.5
35–44 years	119.8	102.4	94.6	73.5	67.4	58.9	52.5	50.8
45–54 years	277.0	254.8	228.6	230.2	209.9	173.9	166.3	158.7
55–64 years	484.6	442.7	404.8	450.4	482.4	391.0	365.4	356.9
65–74 years	477.3	541.6	615.8	662.4	773.2	753.1	679.6	672.9
75–84 years ⁶	605.3	696.3	763.3	923.9	1,059.9	1,124.0	1,071.9	1,065.3
85 years and over	---	728.9	791.5	1,159.9	1,431.3	1,527.7	1,365.8	1,324.4
American Indian or Alaska Native female⁵								
All ages, age-adjusted ⁴	---	---	---	94.0	106.9	108.3	105.9	108.3
All ages, crude	---	---	---	50.4	62.1	61.3	73.8	76.8
25–34 years	---	---	---	*	*	*	*	*
35–44 years	---	---	---	36.9	31.0	23.7	23.5	25.4
45–54 years	---	---	---	96.9	104.5	59.7	85.5	72.8
55–64 years	---	---	---	198.4	213.3	200.9	201.5	193.8
65–74 years	---	---	---	350.8	438.9	458.3	475.8	469.8
75–84 years	---	---	---	446.4	554.3	714.0	701.5	756.8
85 years and over	---	---	---	786.5	843.7	983.2	581.0	684.8
Asian or Pacific Islander female⁵								
All ages, age-adjusted ⁴	---	---	---	93.0	103.0	100.7	94.5	92.2
All ages, crude	---	---	---	54.1	60.5	72.1	78.1	77.8
25–34 years	---	---	---	9.5	7.3	8.1	7.7	7.3
35–44 years	---	---	---	38.7	29.8	28.9	25.1	24.7
45–54 years	---	---	---	99.8	93.9	78.2	75.4	73.5
55–64 years	---	---	---	174.7	196.2	176.5	171.3	160.2
65–74 years	---	---	---	301.9	346.2	357.4	328.1	330.9
75–84 years	---	---	---	522.1	641.4	650.1	606.8	602.4
85 years and over	---	---	---	800.0	971.7	988.5	942.0	878.4
Hispanic or Latina female^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	111.9	110.8	101.9	100.4
All ages, crude	---	---	---	---	60.7	58.5	59.5	59.7
25–34 years	---	---	---	---	9.7	7.8	7.1	8.5
35–44 years	---	---	---	---	34.8	30.7	27.0	27.9
45–54 years	---	---	---	---	100.5	84.7	79.9	78.1
55–64 years	---	---	---	---	205.4	192.5	172.5	174.4
65–74 years	---	---	---	---	404.8	410.0	382.5	370.2
75–84 years	---	---	---	---	663.0	716.5	688.5	665.9
85 years and over	---	---	---	---	1,022.7	1,056.5	880.4	884.9

See footnotes at end of table.

Table 34 (page 4 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
White, not Hispanic or Latina female ⁷	Deaths per 100,000 resident population							
All ages, age-adjusted ⁴	---	---	---	---	177.5	170.0	159.1	157.6
All ages, crude	---	---	---	---	210.6	220.6	215.1	214.7
25–34 years	---	---	---	---	11.9	10.5	8.9	9.2
35–44 years	---	---	---	---	47.0	38.9	37.5	35.9
45–54 years	---	---	---	---	154.9	123.0	113.9	113.0
55–64 years	---	---	---	---	379.5	328.9	293.6	288.5
65–74 years	---	---	---	---	688.5	681.0	634.4	631.3
75–84 years	---	---	---	---	1,027.2	1,075.3	1,049.5	1,044.4
85 years and over	---	---	---	---	1,385.7	1,468.7	1,353.2	1,336.7

--- Data not available.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). See [Appendix II, Cause of death; Tables IV and V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 35 (page 1 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ⁴	15.0	24.1	37.1	49.9	59.3	56.1	52.6	51.5
All ages, crude	12.2	20.3	32.1	45.8	56.8	55.3	53.7	53.0
Under 25 years	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
25–34 years	0.8	1.0	0.9	0.6	0.7	0.5	0.3	0.4
35–44 years	4.5	6.8	11.0	9.2	6.8	6.1	5.3	4.6
45–54 years	20.4	29.6	43.4	54.1	46.8	31.6	29.7	29.1
55–64 years	48.7	75.3	109.1	138.2	160.6	122.4	103.3	99.1
65–74 years	59.7	108.1	164.5	233.3	288.4	284.2	259.6	253.1
75–84 years	55.8	91.5	163.2	240.5	333.3	370.8	375.6	373.5
85 years and over	42.3	65.6	101.7	176.0	242.5	302.1	302.3	300.5
Male								
All ages, age-adjusted ⁴	24.6	43.6	67.5	85.2	91.1	76.7	69.0	67.0
All ages, crude	19.9	35.4	53.4	68.6	75.1	65.5	61.8	60.5
Under 25 years	0.0	0.0	0.1	0.1	0.0	*	*	*
25–34 years	1.1	1.4	1.3	0.8	0.9	0.5	0.4	0.4
35–44 years	7.1	10.5	16.1	11.9	8.5	6.9	5.5	4.7
45–54 years	35.0	50.6	67.5	76.0	59.7	38.5	35.1	33.8
55–64 years	83.8	139.3	189.7	213.6	222.9	154.0	127.6	121.6
65–74 years	98.7	204.3	320.8	403.9	430.4	377.9	330.7	319.4
75–84 years	82.6	167.1	330.8	488.8	572.9	532.2	515.1	509.9
85 years and over	62.5	107.7	194.0	368.1	513.2	521.2	468.0	457.7
Female								
All ages, age-adjusted ⁴	5.8	7.5	13.1	24.4	37.1	41.3	40.5	40.0
All ages, crude	4.5	6.4	11.9	24.3	39.4	45.4	45.9	45.7
Under 25 years	0.1	0.0	0.0	*	*	*	*	*
25–34 years	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.4
35–44 years	1.9	3.2	6.1	6.5	5.2	5.3	5.1	4.5
45–54 years	5.8	9.2	21.0	33.7	34.5	25.0	24.5	24.6
55–64 years	13.6	15.4	36.8	72.0	105.0	93.3	80.7	78.2
65–74 years	23.3	24.4	43.1	102.7	177.6	206.9	199.6	197.0
75–84 years	32.9	32.8	52.4	94.1	190.1	265.6	280.9	280.3
85 years and over	28.2	38.8	50.0	91.9	138.1	212.8	226.2	226.9
White male ⁵								
All ages, age-adjusted ⁴	25.1	43.6	67.1	83.8	89.0	75.7	68.7	66.8
All ages, crude	20.8	36.4	54.6	70.2	77.8	69.4	65.9	64.6
45–54 years	35.1	49.2	63.3	70.9	55.2	35.7	33.3	31.7
55–64 years	85.4	139.2	186.8	205.6	213.7	150.8	123.4	118.3
65–74 years	101.5	207.5	325.0	401.0	422.1	374.9	331.8	319.8
75–84 years	85.5	170.4	336.7	493.5	572.2	529.9	519.9	514.6
85 years and over	67.4	109.4	199.6	374.1	516.3	522.4	469.9	464.0
Black or African American male ⁵								
All ages, age-adjusted ⁴	17.8	42.6	75.4	107.6	125.4	101.1	86.4	83.7
All ages, crude	12.1	28.1	47.7	66.6	73.7	58.3	53.0	52.0
45–54 years	34.4	68.4	115.4	133.8	114.9	70.7	56.9	56.9
55–64 years	68.3	146.8	234.3	321.1	358.6	223.5	199.1	184.3
65–74 years	53.8	168.3	300.5	472.3	585.4	488.8	408.8	402.7
75–84 years ⁶	36.2	107.3	271.6	472.9	645.4	642.5	565.2	563.9
85 years and over	---	82.8	137.0	311.3	499.5	562.8	495.5	442.3
American Indian or Alaska Native male ⁵								
All ages, age-adjusted ⁴	---	---	---	31.7	47.5	42.9	40.4	37.6
All ages, crude	---	---	---	14.2	20.0	18.1	22.6	21.2
45–54 years	---	---	---	*	26.6	14.5	19.8	18.3
55–64 years	---	---	---	72.0	97.8	86.0	83.0	64.4
65–74 years	---	---	---	202.8	194.3	184.8	191.2	202.2
75–84 years	---	---	---	*	356.2	367.9	305.8	294.1
85 years and over	---	---	---	*	*	*	*	*

See footnotes at end of table.

Table 35 (page 2 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	43.3	44.2	40.9	35.9	35.3
All ages, crude	---	---	---	22.1	20.7	22.7	22.9	23.2
45–54 years	---	---	---	33.3	18.8	17.2	15.6	18.0
55–64 years	---	---	---	94.4	74.4	61.4	57.3	56.2
65–74 years	---	---	---	174.3	215.8	183.2	144.1	141.2
75–84 years	---	---	---	301.3	307.5	323.2	286.1	285.6
85 years and over	---	---	---	*	421.3	378.0	381.2	342.6
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	44.1	39.0	33.3	30.3
All ages, crude	---	---	---	---	16.2	13.3	13.0	12.0
45–54 years	---	---	---	---	21.5	14.8	11.9	10.5
55–64 years	---	---	---	---	80.7	58.6	52.3	44.8
65–74 years	---	---	---	---	195.5	167.3	151.4	140.1
75–84 years	---	---	---	---	313.4	327.5	281.6	254.2
85 years and over	---	---	---	---	420.7	368.8	269.0	263.9
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	91.1	77.9	71.4	69.7
All ages, crude	---	---	---	---	84.7	78.9	76.8	75.8
45–54 years	---	---	---	---	57.8	37.7	36.0	34.5
55–64 years	---	---	---	---	221.0	157.7	129.7	124.8
65–74 years	---	---	---	---	431.4	387.3	345.6	334.0
75–84 years	---	---	---	---	580.4	537.7	534.1	531.2
85 years and over	---	---	---	---	520.9	527.3	480.2	474.2
White female⁵								
All ages, age-adjusted ⁴	5.9	6.8	13.1	24.5	37.6	42.3	41.5	41.1
All ages, crude	4.7	5.9	12.3	25.6	42.4	49.9	50.4	50.2
45–54 years	5.7	9.0	20.9	33.0	34.6	24.8	24.0	24.0
55–64 years	13.7	15.1	37.2	71.9	105.7	96.1	82.7	80.5
65–74 years	23.7	24.8	42.9	104.6	181.3	213.2	207.2	205.2
75–84 years	34.0	32.7	52.6	95.2	194.6	272.7	288.4	288.8
85 years and over	29.3	39.1	50.6	92.4	138.3	215.9	229.9	231.9
Black or African American female⁵								
All ages, age-adjusted ⁴	4.5	6.8	13.7	24.8	36.8	39.8	40.0	39.0
All ages, crude	2.8	4.3	9.4	18.3	28.1	30.8	32.7	32.3
45–54 years	7.5	11.3	23.9	43.4	41.3	32.9	33.6	34.7
55–64 years	12.9	17.9	33.5	79.9	117.9	95.3	87.9	82.6
65–74 years	14.0	18.1	46.1	88.0	164.3	194.1	184.5	179.1
75–84 years ⁶	*	31.3	49.1	79.4	148.1	224.3	253.5	251.3
85 years and over	---	34.2	44.8	85.8	134.9	185.9	205.9	191.9
American Indian or Alaska Native female⁵								
All ages, age-adjusted ⁴	---	---	---	11.7	19.3	24.8	29.4	26.3
All ages, crude	---	---	---	6.0	11.2	14.0	20.0	18.5
45–54 years	---	---	---	*	22.9	12.1	18.6	12.1
55–64 years	---	---	---	*	53.7	52.6	56.8	59.7
65–74 years	---	---	---	*	78.5	151.5	166.1	144.7
75–84 years	---	---	---	*	111.8	136.3	192.8	173.0
85 years and over	---	---	---	*	*	*	*	*

See footnotes at end of table.

Table 35 (page 3 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Asian or Pacific Islander female ⁵								
All ages, age-adjusted ⁴	---	---	---	15.4	18.9	18.4	18.1	17.7
All ages, crude	---	---	---	8.4	10.5	12.6	14.5	14.5
45–54 years	---	---	---	13.5	11.3	9.9	10.9	10.2
55–64 years	---	---	---	24.6	38.3	30.4	28.1	27.5
65–74 years	---	---	---	62.4	71.6	77.0	74.7	75.0
75–84 years	---	---	---	117.7	137.9	135.0	140.0	130.0
85 years and over	---	---	---	*	172.9	175.3	163.9	166.4
Hispanic or Latina female ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	14.1	14.7	14.4	13.6
All ages, crude	---	---	---	---	7.2	7.2	7.8	7.5
45–54 years	---	---	---	---	8.7	7.1	7.1	6.3
55–64 years	---	---	---	---	25.1	22.2	20.4	19.0
65–74 years	---	---	---	---	66.8	66.0	63.1	65.2
75–84 years	---	---	---	---	94.3	112.3	114.9	107.6
85 years and over	---	---	---	---	118.2	137.5	129.0	106.0
White, not Hispanic or Latina female ⁷								
All ages, age-adjusted ⁴	---	---	---	---	39.0	44.1	43.7	43.5
All ages, crude	---	---	---	---	46.2	56.4	58.2	58.4
45–54 years	---	---	---	---	36.6	26.4	26.0	26.3
55–64 years	---	---	---	---	111.3	102.2	88.5	86.4
65–74 years	---	---	---	---	186.4	222.9	219.3	217.3
75–84 years	---	---	---	---	199.1	279.2	298.7	300.5
85 years and over	---	---	---	---	139.0	218.0	234.1	237.8

0.0 Quantity more than zero but less than 0.05.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, lung cancer was coded using ICD–9 codes that are most comparable with lung cancer codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/dataawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 36 (page 1 of 2). Death rates for malignant neoplasm of breast among females, by race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
All females								
All ages, age-adjusted ⁴	31.9	31.7	32.1	31.9	33.3	26.8	24.1	23.5
All ages, crude	24.7	26.1	28.4	30.6	34.0	29.2	27.3	26.9
Under 25 years	*	*	*	*	*	*	*	*
25–34 years	3.8	3.8	3.9	3.3	2.9	2.3	1.8	1.8
35–44 years	20.8	20.2	20.4	17.9	17.8	12.4	11.3	10.8
45–54 years	46.9	51.4	52.6	48.1	45.4	33.0	28.7	27.6
55–64 years	69.9	70.8	77.6	80.5	78.6	59.3	54.5	53.7
65–74 years	95.0	90.0	93.8	101.1	111.7	88.3	79.2	76.9
75–84 years	139.8	129.9	127.4	126.4	146.3	128.9	119.2	119.2
85 years and over	195.5	191.9	157.1	169.3	196.8	205.7	177.9	169.9
White ⁵								
All ages, age-adjusted ⁴	32.4	32.0	32.5	32.1	33.2	26.3	23.4	22.9
All ages, crude	25.7	27.2	29.9	32.3	35.9	30.7	28.3	27.9
35–44 years	20.8	19.7	20.2	17.3	17.1	11.3	10.2	9.8
45–54 years	47.1	51.2	53.0	48.1	44.3	31.2	26.2	25.6
55–64 years	70.9	71.8	79.3	81.3	78.5	57.9	52.4	52.0
65–74 years	96.3	91.6	95.9	103.7	113.3	89.3	79.3	77.1
75–84 years	143.6	132.8	129.6	128.4	148.2	130.2	120.7	120.4
85 years and over	204.2	199.7	161.9	171.7	198.0	205.5	179.1	170.3
Black or African American ⁵								
All ages, age-adjusted ⁴	25.3	27.9	28.9	31.7	38.1	34.5	32.8	31.6
All ages, crude	16.4	18.7	19.7	22.9	29.0	27.9	28.4	27.5
35–44 years	21.0	24.8	24.4	24.1	25.8	20.9	20.2	19.0
45–54 years	46.5	54.4	52.0	52.7	60.5	51.5	50.0	44.5
55–64 years	64.3	63.2	64.7	79.9	93.1	80.9	81.1	76.3
65–74 years	67.0	72.3	77.3	84.3	112.2	98.6	96.2	91.2
75–84 years ⁶	81.0	87.5	101.8	114.1	140.5	139.8	126.6	138.2
85 years and over	---	92.1	112.1	149.9	201.5	238.7	201.8	199.2
American Indian or Alaska Native ⁵								
All ages, age-adjusted ⁴	---	---	---	10.8	13.7	13.6	15.2	12.8
All ages, crude	---	---	---	6.1	8.6	8.7	10.5	10.0
35–44 years	---	---	---	*	*	*	*	*
45–54 years	---	---	---	*	23.9	14.4	12.9	15.8
55–64 years	---	---	---	*	*	40.0	21.0	30.9
65–74 years	---	---	---	*	*	42.5	65.8	43.0
75–84 years	---	---	---	*	*	71.8	117.4	54.1
85 years and over	---	---	---	*	*	*	*	*
Asian or Pacific Islander ⁵								
All ages, age-adjusted ⁴	---	---	---	11.9	13.7	12.3	12.2	12.1
All ages, crude	---	---	---	8.2	9.3	10.2	11.0	11.1
35–44 years	---	---	---	10.4	8.4	8.1	6.7	5.2
45–54 years	---	---	---	23.4	26.4	22.3	18.5	19.6
55–64 years	---	---	---	35.7	33.8	31.3	35.0	33.0
65–74 years	---	---	---	*	38.5	34.7	32.1	39.1
75–84 years	---	---	---	*	48.0	37.5	52.2	42.5
85 years and over	---	---	---	*	*	68.2	62.0	68.8
Hispanic or Latina ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	19.5	16.9	15.0	15.0
All ages, crude	---	---	---	---	11.5	9.7	9.4	9.6
35–44 years	---	---	---	---	11.7	8.7	8.0	7.9
45–54 years	---	---	---	---	32.8	23.9	20.0	19.6
55–64 years	---	---	---	---	45.8	39.1	34.7	36.4
65–74 years	---	---	---	---	64.8	54.9	46.9	47.3
75–84 years	---	---	---	---	67.2	74.9	73.3	68.8
85 years and over	---	---	---	---	102.8	105.8	95.1	89.9

See footnotes at end of table.

Table 36 (page 2 of 2). Death rates for malignant neoplasm of breast among females, by race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
White, not Hispanic or Latina ⁷								
All ages, age-adjusted ⁴	---	---	---	---	33.9	26.8	24.0	23.5
All ages, crude	---	---	---	---	38.5	33.8	31.8	31.4
35–44 years	---	---	---	---	17.5	11.6	10.6	10.0
45–54 years	---	---	---	---	45.2	31.7	26.8	26.3
55–64 years	---	---	---	---	80.6	59.2	53.9	53.4
65–74 years	---	---	---	---	115.7	91.4	81.9	79.6
75–84 years	---	---	---	---	151.4	132.2	123.4	123.6
85 years and over	---	---	---	---	201.5	208.3	182.9	174.1

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.
 --- Data not available.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and beyond were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/dataawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 37 (page 1 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1980 ¹	1990 ¹	1995 ¹	2000 ²	2002 ²	2003 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population									
All persons									
All ages, age-adjusted ³	28.3	37.2	40.1	44.2	43.5	43.3	41.1	43.2	40.5
All ages, crude	24.7	34.9	38.6	43.4	43.3	43.5	41.5	44.2	41.6
Under 1 year	1.6	1.4	1.1	0.9	1.0	0.8	0.9	0.8	0.7
1–4 years	0.4	0.4	0.2	0.3	0.4	0.3	0.3	0.3	0.3
5–14 years	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
15–24 years	0.3	0.5	0.7	0.5	0.5	0.5	0.4	0.4	0.4
25–34 years	0.5	0.7	0.9	0.7	0.8	0.7	0.6	0.6	0.6
35–44 years	1.6	1.6	1.9	2.1	2.2	2.1	2.0	2.0	1.9
45–54 years	9.8	9.1	8.7	8.6	8.7	8.7	8.4	9.4	9.1
55–64 years	42.7	48.9	46.8	44.2	42.4	43.3	40.4	42.0	39.2
65–74 years	129.1	152.5	159.6	169.4	163.0	163.2	153.8	160.5	149.3
75–84 years	224.4	321.1	349.3	386.1	386.7	383.0	366.7	385.6	363.4
85 years and over	274.0	433.3	520.1	648.6	637.6	635.1	601.7	637.2	589.1
Male									
All ages, age-adjusted ³	49.9	55.5	54.8	55.8	53.5	52.3	49.5	51.2	47.6
All ages, crude	35.1	40.8	41.4	43.5	42.9	42.4	40.6	42.8	40.2
Under 1 year	1.9	1.6	1.4	1.2	1.1	1.1	1.2	*	0.9
1–4 years	0.5	0.5	0.2	0.4	0.6	0.5	0.4	0.4	0.3
5–14 years	0.2	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.4
15–24 years	0.4	0.5	0.7	0.6	0.6	0.5	0.5	0.4	0.4
25–34 years	0.6	0.7	0.9	0.8	0.8	0.8	0.7	0.6	0.7
35–44 years	1.7	1.7	1.7	1.9	2.2	1.9	2.0	1.9	1.8
45–54 years	12.1	9.4	8.8	9.0	9.1	9.1	8.8	9.7	9.2
55–64 years	59.9	58.6	52.3	47.8	45.2	46.5	43.1	45.0	41.9
65–74 years	210.0	204.0	195.6	195.2	184.8	183.6	172.1	180.7	163.2
75–84 years	437.4	500.0	483.8	488.5	480.8	464.9	445.6	463.7	437.3
85 years and over	583.4	815.1	889.8	967.9	894.8	865.9	811.1	819.9	760.8
Female									
All ages, age-adjusted ³	14.9	26.6	31.8	37.4	37.4	37.8	36.0	38.1	35.9
All ages, crude	15.0	29.2	36.0	43.2	43.7	44.4	42.5	45.5	43.0
Under 1 year	1.3	1.2	*	*	*	*	*	*	*
1–4 years	*	*	*	0.3	0.3	*	*	0.3	*
5–14 years	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
15–24 years	0.3	0.5	0.6	0.4	0.4	0.4	0.3	0.3	0.3
25–34 years	0.5	0.7	0.9	0.7	0.7	0.6	0.5	0.6	0.6
35–44 years	1.5	1.5	2.2	2.2	2.3	2.3	2.1	2.1	2.0
45–54 years	7.7	8.8	8.7	8.3	8.2	8.2	8.1	9.0	8.9
55–64 years	27.6	40.3	41.9	41.0	39.8	40.3	38.0	39.2	36.6
65–74 years	67.1	112.3	130.8	148.2	144.9	146.0	138.4	143.4	137.5
75–84 years	98.7	214.2	265.3	319.2	324.1	328.3	313.6	332.5	312.8
85 years and over	138.7	286.0	377.7	518.5	526.0	533.0	507.4	553.3	508.7
White male ⁴									
All ages, age-adjusted ³	51.6	56.6	55.9	57.2	54.9	53.8	51.1	52.8	49.2
All ages, crude	37.9	44.3	45.5	48.3	47.8	47.4	45.5	47.9	45.1
35–44 years	1.2	1.3	1.4	1.6	1.8	1.7	1.7	1.7	1.6
45–54 years	11.4	8.6	8.1	8.4	8.8	8.9	8.5	9.4	9.0
55–64 years	60.0	58.7	52.7	48.6	46.0	47.6	43.8	46.3	42.9
65–74 years	218.4	208.1	200.0	201.4	192.3	191.6	180.6	189.2	171.5
75–84 years	459.8	513.5	497.9	503.6	495.2	478.5	462.4	479.5	453.3
85 years and over	611.2	847.0	918.3	997.4	923.4	894.4	837.7	846.1	788.6
Black or African American male ⁴									
All ages, age-adjusted ³	34.0	47.6	47.4	47.5	46.3	44.4	40.9	44.1	39.5
All ages, crude	19.3	25.2	24.4	24.3	24.1	23.3	22.0	23.9	21.9
35–44 years	5.8	5.3	4.3	4.8	5.7	4.0	4.0	3.8	3.8
45–54 years	19.7	18.8	16.9	15.0	14.4	13.3	13.9	15.1	13.3
55–64 years	66.6	67.4	60.5	54.6	52.3	50.5	50.1	48.9	48.0
65–74 years	142.0	184.5	178.7	176.9	158.0	155.1	140.4	157.3	136.7
75–84 years	229.8	390.9	370.0	370.3	392.2	382.2	336.3	375.6	339.1
85 years and over	271.6	498.0	624.1	693.1	645.4	601.6	566.3	594.9	512.0

See footnotes at end of table.

Table 37 (page 2 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1980 ¹	1990 ¹	1995 ¹	2000 ²	2002 ²	2003 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population									
American Indian or Alaska Native male⁴									
All ages, age-adjusted ³	23.0	38.3	35.6	43.7	35.9	40.3	32.2	34.9	29.0
All ages, crude	8.4	13.8	12.3	15.3	14.3	17.3	14.9	16.3	14.6
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*
55–64 years	*	*	36.5	46.4	34.5	43.8	40.5	37.7	35.0
65–74 years	*	135.7	132.1	111.3	126.1	125.9	121.9	113.0	102.8
75–84 years	*	363.8	307.3	416.6	348.9	387.0	300.0	351.7	265.1
85 years and over	*	*	*	770.7	500.3	563.8	362.9	438.8	357.2
Asian or Pacific Islander male⁴									
All ages, age-adjusted ³	21.5	29.8	28.9	28.3	25.0	25.2	22.6	22.5	22.3
All ages, crude	8.7	11.3	11.8	12.6	12.0	12.5	11.2	11.8	12.0
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	4.8	2.6	*	*	2.3	2.1
55–64 years	*	22.1	15.7	8.8	11.5	12.7	9.6	9.5	8.8
65–74 years	70.6	91.4	87.9	71.3	58.5	58.4	46.8	45.2	44.5
75–84 years	155.7	258.6	240.6	254.3	235.9	234.9	199.8	207.0	219.5
85 years and over	472.4	615.2	650.4	670.7	582.5	590.7	596.1	574.1	529.5
Hispanic or Latino male^{4,5}									
All ages, age-adjusted ³	---	28.6	31.8	28.8	27.2	27.1	23.8	25.1	21.9
All ages, crude	---	8.4	8.9	8.0	8.1	8.2	7.6	8.3	7.5
35–44 years	---	*	1.1	0.9	1.0	1.0	1.4	1.0	0.7
45–54 years	---	4.1	3.9	3.4	3.8	3.2	2.8	3.6	2.8
55–64 years	---	17.2	19.1	18.2	17.5	16.6	13.7	15.8	14.0
65–74 years	---	81.0	82.4	72.4	69.2	68.1	68.4	64.5	56.6
75–84 years	---	252.4	292.0	250.3	243.3	231.2	206.4	234.2	196.3
85 years and over	---	613.9	689.0	671.1	602.4	646.5	518.4	526.8	484.9
White, not Hispanic or Latino male⁵									
All ages, age-adjusted ³	---	57.9	56.6	58.5	56.5	55.4	52.8	54.7	51.2
All ages, crude	---	48.5	50.2	55.1	55.1	54.9	53.0	56.0	53.0
35–44 years	---	1.4	1.4	1.7	2.0	1.8	1.8	1.9	1.8
45–54 years	---	9.0	8.4	8.9	9.3	9.5	9.2	10.1	9.8
55–64 years	---	61.3	54.6	50.8	48.3	50.0	46.3	48.9	45.4
65–74 years	---	213.4	204.3	208.8	200.4	200.2	188.5	198.7	180.5
75–84 years	---	523.7	501.7	513.6	506.7	491.0	476.6	493.9	469.7
85 years and over	---	860.6	922.6	1,008.6	935.4	903.6	852.5	861.9	804.2
White female⁴									
All ages, age-adjusted ³	15.5	27.8	33.3	39.5	39.7	40.3	38.4	40.7	38.4
All ages, crude	16.4	32.8	40.8	49.7	50.5	51.5	49.3	52.8	49.9
35–44 years	1.3	1.2	1.7	1.8	2.0	2.1	1.9	1.9	1.8
45–54 years	7.6	8.3	8.4	7.9	8.1	8.1	7.9	8.9	9.1
55–64 years	28.7	41.9	44.0	43.2	42.4	42.9	40.8	41.9	39.3
65–74 years	71.0	118.8	139.0	159.6	157.0	158.6	151.1	156.0	150.6
75–84 years	104.0	226.3	279.5	339.1	345.4	352.0	335.5	357.1	335.5
85 years and over	144.2	298.4	395.5	544.8	554.5	562.8	536.5	585.4	538.4
Black or African American female⁴									
All ages, age-adjusted ³	9.1	16.6	20.2	22.7	22.6	22.0	20.9	22.8	21.3
All ages, crude	6.8	12.6	15.5	17.6	17.7	17.3	16.6	18.4	17.4
35–44 years	3.4	3.8	5.4	4.7	4.6	4.6	3.9	3.8	4.1
45–54 years	9.3	14.0	12.8	13.4	11.6	11.9	11.5	12.8	10.8
55–64 years	20.8	33.4	34.7	35.3	31.5	32.4	28.5	31.7	28.9
65–74 years	32.7	64.7	78.7	82.9	82.0	83.3	74.9	83.6	75.2
75–84 years	41.1	96.0	132.7	158.4	167.4	153.2	158.6	165.1	161.6
85 years and over	63.2	133.0	185.8	255.0	262.0	256.4	241.8	274.6	258.1

See footnotes at end of table.

Table 37 (page 3 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980 ¹	1990 ¹	1995 ¹	2000 ²	2002 ²	2003 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population									
American Indian or Alaska Native female⁴									
All ages, age-adjusted ³	7.7	16.8	22.8	26.2	26.4	26.1	26.1	25.5	26.4
All ages, crude	3.8	8.7	11.5	13.4	15.1	15.6	15.9	16.5	17.1
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*
55–64 years	*	*	38.8	31.6	34.1	39.0	35.2	35.8	30.9
65–74 years	*	56.4	79.5	136.8	119.1	101.2	104.8	115.2	107.4
75–84 years	*	116.7	191.3	175.8	194.8	217.2	247.3	201.2	251.4
85 years and over	*	*	*	362.2	353.4	296.2	224.6	244.3	244.6
Asian or Pacific Islander female⁴									
All ages, age-adjusted ³	5.8	11.0	12.1	11.7	9.3	9.9	9.3	9.7	9.1
All ages, crude	2.6	5.2	6.3	6.8	6.0	6.5	6.3	6.9	6.8
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	3.6	*	*	*	*	*	*
55–64 years	*	15.2	9.6	6.2	4.9	6.0	4.1	3.5	4.4
65–74 years	*	26.5	29.2	29.2	24.6	24.8	20.3	23.9	20.1
75–84 years	*	80.6	113.2	88.9	77.0	77.2	75.8	80.6	81.6
85 years and over	*	232.5	227.8	299.5	219.1	253.8	252.7	256.2	220.2
Hispanic or Latina female^{4,5}									
All ages, age-adjusted ³	---	13.4	16.9	16.3	16.2	15.8	14.9	15.4	14.3
All ages, crude	---	6.3	7.7	7.2	7.6	7.7	7.4	7.8	7.5
35–44 years	---	*	1.4	1.3	1.4	1.0	0.7	*	0.7
45–54 years	---	4.9	4.6	3.3	3.1	3.8	3.4	3.5	2.5
55–64 years	---	14.4	12.9	10.8	10.6	9.3	10.9	9.5	10.1
65–74 years	---	36.6	43.1	38.0	41.5	41.5	38.3	39.3	36.5
75–84 years	---	101.1	125.0	136.0	129.8	129.6	125.7	128.6	123.5
85 years and over	---	269.0	402.6	387.8	385.5	365.6	326.3	355.8	315.7
White, not Hispanic or Latina female⁵									
All ages, age-adjusted ³	---	28.5	34.0	40.7	41.2	41.8	40.0	42.5	40.2
All ages, crude	---	35.7	44.7	56.2	57.7	59.0	56.7	61.1	58.0
35–44 years	---	1.2	1.7	1.9	2.1	2.2	2.1	2.2	2.0
45–54 years	---	8.5	8.5	8.3	8.6	8.5	8.4	9.5	9.9
55–64 years	---	43.7	46.2	45.8	45.1	45.7	43.5	44.9	42.1
65–74 years	---	122.8	143.0	167.6	165.5	167.6	160.1	165.8	160.4
75–84 years	---	231.9	284.5	347.2	355.7	363.5	347.2	370.7	348.9
85 years and over	---	302.1	393.7	548.7	559.8	569.5	544.8	595.3	548.5

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

¹For the period 1980–1998, underlying cause of death was coded according to the Ninth Revision of the International Classification of Diseases (ICD), using ICD–9 codes for chronic lower respiratory diseases (CLRD) that are most nearly comparable with CLRD codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

²Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

³Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁵Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia (D.C.) reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 38 (page 1 of 2). Death rates for human immunodeficiency virus (HIV) disease, by sex, race, Hispanic origin, and age: United States, selected years 1987–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age¹</i>	1987 ²	1990 ²	1995 ²	1996	1997	1998	1999 ³	2000 ³	2004 ³	2005 ³	2006 ³
All persons											
Deaths per 100,000 resident population											
All ages, age-adjusted ⁴	5.6	10.2	16.2	11.5	6.0	4.9	5.3	5.2	4.5	4.2	4.0
All ages, crude	5.6	10.1	16.2	11.6	6.1	4.9	5.3	5.1	4.4	4.2	4.0
Under 1 year	2.3	2.7	1.5	1.1	*	*	*	*	*	*	*
1–4 years	0.7	0.8	1.3	0.9	0.3	0.2	0.2	*	*	*	*
5–14 years	0.1	0.2	0.5	0.5	0.3	0.1	0.2	0.1	0.1	*	*
15–24 years	1.3	1.5	1.7	1.1	0.7	0.5	0.5	0.5	0.5	0.4	0.5
25–34 years	11.7	19.7	28.3	19.2	9.7	7.1	6.8	6.1	3.7	3.3	2.9
35–44 years	14.0	27.4	44.2	31.3	16.0	12.8	13.8	13.1	10.9	9.9	9.2
45–54 years	8.0	15.2	26.0	19.1	10.3	8.9	10.7	11.0	10.6	10.6	10.1
55–64 years	3.5	6.2	10.9	8.3	4.8	4.3	4.8	5.1	5.4	5.3	5.5
65–74 years	1.3	2.0	3.6	2.7	1.8	1.6	2.2	2.2	2.4	2.3	2.5
75–84 years	0.8	0.7	0.7	0.8	0.6	0.5	0.6	0.7	0.8	0.8	0.8
85 years and over	*	*	*	*	*	*	*	*	*	*	*
Male											
All ages, age-adjusted ⁴	10.4	18.5	27.3	19.0	9.6	7.6	8.2	7.9	6.6	6.2	5.9
All ages, crude	10.2	18.5	27.6	19.2	9.7	7.6	8.2	7.9	6.6	6.3	5.9
Under 1 year	2.2	2.4	1.7	1.1	*	*	*	*	*	*	*
1–4 years	0.7	0.8	1.2	0.9	0.3	*	*	*	*	*	*
5–14 years	0.2	0.3	0.5	0.5	0.3	0.1	0.2	0.1	*	*	*
15–24 years	2.2	2.2	2.0	1.3	0.8	0.5	0.5	0.5	0.5	0.4	0.6
25–34 years	20.7	34.5	45.5	30.2	14.4	10.0	9.5	8.0	4.5	4.0	3.5
35–44 years	26.3	50.2	75.5	51.7	25.4	20.0	21.0	19.8	15.7	14.3	12.9
45–54 years	15.5	29.1	46.2	33.1	17.1	14.8	17.5	17.8	16.3	16.4	15.3
55–64 years	6.8	12.0	19.7	14.7	8.3	7.2	8.3	8.7	9.0	8.8	8.9
65–74 years	2.4	3.7	6.4	5.0	3.4	2.9	3.8	3.8	4.0	4.1	4.2
75–84 years	1.2	1.1	1.3	1.5	1.0	0.9	1.0	1.3	1.4	1.4	1.6
85 years and over	*	*	*	*	*	*	*	*	*	*	*
Female											
All ages, age-adjusted ⁴	1.1	2.2	5.3	4.2	2.6	2.2	2.5	2.5	2.4	2.3	2.2
All ages, crude	1.1	2.2	5.3	4.3	2.6	2.2	2.5	2.5	2.4	2.2	2.2
Under 1 year	2.5	3.0	1.2	*	*	*	*	*	*	*	*
1–4 years	0.7	0.8	1.5	1.0	0.4	*	*	*	*	*	*
5–14 years	*	0.2	0.5	0.4	0.2	0.2	0.2	0.1	*	*	*
15–24 years	0.3	0.7	1.4	0.9	0.7	0.5	0.5	0.4	0.4	0.3	0.4
25–34 years	2.8	4.9	10.9	8.2	4.9	4.2	4.1	4.2	2.8	2.6	2.3
35–44 years	2.1	5.2	13.3	11.2	6.7	5.7	6.7	6.5	6.2	5.6	5.4
45–54 years	0.8	1.9	6.6	5.6	3.7	3.1	4.1	4.4	5.2	5.1	5.1
55–64 years	0.5	1.1	2.8	2.5	1.6	1.6	1.6	1.8	2.0	2.0	2.3
65–74 years	0.5	0.8	1.4	0.8	0.5	0.6	0.8	0.8	1.0	0.9	1.1
75–84 years	0.5	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.4	0.3
85 years and over	*	*	*	*	*	*	*	*	*	*	*
All ages, age-adjusted ⁴											
White male	8.7	15.7	20.4	13.1	5.9	4.5	4.9	4.6	3.8	3.6	3.4
Black or African American male	26.2	46.3	89.0	70.3	40.9	33.2	36.1	35.1	29.2	28.2	26.3
American Indian or Alaska Native male	*	3.3	10.5	6.4	3.3	3.5	4.2	3.5	4.3	4.0	3.3
Asian or Pacific Islander male	2.5	4.3	6.0	4.4	1.6	1.3	1.4	1.2	1.2	1.0	1.1
Hispanic or Latino male ⁵	18.8	28.8	40.8	28.0	14.0	10.2	10.9	10.6	8.2	7.5	7.0
White, not Hispanic or Latino male ⁵	10.7	14.1	17.9	11.2	4.8	3.7	4.0	3.8	3.1	3.0	2.8
White female	0.6	1.1	2.5	1.9	1.0	0.8	1.0	1.0	0.9	0.8	0.7
Black or African American female	4.6	10.1	24.4	20.8	13.7	12.0	13.1	13.2	13.0	12.0	12.2
American Indian or Alaska Native female	*	*	2.5	1.4	1.0	0.6	1.0	1.0	1.5	1.5	1.5
Asian or Pacific Islander female	*	*	0.6	0.5	0.2	0.3	0.2	0.2	*	*	*
Hispanic or Latina female ⁵	2.1	3.8	8.8	6.3	3.3	2.8	3.0	2.9	2.4	1.9	1.9
White, not Hispanic or Latina female ⁵	0.5	0.7	1.7	1.3	0.7	0.5	0.7	0.7	0.6	0.6	0.6

See footnotes at end of table.

Table 38 (page 2 of 2). Death rates for human immunodeficiency virus (HIV) disease, by sex, race, Hispanic origin, and age: United States, selected years 1987–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age¹</i>	1987 ²	1990 ²	1995 ²	1996	1997	1998	1999 ³	2000 ³	2004 ³	2005 ³	2006 ³
Age 25–44 years											
Deaths per 100,000 resident population											
All persons	12.7	23.2	36.3	25.4	12.9	10.1	10.5	9.8	7.5	6.8	6.2
White male	19.2	35.0	46.1	29.1	12.9	9.6	9.7	8.8	6.3	5.7	5.1
Black or African American male	60.2	102.0	179.4	136.8	75.2	58.1	59.3	55.4	39.9	36.2	32.9
American Indian or Alaska Native male	*	7.7	28.5	16.6	9.5	7.5	9.1	5.5	8.6	6.1	5.4
Asian or Pacific Islander male	4.1	8.1	12.1	7.7	3.3	2.4	2.4	1.9	1.7	1.4	1.0
Hispanic or Latino male ⁵	36.8	59.3	73.9	48.0	23.3	16.6	16.5	14.3	9.3	8.3	7.6
White, not Hispanic or Latino male ⁵	23.3	31.6	41.2	25.6	10.9	8.1	8.2	7.4	5.5	4.9	4.3
White female	1.2	2.3	5.9	4.3	2.3	1.8	2.2	2.1	1.6	1.5	1.3
Black or African American female	11.6	23.6	53.6	45.7	28.6	25.5	26.6	26.7	23.1	20.7	19.9
American Indian or Alaska Native female	*	*	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female	*	*	1.2	*	*	*	*	*	*	*	*
Hispanic or Latina female ⁵	4.9	8.9	17.2	12.0	6.2	4.6	5.3	4.6	3.1	2.6	2.5
White, not Hispanic or Latina female ⁵	1.0	1.5	4.2	3.1	1.7	1.3	1.6	1.6	1.3	1.2	1.0
Age 45–64 years											
All persons	5.8	11.1	19.9	14.8	8.1	7.0	8.4	8.7	8.5	8.4	8.1
White male	9.9	18.6	26.0	17.3	7.9	6.6	7.8	8.1	7.5	7.3	7.2
Black or African American male	27.3	53.0	133.2	110.7	69.3	60.9	70.7	71.6	66.0	66.2	61.4
American Indian or Alaska Native male	*	*	*	*	*	*	*	*	7.2	8.9	6.4
Asian or Pacific Islander male	*	6.5	9.1	7.9	2.3	2.4	2.3	2.1	2.4	2.0	2.3
Hispanic or Latino male ⁵	25.8	37.9	67.1	49.7	25.1	18.3	21.2	23.3	19.4	18.0	16.6
White, not Hispanic or Latino male ⁵	12.6	16.9	22.4	14.2	6.3	5.4	6.4	6.5	6.0	6.0	5.9
White female	0.5	0.9	2.4	1.9	1.1	0.9	1.2	1.3	1.4	1.4	1.3
Black or African American female	2.6	7.5	27.0	24.3	17.5	15.4	18.6	19.6	22.7	22.0	23.4
American Indian or Alaska Native female	*	*	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female	*	*	*	*	*	*	*	*	*	*	*
Hispanic or Latina female ⁵	*	3.1	12.6	9.8	5.4	4.9	5.1	5.8	5.0	4.1	3.9
White, not Hispanic or Latina female ⁵	0.5	0.7	1.5	1.2	0.7	0.5	0.8	0.9	0.9	1.1	0.9

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

²Categories for the coding and classification of human immunodeficiency virus (HIV) disease were introduced in the United States in 1987. For the period 1987–1998, underlying cause of death was coded according to the Ninth Revision of the International Classification of Diseases (ICD). See [Appendix II, Cause of death; Human immunodeficiency virus \(HIV\) disease; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. Additional years of data available in spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>; See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵Prior to 1997, excludes data from states lacking a Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and beyond were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia (D.C.) reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1987–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/dataawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, and Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 39. Maternal mortality for complications of pregnancy, childbirth, and the puerperium, by race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2004 ^{3,4}	2005 ^{3,4}	2006 ^{3,4}
Number of deaths									
All persons	2,960	1,579	803	334	343	396	540	623	569
White	1,873	936	445	193	177	240	300	360	313
Black or African American	1,041	624	342	127	153	137	214	231	218
American Indian or Alaska Native	---	---	---	3	4	6	4	5	9
Asian or Pacific Islander	---	---	---	11	9	13	22	27	29
Hispanic or Latina ⁵	---	---	---	---	47	81	80	95	106
White, not Hispanic or Latina ⁵	---	---	---	---	125	160	225	267	210
Deaths per 100,000 live births									
All persons	73.7	32.1	21.5	9.4	7.6	8.2	11.3	12.4	11.2
All ages, crude	83.3	37.1	21.5	9.2	8.2	9.8	13.1	15.1	13.3
Under 20 years	70.7	22.7	18.9	7.6	7.5	*	6.6	7.4	5.0
20–24 years	47.6	20.7	13.0	5.8	6.1	7.4	10.8	10.7	10.2
25–29 years	63.5	29.8	17.0	7.7	6.0	7.9	11.0	11.8	11.7
30–34 years	107.7	50.3	31.6	13.6	9.5	10.0	11.8	12.8	12.6
35 years and over ⁷	222.0	104.3	81.9	36.3	20.7	22.7	28.2	38.0	29.3
White									
All ages, age-adjusted ⁶	53.1	22.4	14.4	6.7	5.1	6.2	7.5	9.1	8.1
All ages, crude	61.1	26.0	14.3	6.6	5.4	7.5	9.3	11.1	9.5
Under 20 years	44.9	14.8	13.8	5.8	*	*	*	*	*
20–24 years	35.7	15.3	8.4	4.2	3.9	5.6	6.5	9.0	8.3
25–29 years	45.0	20.3	11.1	5.4	4.8	5.9	6.9	7.2	7.4
30–34 years	75.9	34.3	18.7	9.3	5.0	7.1	9.0	9.3	8.2
35 years and over ⁷	174.1	73.9	59.3	25.5	12.6	18.0	22.0	28.9	20.5
Black or African American									
All ages, age-adjusted ⁶	---	92.0	65.5	24.9	21.7	20.1	32.3	31.7	28.7
All ages, crude	---	103.6	60.9	22.4	22.4	22.0	34.7	36.5	32.7
Under 20 years	---	54.8	32.3	13.1	*	*	*	*	*
20–24 years	---	56.9	41.9	13.9	14.7	15.3	27.9	18.2	17.8
25–29 years	---	92.8	65.2	22.4	14.9	21.8	38.6	37.1	36.0
30–34 years	---	150.6	117.8	44.0	44.2	34.8	40.4	46.6	45.1
35 years and over ⁷	---	299.5	207.5	100.6	79.7	62.8	79.2	112.8	97.0
Hispanic or Latina ^{5,8}									
All ages, age-adjusted ⁶	---	---	---	---	7.4	9.0	7.3	8.2	8.8
All ages, crude	---	---	---	---	7.9	9.9	8.5	9.6	10.2
White, not Hispanic or Latina ⁵									
All ages, age-adjusted ⁶	---	---	---	---	4.4	5.5	7.8	9.6	8.0
All ages, crude	---	---	---	---	4.8	6.8	9.8	11.7	9.1

--- Data not available.

– Quantity zero.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. Major changes in the classification and coding of maternal deaths account for an increase in the number of maternal deaths under ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI; International Classification of Diseases \(ICD\); Maternal death](#).

⁴Increases are due to methodological changes in reporting and data processing. See [Appendix II, Maternal death](#).

⁵Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

⁶Rates are age-adjusted to the 1970 distribution of live births by mother's age in the United States. See [Appendix II, Age adjustment; Table III](#).

⁷Rates computed by relating deaths of women 35 years and over to live births to women 35–49 years. See [Appendix II, Rate: Death and related rates](#).

⁸Age-specific maternal mortality rates are not calculated because rates based on fewer than 20 deaths are considered unreliable.

NOTES: The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. For 1950 and 1960, rates were based on live births by race of child; for all other years, rates are based on live births by race of mother. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Rates are not calculated for American Indian or Alaska Native and Asian or Pacific Islander mothers because rates based on fewer than 20 deaths are considered unreliable. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from annual natality files; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 40 (page 1 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ⁴	24.6	23.1	27.6	22.3	18.5	15.4	15.2	15.0
All ages, crude	23.1	21.3	26.9	23.5	18.8	15.4	15.3	15.1
Under 1 year	8.4	8.1	9.8	7.0	4.9	4.4	3.6	3.4
1–14 years	9.8	8.6	10.5	8.2	6.0	4.3	3.6	3.4
1–4 years	11.5	10.0	11.5	9.2	6.3	4.2	3.8	3.6
5–14 years	8.8	7.9	10.2	7.9	5.9	4.3	3.6	3.3
15–24 years	34.4	38.0	47.2	44.8	34.1	26.9	25.9	26.0
15–19 years	29.6	33.9	43.6	43.0	33.1	26.0	23.6	23.2
20–24 years	38.8	42.9	51.3	46.6	35.0	28.0	28.2	28.8
25–34 years	24.6	24.3	30.9	29.1	23.6	17.3	18.0	18.2
35–44 years	20.3	19.3	24.9	20.9	16.9	15.3	15.4	15.3
45–64 years	25.2	23.0	26.5	18.0	15.7	14.3	14.9	14.9
45–54 years	22.2	21.4	25.5	18.6	15.6	14.2	15.1	15.3
55–64 years	29.0	25.1	27.9	17.4	15.9	14.4	14.7	14.3
65 years and over	43.1	34.7	36.2	22.5	23.1	21.4	20.1	19.0
65–74 years	39.1	31.4	32.8	19.2	18.6	16.5	16.7	15.4
75–84 years	52.7	41.8	43.5	28.1	29.1	25.7	22.9	22.3
85 years and over	45.1	37.9	34.2	27.6	31.2	30.4	25.1	23.4
Male								
All ages, age-adjusted ⁴	38.5	35.4	41.5	33.6	26.5	21.7	21.7	21.4
All ages, crude	35.4	31.8	39.7	35.3	26.7	21.3	21.7	21.4
Under 1 year	9.1	8.6	9.3	7.3	5.0	4.6	3.5	3.3
1–14 years	12.3	10.7	13.0	10.0	7.0	4.9	4.1	3.7
1–4 years	13.0	11.5	12.9	10.2	6.9	4.7	4.2	3.8
5–14 years	11.9	10.4	13.1	9.9	7.0	5.0	4.1	3.7
15–24 years	56.7	61.2	73.2	68.4	49.5	37.4	36.5	36.6
15–19 years	46.3	51.7	64.1	62.6	45.5	33.9	30.7	30.2
20–24 years	66.7	73.2	84.4	74.3	53.3	41.2	42.3	42.9
25–34 years	40.8	40.1	49.4	46.3	35.7	25.5	26.9	27.4
35–44 years	32.5	29.9	37.7	31.7	24.7	22.0	22.2	21.8
45–64 years	37.7	33.3	38.9	26.5	21.9	20.2	21.6	21.7
45–54 years	33.6	31.6	37.2	27.6	22.0	20.4	22.2	22.6
55–64 years	43.1	35.6	40.9	25.4	21.7	19.8	20.9	20.5
65 years and over	66.6	52.1	54.4	33.9	32.1	29.5	28.5	26.5
65–74 years	59.1	45.8	47.3	27.3	24.2	21.7	23.2	21.1
75–84 years	85.0	66.0	68.2	44.3	41.2	35.6	32.4	30.8
85 years and over	78.1	62.7	63.1	56.1	64.5	57.5	44.1	41.0
Female								
All ages, age-adjusted ⁴	11.5	11.7	14.9	11.8	11.0	9.5	8.9	8.8
All ages, crude	10.9	11.0	14.7	12.3	11.3	9.7	9.1	9.0
Under 1 year	7.6	7.5	10.4	6.7	4.9	4.2	3.6	3.5
1–14 years	7.2	6.3	7.9	6.3	4.9	3.7	3.1	3.1
1–4 years	10.0	8.4	10.0	8.1	5.6	3.8	3.4	3.4
5–14 years	5.7	5.4	7.2	5.7	4.7	3.6	3.0	2.9
15–24 years	12.6	15.1	21.6	20.8	17.9	15.9	14.7	14.7
15–19 years	12.9	16.0	22.7	22.8	20.0	17.5	16.2	15.7
20–24 years	12.2	14.0	20.4	18.9	16.0	14.2	13.2	13.7
25–34 years	9.3	9.2	13.0	12.2	11.5	8.8	8.8	8.7
35–44 years	8.5	9.1	12.9	10.4	9.2	8.8	8.6	8.8
45–64 years	12.6	13.1	15.3	10.3	10.1	8.7	8.5	8.3
45–54 years	10.9	11.6	14.5	10.2	9.6	8.2	8.2	8.2
55–64 years	14.9	15.2	16.2	10.5	10.8	9.5	8.9	8.5
65 years and over	21.9	20.3	23.1	15.0	17.2	15.8	14.0	13.5
65–74 years	20.6	19.0	21.6	13.0	14.1	12.3	11.2	10.6
75–84 years	25.2	23.0	27.2	18.5	21.9	19.2	16.5	16.5
85 years and over	22.1	22.0	18.0	15.2	18.3	19.3	16.4	15.2
White male ⁵								
All ages, age-adjusted ⁴	37.9	34.8	40.4	33.8	26.3	21.8	22.2	21.8
All ages, crude	35.1	31.5	39.1	35.9	26.7	21.6	22.3	22.0
Under 1 year	9.1	8.8	9.1	7.0	4.8	4.2	3.3	3.2
1–14 years	12.4	10.6	12.5	9.8	6.6	4.8	4.1	3.5
15–24 years	58.3	62.7	75.2	73.8	52.5	39.6	39.1	39.2
25–34 years	39.1	38.6	47.0	46.6	35.4	25.1	27.3	27.6
35–44 years	30.9	28.4	35.2	30.7	23.7	21.8	22.4	22.2
45–64 years	36.2	31.7	36.5	25.2	20.6	19.7	21.7	21.6
65 years and over	67.1	52.1	54.2	32.7	31.4	29.4	28.7	26.8

See footnotes at end of table.

Table 40 (page 2 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Black or African American male⁵								
All ages, age-adjusted ⁴	34.8	39.6	51.0	34.2	29.9	24.4	22.5	22.6
All ages, crude	37.2	33.1	44.3	31.1	28.1	22.5	21.2	21.5
Under 1 year	---	*	10.6	7.8	*	6.7	*	*
1–14 years ⁵	10.4	11.2	16.3	11.4	8.9	5.5	4.4	4.8
15–24 years	42.5	46.4	58.1	34.9	36.1	30.2	28.0	27.2
25–34 years	54.4	51.0	70.4	44.9	39.5	32.6	30.8	33.0
35–44 years	46.7	43.6	59.5	41.2	33.5	27.2	25.9	25.3
45–64 years	54.6	47.8	61.7	39.5	33.3	27.1	24.8	26.2
65 years and over	52.6	48.2	53.4	42.4	36.3	32.1	29.3	26.4
American Indian or Alaska Native male⁵								
All ages, age-adjusted ⁴	---	---	---	78.9	48.3	35.8	34.3	36.8
All ages, crude	---	---	---	74.6	47.6	33.6	35.2	37.1
1–14 years	---	---	---	15.1	11.6	7.8	11.7	5.8
15–24 years	---	---	---	126.1	75.2	56.8	50.6	56.2
25–34 years	---	---	---	107.0	78.2	49.8	52.8	49.7
35–44 years	---	---	---	82.8	57.0	36.3	40.7	38.9
45–64 years	---	---	---	77.4	45.9	32.0	34.1	45.1
65 years and over	---	---	---	97.0	43.0	48.5	26.4	35.5
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	19.0	17.9	10.6	9.6	9.5
All ages, crude	---	---	---	17.1	15.8	9.8	8.9	8.8
1–14 years	---	---	---	8.2	6.3	2.5	1.8	2.7
15–24 years	---	---	---	27.2	25.7	17.0	16.1	16.8
25–34 years	---	---	---	18.8	17.0	10.4	9.0	8.5
35–44 years	---	---	---	13.1	12.2	6.9	6.4	5.8
45–64 years	---	---	---	13.7	15.1	10.1	9.1	8.6
65 years and over	---	---	---	37.3	33.6	21.1	20.5	19.3
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	29.5	21.3	21.3	21.2
All ages, crude	---	---	---	---	29.2	20.1	20.7	20.7
1–14 years	---	---	---	---	7.2	4.4	4.7	4.4
15–24 years	---	---	---	---	48.2	34.7	40.3	41.1
25–34 years	---	---	---	---	41.0	24.9	26.3	25.6
35–44 years	---	---	---	---	28.0	21.6	20.2	20.6
45–64 years	---	---	---	---	28.9	21.7	20.1	21.4
65 years and over	---	---	---	---	35.3	28.9	26.6	23.7
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	25.7	21.7	22.0	21.6
All ages, crude	---	---	---	---	26.0	21.5	22.4	22.0
1–14 years	---	---	---	---	6.4	4.9	3.9	3.2
15–24 years	---	---	---	---	52.3	40.3	38.2	38.1
25–34 years	---	---	---	---	34.0	24.7	27.1	27.8
35–44 years	---	---	---	---	23.1	21.6	22.7	22.2
45–64 years	---	---	---	---	19.8	19.3	21.7	21.4
65 years and over	---	---	---	---	31.1	29.3	28.7	26.9
White female⁵								
All ages, age-adjusted ⁴	11.4	11.7	14.9	12.2	11.2	9.8	9.2	9.1
All ages, crude	10.9	11.2	14.8	12.8	11.6	10.0	9.5	9.4
Under 1 year	7.8	7.5	10.2	7.1	4.7	3.5	2.9	3.0
1–14 years	7.2	6.2	7.5	6.2	4.8	3.7	3.1	3.0
15–24 years	12.6	15.6	22.7	23.0	19.5	17.1	15.8	15.9
25–34 years	9.0	9.0	12.7	12.2	11.6	8.9	9.3	8.9
35–44 years	8.1	8.9	12.3	10.6	9.2	8.9	8.9	9.1
45–64 years	12.7	13.1	15.1	10.4	9.9	8.7	8.6	8.3
65 years and over	22.2	20.8	23.7	15.3	17.4	16.2	14.4	13.9

See footnotes at end of table.

Table 40 (page 3 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Black or African American female ⁵								
All ages, age-adjusted ⁴	9.3	10.4	14.1	8.5	9.6	8.4	7.6	7.8
All ages, crude	10.2	9.7	13.4	8.3	9.4	8.2	7.5	7.7
Under 1 year	---	8.1	11.9	*	7.0	*	6.8	*
1–14 years ⁵	7.2	6.9	10.2	6.3	5.3	3.9	3.4	3.4
15–24 years	11.6	9.9	13.4	8.0	9.9	11.7	10.7	10.0
25–34 years	10.8	9.8	13.3	10.6	11.1	9.4	7.5	8.7
35–44 years	11.1	11.0	16.1	8.3	9.4	8.2	7.7	8.1
45–64 years	11.8	12.7	16.7	9.2	10.7	9.0	8.3	8.9
65 years and over	14.3	13.2	15.7	9.5	13.5	10.4	9.8	9.4
American Indian or Alaska Native female ⁵								
All ages, age-adjusted ⁴	---	---	---	32.0	17.5	19.5	15.4	16.9
All ages, crude	---	---	---	32.0	17.3	18.6	15.5	17.1
1–14 years	---	---	---	15.0	8.1	6.5	*	*
15–24 years	---	---	---	42.3	31.4	30.3	24.3	27.7
25–34 years	---	---	---	52.5	18.8	22.3	24.8	21.8
35–44 years	---	---	---	38.1	18.2	22.0	17.8	20.6
45–64 years	---	---	---	32.6	17.6	17.8	11.2	14.5
65 years and over	---	---	---	*	*	24.0	*	16.2
Asian or Pacific Islander female ⁵								
All ages, age-adjusted ⁴	---	---	---	9.3	10.4	6.7	5.9	5.6
All ages, crude	---	---	---	8.2	9.0	5.9	5.5	5.3
1–14 years	---	---	---	7.4	3.6	2.3	1.5	1.8
15–24 years	---	---	---	7.4	11.4	6.0	7.9	7.3
25–34 years	---	---	---	7.3	7.3	4.5	3.6	3.4
35–44 years	---	---	---	8.6	7.5	4.9	4.3	4.1
45–64 years	---	---	---	8.5	11.8	6.4	6.6	6.2
65 years and over	---	---	---	18.6	24.3	18.5	13.6	13.3
Hispanic or Latina female ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	9.6	7.9	7.8	7.7
All ages, crude	---	---	---	---	8.9	7.2	7.4	7.2
1–14 years	---	---	---	---	4.8	3.9	3.3	3.2
15–24 years	---	---	---	---	11.6	10.6	13.4	11.6
25–34 years	---	---	---	---	9.4	6.5	7.2	6.8
35–44 years	---	---	---	---	8.0	7.3	7.4	7.2
45–64 years	---	---	---	---	11.4	8.3	7.5	8.0
65 years and over	---	---	---	---	14.9	13.4	11.1	11.7

See footnotes at end of table.

Table 40 (page 4 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
White, not Hispanic or Latina female ⁷	Deaths per 100,000 resident population							
All ages, age-adjusted ⁴	---	---	---	---	11.3	10.0	9.4	9.3
All ages, crude	---	---	---	---	11.7	10.3	9.8	9.7
1–14 years	---	---	---	---	4.7	3.5	3.0	2.9
15–24 years	---	---	---	---	20.4	18.4	16.1	16.7
25–34 years	---	---	---	---	11.7	9.3	9.7	9.4
35–44 years	---	---	---	---	9.3	9.0	9.1	9.3
45–64 years	---	---	---	---	9.7	8.7	8.6	8.3
65 years and over	---	---	---	---	17.5	16.3	14.6	14.0

--- Data not available.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group under 15 years.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/injury/wisqars/index.html>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 41 (page 1 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ⁴	5.1	5.0	8.8	10.4	9.4	5.9	6.1	6.2
All ages, crude	5.0	4.6	8.1	10.6	9.9	6.0	6.1	6.2
Under 1 year	4.4	4.8	4.3	5.9	8.4	9.2	7.5	8.1
1–14 years	0.6	0.6	1.1	1.5	1.8	1.3	1.3	1.3
1–4 years	0.6	0.7	1.9	2.5	2.5	2.3	2.3	2.2
5–14 years	0.5	0.5	0.9	1.2	1.5	0.9	0.8	1.0
15–24 years	5.8	5.6	11.3	15.4	19.7	12.6	13.0	13.5
15–19 years	3.9	3.9	7.7	10.5	16.9	9.5	9.9	10.7
20–24 years	8.5	7.7	15.6	20.2	22.2	16.0	16.1	16.2
25–44 years	8.9	8.5	14.9	17.5	14.7	8.7	9.4	9.2
25–34 years	9.3	9.2	16.2	19.3	17.4	10.4	11.8	11.7
35–44 years	8.4	7.8	13.5	14.9	11.6	7.1	7.1	6.9
45–64 years	5.0	5.3	8.7	9.0	6.3	4.0	4.0	4.3
45–54 years	5.9	6.1	10.0	11.0	7.5	4.7	4.8	5.1
55–64 years	3.9	4.1	7.1	7.0	5.0	3.0	2.8	3.2
65 years and over	3.0	2.7	4.6	5.5	4.0	2.4	2.3	2.1
65–74 years	3.2	2.8	4.9	5.7	3.8	2.4	2.4	2.1
75–84 years	2.5	2.3	4.0	5.2	4.3	2.4	2.2	2.1
85 years and over	2.3	2.4	4.2	5.3	4.6	2.4	2.1	1.9
Male								
All ages, age-adjusted ⁴	7.9	7.5	14.3	16.6	14.8	9.0	9.6	9.7
All ages, crude	7.7	6.8	13.1	17.1	15.9	9.3	9.8	10.0
Under 1 year	4.5	4.7	4.5	6.3	8.8	10.4	8.2	9.4
1–14 years	0.6	0.6	1.2	1.6	2.0	1.5	1.4	1.6
1–4 years	0.5	0.7	1.9	2.7	2.7	2.5	2.6	2.5
5–14 years	0.6	0.5	1.0	1.2	1.7	1.1	1.0	1.2
15–24 years	8.6	8.4	18.2	24.0	32.5	20.9	22.0	22.8
15–19 years	5.5	5.7	12.1	15.9	27.8	15.5	16.8	18.2
20–24 years	13.5	11.8	25.6	32.2	36.9	26.7	27.2	27.5
25–44 years	13.8	12.8	24.4	28.9	23.5	13.3	14.9	14.7
25–34 years	14.4	13.9	26.8	31.9	27.7	16.7	19.6	19.4
35–44 years	13.2	11.7	21.7	24.5	18.6	10.3	10.6	10.4
45–64 years	8.1	8.1	14.8	15.2	10.2	6.0	6.2	6.5
45–54 years	9.5	9.4	16.8	18.4	11.9	6.9	7.6	7.6
55–64 years	6.3	6.4	12.1	11.8	8.0	4.6	4.3	4.8
65 years and over	4.8	4.3	7.7	8.8	5.8	3.3	3.0	2.8
65–74 years	5.2	4.6	8.5	9.2	5.8	3.4	3.3	3.0
75–84 years	3.9	3.7	5.9	8.1	5.7	3.2	2.6	2.7
85 years and over	2.5	3.6	7.4	7.5	6.7	3.3	2.7	2.3
Female								
All ages, age-adjusted ⁴	2.4	2.6	3.7	4.4	4.0	2.8	2.5	2.5
All ages, crude	2.4	2.4	3.4	4.5	4.2	2.8	2.5	2.5
Under 1 year	4.2	4.9	4.1	5.6	8.0	7.9	6.6	6.8
1–14 years	0.6	0.5	1.0	1.4	1.6	1.1	1.1	1.1
1–4 years	0.7	0.7	1.9	2.2	2.3	2.1	2.0	2.0
5–14 years	0.5	0.4	0.7	1.1	1.2	0.7	0.7	0.7
15–24 years	3.0	2.8	4.6	6.6	6.2	3.9	3.4	3.5
15–19 years	2.4	1.9	3.2	4.9	5.4	3.1	2.5	2.9
20–24 years	3.7	3.8	6.2	8.2	7.0	4.7	4.3	4.2
25–44 years	4.2	4.3	5.8	6.4	6.0	4.0	3.7	3.6
25–34 years	4.5	4.6	6.0	6.9	7.1	4.1	3.8	3.7
35–44 years	3.8	4.0	5.7	5.7	4.8	4.0	3.6	3.4
45–64 years	1.9	2.5	3.1	3.4	2.8	2.1	1.9	2.2
45–54 years	2.3	2.9	3.7	4.1	3.2	2.5	2.2	2.6
55–64 years	1.4	2.0	2.5	2.8	2.3	1.6	1.4	1.7
65 years and over	1.4	1.3	2.3	3.3	2.8	1.8	1.7	1.6
65–74 years	1.3	1.3	2.2	3.0	2.2	1.6	1.6	1.3
75–84 years	1.4	1.3	2.7	3.5	3.4	2.0	1.9	1.8
85 years and over	2.1	1.6	2.5	4.3	3.8	2.0	1.9	1.8

See footnotes at end of table.

Table 41 (page 2 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
White male ⁵								
All ages, age-adjusted ⁴	3.8	3.9	7.2	10.4	8.3	5.2	5.3	5.4
All ages, crude	3.6	3.6	6.6	10.7	8.8	5.2	5.4	5.4
Under 1 year	4.3	3.8	2.9	4.3	6.4	8.2	6.7	7.4
1–14 years	0.4	0.5	0.7	1.2	1.3	1.2	1.0	1.1
15–24 years	3.2	5.0	7.6	15.1	15.2	9.9	10.6	10.6
25–44 years	5.4	5.5	11.6	17.2	13.0	7.4	8.0	7.8
25–34 years	4.9	5.7	12.5	18.5	14.7	8.4	9.8	9.3
35–44 years	6.1	5.2	10.8	15.2	11.1	6.5	6.3	6.4
45–64 years	4.8	4.6	8.3	9.8	6.9	4.1	4.3	4.4
65 years and over	3.8	3.1	5.4	6.7	4.1	2.5	2.2	2.2
Black or African American male ⁵								
All ages, age-adjusted ⁴	47.0	42.3	78.2	69.4	63.1	35.4	37.3	37.8
All ages, crude	44.7	35.0	66.0	65.7	68.5	37.2	39.7	40.6
Under 1 year	---	10.3	14.3	18.6	21.4	23.3	15.9	20.7
1–14 years ⁶	1.8	1.5	4.4	4.1	5.8	3.1	3.9	4.0
15–24 years	53.8	43.2	98.3	82.6	137.1	85.3	84.1	88.2
25–44 years	92.8	80.5	140.2	130.0	105.4	55.8	63.4	63.2
25–34 years	104.3	86.4	154.5	142.9	123.7	73.9	86.2	86.2
35–44 years	80.0	74.4	124.0	109.3	81.2	38.5	40.6	39.8
45–64 years	46.0	44.6	82.3	70.6	41.4	21.9	22.3	23.3
65 years and over	16.5	17.3	33.3	30.9	25.7	12.8	11.9	10.0
American Indian or Alaska Native male ⁵								
All ages, age-adjusted ⁴	---	---	---	23.3	16.7	10.7	11.3	11.9
All ages, crude	---	---	---	23.1	16.6	10.7	12.2	12.9
15–24 years	---	---	---	35.4	25.1	17.0	22.1	22.5
25–44 years	---	---	---	39.2	25.7	17.0	16.1	17.9
45–64 years	---	---	---	22.1	14.8	*	10.8	9.1
Asian or Pacific Islander male ⁵								
All ages, age-adjusted ⁴	---	---	---	9.1	7.3	4.3	4.4	4.4
All ages, crude	---	---	---	8.3	7.9	4.4	4.6	4.5
15–24 years	---	---	---	9.3	14.9	7.8	10.8	11.5
25–44 years	---	---	---	11.3	9.6	4.6	4.9	4.0
45–64 years	---	---	---	10.4	7.0	6.1	4.2	4.7
Hispanic or Latino male ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	27.4	11.8	12.1	11.7
All ages, crude	---	---	---	---	31.0	13.4	13.6	13.1
Under 1 year	---	---	---	---	8.7	6.6	6.3	10.1
1–14 years	---	---	---	---	3.1	1.7	1.5	1.6
15–24 years	---	---	---	---	55.4	28.5	31.0	31.0
25–44 years	---	---	---	---	46.4	17.2	18.0	16.5
25–34 years	---	---	---	---	50.9	19.9	22.3	19.7
35–44 years	---	---	---	---	39.3	13.5	12.7	12.5
45–64 years	---	---	---	---	20.5	9.1	8.2	8.3
65 years and over	---	---	---	---	9.4	4.4	4.4	3.1
White, not Hispanic or Latino male ⁷								
All ages, age-adjusted ⁴	---	---	---	---	5.6	3.6	3.5	3.6
All ages, crude	---	---	---	---	5.8	3.6	3.6	3.6
Under 1 year	---	---	---	---	5.4	8.3	6.9	6.5
1–14 years	---	---	---	---	0.9	1.0	0.8	0.9
15–24 years	---	---	---	---	7.5	4.7	4.7	4.7
25–44 years	---	---	---	---	8.7	5.2	5.1	5.1
25–34 years	---	---	---	---	9.3	5.2	5.4	5.5
35–44 years	---	---	---	---	8.0	5.2	4.8	4.9
45–64 years	---	---	---	---	5.7	3.6	3.8	3.9
65 years and over	---	---	---	---	3.7	2.3	2.1	2.1

See footnotes at end of table.

Table 41 (page 3 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	<i>1950^{1,2}</i>	<i>1960^{1,2}</i>	<i>1970²</i>	<i>1980²</i>	<i>1990²</i>	<i>2000³</i>	<i>2005³</i>	<i>2006³</i>
Deaths per 100,000 resident population								
White female ⁵								
All ages, age-adjusted ⁴	1.4	1.5	2.3	3.2	2.7	2.1	1.9	1.9
All ages, crude	1.4	1.4	2.1	3.2	2.8	2.1	1.9	1.9
Under 1 year	3.9	3.5	2.9	4.3	5.1	5.0	5.5	6.3
1–14 years	0.4	0.4	0.7	1.1	1.0	0.8	0.8	0.8
15–24 years	1.3	1.5	2.7	4.7	4.0	2.7	2.3	2.4
25–44 years	2.0	2.1	3.3	4.2	3.8	2.9	2.8	2.5
45–64 years	1.5	1.7	2.1	2.6	2.3	1.8	1.5	1.8
65 years and over	1.2	1.2	1.9	2.9	2.2	1.6	1.6	1.5
Black or African American female ⁵								
All ages, age-adjusted ⁴	11.1	11.4	14.7	13.2	12.5	7.1	6.1	6.4
All ages, crude	11.5	10.4	13.2	13.5	13.4	7.2	6.2	6.6
Under 1 year	---	13.8	10.7	12.8	22.8	22.2	12.6	11.1
1–14 years ⁶	1.8	1.2	3.1	3.3	4.7	2.7	2.3	2.5
15–24 years	16.5	11.9	17.7	18.4	18.9	10.7	8.8	9.5
25–44 years	22.5	22.7	25.3	22.6	21.0	11.0	9.3	10.1
45–64 years	6.8	10.3	13.4	10.8	6.5	4.5	4.9	5.2
65 years and over	3.6	3.0	7.4	8.0	9.4	3.5	2.9	2.5
American Indian or Alaska Native female ⁵								
All ages, age-adjusted ⁴	---	---	---	8.1	4.6	3.0	4.0	2.9
All ages, crude	---	---	---	7.7	4.8	2.9	4.0	3.0
15–24 years	---	---	---	*	*	*	*	*
25–44 years	---	---	---	13.7	6.9	5.9	6.1	6.0
45–64 years	---	---	---	*	*	*	*	*
Asian or Pacific Islander female ⁵								
All ages, age-adjusted ⁴	---	---	---	3.1	2.8	1.7	1.6	1.4
All ages, crude	---	---	---	3.1	2.8	1.7	1.6	1.4
15–24 years	---	---	---	*	*	*	2.8	*
25–44 years	---	---	---	4.6	3.8	2.2	1.7	1.6
45–64 years	---	---	---	*	*	2.0	1.3	2.0
Hispanic or Latina female ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	4.3	2.8	2.4	2.3
All ages, crude	---	---	---	---	4.7	2.8	2.5	2.4
Under 1 year	---	---	---	---	*	7.4	6.6	6.5
1–14 years	---	---	---	---	1.9	1.0	1.0	1.0
15–24 years	---	---	---	---	8.1	3.7	3.6	3.8
25–44 years	---	---	---	---	6.1	3.7	3.4	3.1
45–64 years	---	---	---	---	3.3	2.9	1.9	1.9
65 years and over	---	---	---	---	*	2.4	*	*
White, not Hispanic or Latina female ⁷								
All ages, age-adjusted ⁴	---	---	---	---	2.5	1.9	1.8	1.8
All ages, crude	---	---	---	---	2.5	1.9	1.8	1.8
Under 1 year	---	---	---	---	4.4	4.1	5.0	6.2
1–14 years	---	---	---	---	0.8	0.8	0.7	0.8
15–24 years	---	---	---	---	3.3	2.3	2.0	2.0
25–44 years	---	---	---	---	3.5	2.7	2.6	2.3
45–64 years	---	---	---	---	2.2	1.6	1.5	1.8
65 years and over	---	---	---	---	2.2	1.6	1.6	1.5

See footnotes at end of table.

Table 41 (page 4 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

-- Data not available.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group under 15 years.

⁷Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Figures for 2001 include September 11-related deaths for which death certificates were filed as of October 24, 2002. For the period 1980–1998, homicide was coded using ICD–9 codes that are most nearly comparable with homicide codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/injury/wisqars/index.html>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 42 (page 1 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted ⁴	13.2	12.5	13.1	12.2	12.5	10.4	10.9	10.9
All ages, crude	11.4	10.6	11.6	11.9	12.4	10.4	11.0	11.1
Under 1 year . . . . .	...	...	...	...	...	...	...	...
1–4 years . . . . .	...	...	...	...	...	...	...	...
5–14 years	0.2	0.3	0.3	0.4	0.8	0.7	0.7	0.5
15–24 years	4.5	5.2	8.8	12.3	13.2	10.2	10.0	9.9
15–19 years	2.7	3.6	5.9	8.5	11.1	8.0	7.7	7.3
20–24 years	6.2	7.1	12.2	16.1	15.1	12.5	12.4	12.5
25–44 years	11.6	12.2	15.4	15.6	15.2	13.4	13.7	13.8
25–34 years	9.1	10.0	14.1	16.0	15.2	12.0	12.4	12.3
35–44 years	14.3	14.2	16.9	15.4	15.3	14.5	14.9	15.1
45–64 years	23.5	22.0	20.6	15.9	15.3	13.5	15.4	16.0
45–54 years	20.9	20.7	20.0	15.9	14.8	14.4	16.5	17.2
55–64 years	26.8	23.7	21.4	15.9	16.0	12.1	13.9	14.5
65 years and over	30.0	24.5	20.8	17.6	20.5	15.2	14.7	14.2
65–74 years	29.6	23.0	20.8	16.9	17.9	12.5	12.6	12.6
75–84 years	31.1	27.9	21.2	19.1	24.9	17.6	16.9	15.9
85 years and over	28.8	26.0	19.0	19.2	22.2	19.6	16.9	15.9
Male								
All ages, age-adjusted ⁴	21.2	20.0	19.8	19.9	21.5	17.7	18.0	18.0
All ages, crude	17.8	16.5	16.8	18.6	20.4	17.1	17.7	17.8
Under 1 year . . . . .	...	...	...	...	...	...	...	...
1–4 years . . . . .	...	...	...	...	...	...	...	...
5–14 years	0.3	0.4	0.5	0.6	1.1	1.2	1.0	0.7
15–24 years	6.5	8.2	13.5	20.2	22.0	17.1	16.2	16.2
15–19 years	3.5	5.6	8.8	13.8	18.1	13.0	12.1	11.5
20–24 years	9.3	11.5	19.3	26.8	25.7	21.4	20.2	20.8
25–44 years	17.2	17.9	20.9	24.0	24.4	21.3	21.6	21.5
25–34 years	13.4	14.7	19.8	25.0	24.8	19.6	19.9	19.7
35–44 years	21.3	21.0	22.1	22.5	23.9	22.8	23.1	23.2
45–64 years	37.1	34.4	30.0	23.7	24.3	21.3	24.0	24.8
45–54 years	32.0	31.6	27.9	22.9	23.2	22.4	25.2	26.2
55–64 years	43.6	38.1	32.7	24.5	25.7	19.4	22.2	22.7
65 years and over	52.8	44.0	38.4	35.0	41.6	31.1	29.5	28.5
65–74 years	50.5	39.6	36.0	30.4	32.2	22.7	22.7	22.7
75–84 years	58.3	52.5	42.8	42.3	56.1	38.6	35.8	33.3
85 years and over	58.3	57.4	42.4	50.6	65.9	57.5	45.0	43.2
Female								
All ages, age-adjusted ⁴	5.6	5.6	7.4	5.7	4.8	4.0	4.4	4.5
All ages, crude	5.1	4.9	6.6	5.5	4.8	4.0	4.5	4.6
Under 1 year . . . . .	...	...	...	...	...	...	*	*
1–4 years . . . . .	...	...	...	...	...	...	*	*
5–14 years	0.1	0.1	0.2	0.2	0.4	0.3	0.3	0.3
15–24 years	2.6	2.2	4.2	4.3	3.9	3.0	3.5	3.2
15–19 years	1.8	1.6	2.9	3.0	3.7	2.7	3.0	2.8
20–24 years	3.3	2.9	5.7	5.5	4.1	3.2	4.0	3.6
25–44 years	6.2	6.6	10.2	7.7	6.2	5.4	5.8	5.9
25–34 years	4.9	5.5	8.6	7.1	5.6	4.3	4.7	4.7
35–44 years	7.5	7.7	11.9	8.5	6.8	6.4	6.8	7.0
45–64 years	9.9	10.2	12.0	8.9	7.1	6.2	7.2	7.7
45–54 years	9.9	10.2	12.6	9.4	6.9	6.7	8.0	8.4
55–64 years	9.9	10.2	11.4	8.4	7.3	5.4	6.1	6.8
65 years and over	9.4	8.4	8.1	6.1	6.4	4.0	4.0	3.9
65–74 years	10.1	8.4	9.0	6.5	6.7	4.0	4.0	4.1
75–84 years	8.1	8.9	7.0	5.5	6.3	4.0	4.0	4.0
85 years and over	8.2	6.0	5.9	5.5	5.4	4.2	4.0	3.1
White male ⁵								
All ages, age-adjusted ⁴	22.3	21.1	20.8	20.9	22.8	19.1	19.6	19.6
All ages, crude	19.0	17.6	18.0	19.9	22.0	18.8	19.7	19.8
15–24 years	6.6	8.6	13.9	21.4	23.2	17.9	17.3	17.1
25–44 years	17.9	18.5	21.5	24.6	25.4	22.9	23.5	23.5
45–64 years	39.3	36.5	31.9	25.0	26.0	23.2	26.6	27.4
65 years and over	55.8	46.7	41.1	37.2	44.2	33.3	32.1	30.9
65–74 years	53.2	42.0	38.7	32.5	34.2	24.3	24.9	24.7
75–84 years	61.9	55.7	45.5	45.5	60.2	41.1	38.4	36.0
85 years and over	61.9	61.3	45.8	52.8	70.3	61.6	48.2	46.1

See footnotes at end of table.

Table 42 (page 2 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
Black or African American male⁵								
All ages, age-adjusted ⁴	7.5	8.4	10.0	11.4	12.8	10.0	9.2	9.4
All ages, crude	6.3	6.4	8.0	10.3	12.0	9.4	8.7	8.8
15–24 years	4.9	4.1	10.5	12.3	15.1	14.2	11.5	10.6
25–44 years	9.8	12.6	16.1	19.2	19.6	14.3	13.7	14.3
45–64 years	12.7	13.0	12.4	11.8	13.1	9.9	9.4	9.9
65 years and over	9.0	9.9	8.7	11.4	14.9	11.5	10.2	10.4
65–74 years	10.0	11.3	8.7	11.1	14.7	11.1	8.4	8.8
75–84 years ⁶	*	*	*	10.5	14.4	12.1	12.8	11.6
85 years and over	---	*	*	*	*	*	*	*
American Indian or Alaska Native male⁵								
All ages, age-adjusted ⁴	---	---	---	19.3	20.1	16.0	18.9	18.3
All ages, crude	---	---	---	20.9	20.9	15.9	19.8	19.3
15–24 years	---	---	---	45.3	49.1	26.2	32.7	35.9
25–44 years	---	---	---	31.2	27.8	24.5	29.4	26.0
45–64 years	---	---	---	*	*	15.4	16.8	18.0
65 years and over	---	---	---	*	*	*	*	*
Asian or Pacific Islander male⁵								
All ages, age-adjusted ⁴	---	---	---	10.7	9.6	8.6	7.3	7.9
All ages, crude	---	---	---	8.8	8.7	7.9	7.2	8.0
15–24 years	---	---	---	10.8	13.5	9.1	7.2	12.0
25–44 years	---	---	---	11.0	10.6	9.9	9.5	9.2
45–64 years	---	---	---	13.0	9.7	9.7	8.9	9.7
65 years and over	---	---	---	18.6	16.8	15.4	11.0	10.6
Hispanic or Latino male^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	13.7	10.3	9.4	8.8
All ages, crude	---	---	---	---	11.4	8.4	8.3	7.9
15–24 years	---	---	---	---	14.7	10.9	12.1	11.6
25–44 years	---	---	---	---	16.2	11.2	11.2	10.8
45–64 years	---	---	---	---	16.1	12.0	10.7	10.3
65 years and over	---	---	---	---	23.4	19.5	14.1	12.1
White, not Hispanic or Latino male⁷								
All ages, age-adjusted ⁴	---	---	---	---	23.5	20.2	21.2	21.4
All ages, crude	---	---	---	---	23.1	20.4	22.0	22.3
15–24 years	---	---	---	---	24.4	19.5	18.4	18.5
25–44 years	---	---	---	---	26.4	25.1	26.6	26.9
45–64 years	---	---	---	---	26.8	24.0	28.2	29.3
65 years and over	---	---	---	---	45.4	33.9	33.2	32.3
White female⁵								
All ages, age-adjusted ⁴	6.0	5.9	7.9	6.1	5.2	4.3	4.9	5.1
All ages, crude	5.5	5.3	7.1	5.9	5.3	4.4	5.0	5.2
15–24 years	2.7	2.3	4.2	4.6	4.2	3.1	3.7	3.4
25–44 years	6.6	7.0	11.0	8.1	6.6	6.0	6.5	6.8
45–64 years	10.6	10.9	13.0	9.6	7.7	6.9	8.1	8.8
65 years and over	9.9	8.8	8.5	6.4	6.8	4.3	4.2	4.1
Black or African American female⁵								
All ages, age-adjusted ⁴	1.8	2.0	2.9	2.4	2.4	1.8	1.9	1.4
All ages, crude	1.5	1.6	2.6	2.2	2.3	1.7	1.8	1.4
15–24 years	1.8	*	3.8	2.3	2.3	2.2	1.7	1.8
25–44 years	2.3	3.0	4.8	4.3	3.8	2.6	2.8	2.0
45–64 years	2.7	3.1	2.9	2.5	2.9	2.1	2.5	1.9
65 years and over	*	*	2.6	*	1.9	1.3	1.4	*

See footnotes at end of table.

Table 42 (page 3 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 ^{1,2}	1960 ^{1,2}	1970 ²	1980 ²	1990 ²	2000 ³	2005 ³	2006 ³
Deaths per 100,000 resident population								
American Indian or Alaska Native female ⁵								
All ages, age-adjusted ⁴	---	---	---	4.7	3.6	3.8	4.6	5.1
All ages, crude	---	---	---	4.7	3.7	4.0	5.0	5.4
15–24 years	---	---	---	*	*	*	10.1	8.9
25–44 years	---	---	---	10.7	*	7.2	7.4	8.0
45–64 years	---	---	---	*	*	*	*	*
65 years and over	---	---	---	*	*	*	*	*
Asian or Pacific Islander female ⁵								
All ages, age-adjusted ⁴	---	---	---	5.5	4.1	2.8	3.3	3.4
All ages, crude	---	---	---	4.7	3.4	2.7	3.2	3.3
15–24 years	---	---	---	*	3.9	2.7	3.7	4.0
25–44 years	---	---	---	5.4	3.8	3.3	3.4	3.3
45–64 years	---	---	---	7.9	5.0	3.2	3.8	4.2
65 years and over	---	---	---	*	8.5	5.2	6.8	6.9
Hispanic or Latina female ^{5,7}								
All ages, age-adjusted ⁴	---	---	---	---	2.3	1.7	1.8	1.8
All ages, crude	---	---	---	---	2.2	1.5	1.7	1.7
15–24 years	---	---	---	---	3.1	2.0	2.7	2.6
25–44 years	---	---	---	---	3.1	2.1	2.2	2.3
45–64 years	---	---	---	---	2.5	2.5	2.1	2.4
65 years and over	---	---	---	---	*	*	2.0	1.7
White, not Hispanic or Latina female ⁷								
All ages, age-adjusted ⁴	---	---	---	---	5.4	4.7	5.3	5.6
All ages, crude	---	---	---	---	5.6	4.9	5.6	5.9
15–24 years	---	---	---	---	4.3	3.3	3.9	3.5
25–44 years	---	---	---	---	7.0	6.7	7.4	7.8
45–64 years	---	---	---	---	8.0	7.3	8.7	9.5
65 years and over	---	---	---	---	7.0	4.4	4.3	4.3

... Category not applicable.

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

¹Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).

²Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

⁴Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁶In 1950, rate is for the age group 75 years and over.

⁷Prior to 1997, excludes data from states lacking a Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Figures for 2001 include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/injury/wisqars/index.html>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and D.C. reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 43 (page 1 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1970 ¹	1980 ¹	1990 ¹	1995 ¹	2000 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted ³	14.3	14.8	14.6	13.4	10.2	10.0	10.2	10.2
All ages, crude	13.1	14.9	14.9	13.5	10.2	10.1	10.4	10.3
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	1.6	1.4	1.5	1.6	0.7	0.6	0.7	0.7
1–4 years	1.0	0.7	0.6	0.6	0.3	0.3	0.4	0.3
5–14 years	1.7	1.6	1.9	1.9	0.9	0.7	0.8	0.9
15–24 years	15.5	20.6	25.8	26.7	16.8	15.7	16.2	16.9
15–19 years	11.4	14.7	23.3	24.1	12.9	12.0	12.5	13.2
20–24 years	20.3	26.4	28.1	29.2	20.9	19.3	20.0	20.6
25–44 years	20.9	22.5	19.3	16.9	13.1	13.1	13.6	13.3
25–34 years	22.2	24.3	21.8	19.6	14.5	15.0	15.7	15.3
35–44 years	19.6	20.0	16.3	14.3	11.9	11.3	11.6	11.5
45–64 years	17.6	15.2	13.6	11.7	10.0	10.5	10.6	10.6
45–54 years	18.1	16.4	13.9	12.0	10.5	11.0	11.2	11.2
55–64 years	17.0	13.9	13.3	11.3	9.4	9.8	9.8	9.8
65 years and over	13.8	13.5	16.0	14.1	12.2	11.5	11.8	11.2
65–74 years	14.5	13.8	14.4	12.8	10.6	10.2	10.3	10.0
75–84 years	13.4	13.4	19.4	16.3	13.9	13.3	13.7	12.9
85 years and over	10.2	11.6	14.7	14.4	14.2	11.9	12.0	11.5
Male								
All ages, age-adjusted ³	24.8	25.9	26.1	23.8	18.1	17.7	18.3	18.1
All ages, crude	22.2	25.7	26.2	23.6	17.8	17.6	18.3	18.1
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	2.3	2.0	2.2	2.3	1.1	0.9	1.0	1.0
1–4 years	1.2	0.9	0.7	0.8	0.4	0.4	0.5	0.5
5–14 years	2.7	2.5	2.9	2.9	1.4	1.1	1.2	1.2
15–24 years	26.4	34.8	44.7	46.5	29.4	27.5	28.7	29.8
15–19 years	19.2	24.5	40.1	41.6	22.4	20.7	22.0	23.3
20–24 years	35.1	45.2	49.1	51.5	37.0	34.2	35.3	36.2
25–44 years	34.1	38.1	32.6	28.4	22.0	22.3	23.1	22.6
25–34 years	36.5	41.4	37.0	33.2	24.9	26.1	27.2	26.6
35–44 years	31.6	33.2	27.4	23.6	19.4	18.7	19.2	18.9
45–64 years	31.0	25.9	23.4	20.0	17.1	17.8	18.3	17.9
45–54 years	30.7	27.3	23.2	20.1	17.6	18.3	18.9	18.5
55–64 years	31.3	24.5	23.7	19.8	16.3	17.1	17.4	17.0
65 years and over	29.7	29.7	35.3	30.7	26.4	24.8	25.1	24.1
65–74 years	29.5	27.8	28.2	25.1	20.3	19.7	19.7	19.2
75–84 years	31.0	33.0	46.9	37.8	32.2	29.8	30.8	29.1
85 years and over	26.2	34.9	49.3	47.1	44.7	35.9	35.4	33.6
Female								
All ages, age-adjusted ³	4.8	4.7	4.2	3.8	2.8	2.7	2.7	2.7
All ages, crude	4.4	4.7	4.3	3.8	2.8	2.7	2.7	2.8
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	0.8	0.7	0.8	0.8	0.3	0.3	0.4	0.4
1–4 years	0.9	0.5	0.5	0.5	*	0.3	0.3	*
5–14 years	0.8	0.7	1.0	0.9	0.4	0.3	0.4	0.4
15–24 years	4.8	6.1	6.0	5.9	3.5	3.2	3.0	3.2
15–19 years	3.5	4.6	5.7	5.6	2.9	2.9	2.4	2.5
20–24 years	6.4	7.7	6.3	6.1	4.2	3.5	3.6	3.8
25–44 years	8.3	7.4	6.1	5.5	4.2	3.8	3.9	3.9
25–34 years	8.4	7.5	6.7	5.8	4.0	3.7	3.8	3.7
35–44 years	8.2	7.2	5.4	5.2	4.4	3.9	4.0	4.1
45–64 years	5.4	5.4	4.5	3.9	3.4	3.7	3.3	3.6
45–54 years	6.4	6.2	4.9	4.2	3.6	4.0	3.7	4.0
55–64 years	4.2	4.6	4.0	3.5	3.0	3.1	2.8	3.2
65 years and over	2.4	2.5	3.1	2.8	2.2	2.0	2.1	1.9
65–74 years	2.8	3.1	3.6	3.0	2.5	2.2	2.5	2.2
75–84 years	1.7	1.7	2.9	2.8	2.0	2.3	2.1	1.8
85 years and over	*	1.3	1.3	1.8	1.7	1.0	1.3	1.1
White male ⁴								
All ages, age-adjusted ³	19.7	22.1	22.0	20.1	15.9	15.4	15.7	15.3
All ages, crude	17.6	21.8	21.8	19.9	15.6	15.5	15.8	15.4
1–14 years	1.8	1.9	1.9	1.9	1.0	0.7	0.8	0.8
15–24 years	16.9	28.4	29.5	30.8	19.6	18.4	18.2	18.4
25–44 years	24.2	29.5	25.7	23.2	18.0	17.6	17.9	17.3
25–34 years	24.3	31.1	27.8	25.2	18.1	18.2	18.6	17.7
35–44 years	24.1	27.1	23.3	21.2	17.9	17.1	17.2	17.0
45–64 years	27.4	23.3	22.8	19.5	17.4	18.4	19.0	18.4
65 years and over	29.9	30.1	36.8	32.2	28.2	26.5	27.1	26.0

See footnotes at end of table.

Table 43 (page 2 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2006

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1970 ¹	1980 ¹	1990 ¹	1995 ¹	2000 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population								
Black or African American male⁴								
All ages, age-adjusted ³	70.8	60.1	56.3	49.2	34.2	34.5	36.4	37.4
All ages, crude	60.8	57.7	61.9	52.9	36.1	36.4	38.7	40.0
1–14 years	5.3	3.0	4.4	4.4	1.8	2.0	2.1	2.2
15–24 years	97.3	77.9	138.0	138.7	89.3	80.7	86.8	91.8
25–44 years	126.2	114.1	90.3	70.2	54.1	59.2	63.6	63.8
25–34 years	145.6	128.4	108.6	92.3	74.8	83.6	88.4	89.0
35–44 years	104.2	92.3	66.1	46.3	34.3	35.1	38.7	38.1
45–64 years	71.1	55.6	34.5	28.3	18.4	18.3	17.8	19.3
65 years and over	30.6	29.7	23.9	21.8	13.8	14.6	13.6	13.4
American Indian or Alaska Native male⁴								
All ages, age-adjusted ³	---	24.0	19.4	19.4	13.1	14.2	15.7	14.7
All ages, crude	---	27.5	20.5	20.9	13.2	15.0	16.7	15.8
15–24 years	---	55.3	49.1	40.9	26.9	25.7	32.7	32.7
25–44 years	---	43.9	25.4	31.2	16.6	23.5	23.2	21.2
45–64 years	---	*	*	14.2	12.2	9.5	13.0	11.0
65 years and over	---	*	*	*	*	*	*	*
Asian or Pacific Islander male⁴								
All ages, age-adjusted ³	---	7.8	8.8	9.2	6.0	4.8	5.3	5.4
All ages, crude	---	8.2	9.4	10.0	6.2	5.0	5.5	5.7
15–24 years	---	10.8	21.0	24.3	9.3	8.8	12.1	14.5
25–44 years	---	12.8	10.9	10.6	8.1	5.7	6.4	5.7
45–64 years	---	10.4	8.1	8.2	7.4	6.1	5.7	5.6
65 years and over	---	*	*	*	*	4.2	*	*
Hispanic or Latino male^{4,5}								
All ages, age-adjusted ³	---	---	27.6	23.8	13.6	13.1	13.3	12.7
All ages, crude	---	---	29.9	26.2	14.2	13.9	14.2	13.7
1–14 years	---	---	2.6	2.8	1.0	0.7	0.7	1.1
15–24 years	---	---	55.5	61.7	30.8	32.4	33.0	33.6
25–44 years	---	---	42.7	31.4	17.3	17.6	18.8	17.4
25–34 years	---	---	47.3	36.4	20.3	21.3	22.9	20.9
35–44 years	---	---	35.4	24.2	13.2	12.9	13.4	12.9
45–64 years	---	---	21.4	17.2	12.0	9.9	9.1	8.5
65 years and over	---	---	19.1	16.5	12.2	10.0	9.8	7.6
White, not Hispanic or Latino male⁵								
All ages, age-adjusted ³	---	---	20.6	18.6	15.5	15.1	15.3	15.0
All ages, crude	---	---	20.4	18.5	15.7	15.6	15.9	15.6
1–14 years	---	---	1.6	1.6	1.0	0.7	0.8	0.7
15–24 years	---	---	24.1	23.5	16.2	14.3	13.9	13.9
25–44 years	---	---	23.3	21.4	17.9	17.4	17.4	17.1
25–34 years	---	---	24.7	22.5	17.2	16.9	16.9	16.3
35–44 years	---	---	21.6	20.4	18.4	17.8	17.8	17.8
45–64 years	---	---	22.7	19.5	17.8	19.2	20.0	19.5
65 years and over	---	---	37.4	32.5	29.0	27.6	28.2	27.3
White female⁴								
All ages, age-adjusted ³	4.0	4.2	3.8	3.5	2.7	2.7	2.6	2.6
All ages, crude	3.7	4.1	3.8	3.5	2.7	2.7	2.6	2.6
15–24 years	3.4	5.1	4.8	4.5	2.8	2.6	2.3	2.3
25–44 years	6.9	6.2	5.3	4.9	3.9	3.6	3.7	3.5
45–64 years	5.0	5.1	4.5	4.0	3.5	3.9	3.6	3.9
65 years and over	2.2	2.5	3.1	2.8	2.4	2.2	2.3	2.0

See footnotes at end of table.

Table 43 (page 3 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2006

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1970 ¹	1980 ¹	1990 ¹	1995 ¹	2000 ²	2004 ²	2005 ²	2006 ²
Deaths per 100,000 resident population								
Black or African American female ⁴								
All ages, age-adjusted ³	11.1	8.7	7.3	6.2	3.9	3.6	3.6	4.0
All ages, crude	10.0	8.8	7.8	6.5	4.0	3.7	3.7	4.1
15–24 years	15.2	12.3	13.3	13.2	7.6	6.9	6.7	7.7
25–44 years	19.4	16.1	12.4	9.8	6.5	5.7	6.0	7.0
45–64 years	10.2	8.2	4.8	4.1	3.1	3.0	2.7	2.6
65 years and over	4.3	3.1	3.1	2.6	1.3	*	1.3	1.0
American Indian or Alaska Native female ⁴								
All ages, age-adjusted ³	---	5.8	3.3	3.8	2.9	2.7	2.4	2.4
All ages, crude	---	5.8	3.4	4.1	2.9	2.9	2.6	2.4
15–24 years	---	*	*	*	*	*	*	*
25–44 years	---	10.2	*	7.0	5.5	*	*	*
45–64 years	---	*	*	*	*	*	*	*
65 years and over	---	*	*	*	*	*	*	*
Asian or Pacific Islander female ⁴								
All ages, age-adjusted ³	---	2.0	1.9	2.0	1.1	0.9	0.9	1.0
All ages, crude	---	2.1	2.1	2.1	1.2	1.0	0.9	1.0
15–24 years	---	*	*	3.9	*	*	2.3	*
25–44 years	---	3.2	2.7	2.7	1.5	1.4	1.0	1.2
45–64 years	---	*	*	*	*	1.3	*	1.3
65 years and over	---	*	*	*	*	*	*	*
Hispanic or Latina female ^{4,5}								
All ages, age-adjusted ³	---	---	3.3	3.1	1.8	1.5	1.6	1.5
All ages, crude	---	---	3.6	3.3	1.8	1.5	1.6	1.5
15–24 years	---	---	6.9	6.1	2.9	2.6	2.6	2.7
25–44 years	---	---	5.1	4.7	2.5	2.2	2.7	2.3
45–64 years	---	---	2.4	2.4	2.2	1.5	1.2	1.4
65 years and over	---	---	*	*	*	*	*	*
White, not Hispanic or Latina female ⁵								
All ages, age-adjusted ³	---	---	3.7	3.4	2.8	2.8	2.7	2.7
All ages, crude	---	---	3.7	3.5	2.9	2.9	2.8	2.8
15–24 years	---	---	4.3	4.1	2.7	2.5	2.2	2.2
25–44 years	---	---	5.1	4.8	4.2	3.9	4.0	3.8
45–64 years	---	---	4.6	4.1	3.6	4.1	3.8	4.2
65 years and over	---	---	3.2	2.8	2.4	2.3	2.4	2.2

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

¹Underlying cause of death was coded according to the Eighth Revision of the *International Classification of Diseases* (ICD) in 1970 and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

²Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

³Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

⁵Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/injury/wisqars/index/html>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia (D.C.) reported multiple-race data. In 2006, 25 states and D.C. reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/whstatab/unpubd/mortabs.htm>; Heron MP, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final Data for 2006. National vital statistics reports. Vol 57 no 14. Hyattsville, MD: NCHS. 2009.

Table 44. Deaths from selected occupational diseases among persons 15 years of age and over: United States, selected years 1980–2006

[Data are based on death certificates]

Cause of death ¹	1980 ²	1985 ²	1990 ²	1995 ²	2000 ³	2004 ³	2005 ³	2006 ³
Underlying and nonunderlying cause of death		Number of death certificates with cause of death code(s) mentioned						
Angiosarcoma of liver ⁴	---	---	---	---	16	21	26	23
Malignant mesothelioma ⁵	699	715	874	897	2,531	2,657	2,704	2,588
Pneumoconiosis ⁶	4,151	3,783	3,644	3,151	2,859	2,524	2,425	2,308
Coal workers' pneumoconiosis	2,576	2,615	1,990	1,413	949	703	652	654
Asbestosis	339	534	948	1,169	1,486	1,460	1,416	1,340
Silicosis	448	334	308	242	151	165	160	126
Other (including unspecified)	814	321	413	343	290	214	222	206
Underlying cause of death		Number of deaths						
Angiosarcoma of liver ⁴	---	---	---	---	15	21	23	21
Malignant mesothelioma ⁵	531	573	725	780	2,384	2,504	2,553	2,452
Pneumoconiosis	1,581	1,355	1,335	1,117	1,142	1,013	983	907
Coal workers' pneumoconiosis	982	958	734	533	389	292	270	266
Asbestosis	101	139	302	355	558	542	532	485
Silicosis	207	143	150	114	71	76	74	67
Other (including unspecified)	291	115	149	115	124	103	107	89

--- Data not available.

¹Cause-of-death titles for selected occupational diseases and corresponding code numbers according to the *International Classification of Diseases*, Ninth and Tenth Revisions. See [Appendix II, Cause of death; Table IV](#).

Cause of death	ICD-9 code	ICD-10 code
Angiosarcoma of liver	---	C22.3
Malignant mesothelioma	158.8,158.9,163	C45
Pneumoconiosis	500-505	J60-J66
Coal workers' pneumoconiosis	500	J60
Asbestosis	501	J61
Silicosis	502	J62
Other (including unspecified)	503-505	J63-J66

²For the period 1980–1998, underlying cause of death was coded according to the Ninth Revision of the *International Classification of Diseases* (ICD). See [Appendix II, Cause of death; Tables IV and V](#).

³Starting with 1999 data, ICD-10 was introduced for coding cause of death. Discontinuities exist between 1998 and 1999 due to ICD-10 coding and classification changes. Caution should be exercised in interpreting trends for the causes of death in this table, especially for those with major ICD-10 changes (e.g., malignant mesothelioma). See [Appendix II, International Classification of Diseases \(ICD\)](#).

⁴Prior to 1999, there was no discrete code for this condition.

⁵Prior to 1999, the combined ICD-9 categories of malignant neoplasm of peritoneum and malignant neoplasm of pleura served as a crude surrogate for malignant mesothelioma category under ICD-10.

⁶For underlying and nonunderlying cause of death, counts for pneumoconiosis subgroups may sum to slightly more than total pneumoconiosis due to the reporting of more than one type of pneumoconiosis on some death certificates.

NOTES: See [Appendix I, National Vital Statistics System, Multiple Cause of Death File](#), for information about tabulating cause-of-death data in this table. Selection of occupational diseases is based on definitions in Mullan RJ, Murthy LI. Occupational sentinel health events: An updated list for physician recognition and public health surveillance. 1991; *Am J Ind Med* 19(6):775–99. For more detailed information about pneumoconiosis deaths, see *Work-Related Lung Disease Surveillance Report 2007*, DHHS (NIOSH) Publication Number 2008–143 available from: <http://www2a.cdc.gov/drds/WorldReportData>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; annual mortality files for underlying and multiple cause of death.

Table 45 (page 1 of 2). Occupational injury deaths and rates, by industry, sex, age, race, and Hispanic origin: United States, selected years 1995–2007

[Data are compiled from various federal, state, and local administrative sources]

Characteristic	1995	2000	2001 ¹	2004	2005	2006	2007
Deaths per 100,000 employed workers ²							
Total workforce	4.9	4.3	4.3	4.1	4.0	4.0	3.8
Sex							
Male	8.3	7.4	7.4	7.1	6.9	6.9	6.6
Female	0.9	0.7	0.7	0.6	0.6	0.7	0.6
Age							
16–17 years	1.6	1.6	1.3	1.1	1.4	0.9	0.9
18–19 years	3.3	2.7	2.8	2.7	2.9	2.8	2.6
20–24 years	3.8	3.2	3.2	3.0	2.8	2.7	3.0
25–34 years	4.3	3.8	3.8	3.2	3.3	3.3	3.1
35–44 years	4.6	4.0	4.0	3.9	3.6	3.7	3.4
45–54 years	5.2	4.4	4.5	4.3	4.2	4.2	4.1
55–64 years	7.2	6.1	5.5	5.2	5.1	5.0	4.6
65 years and over	14.0	12.0	12.7	11.8	11.3	11.2	10.2
Race and Hispanic origin ³							
Hispanic or Latino	5.5	5.6	6.0	5.0	4.9	5.0	4.6
Not Hispanic or Latino	---	---	---	---	---	---	---
White	---	4.2	4.2	4.1	3.9	4.0	3.8
Black or African American	---	3.8	3.8	3.7	3.9	3.7	3.9
Industry ⁴							
Private sector	---	---	---	4.4	4.3	4.3	4.1
Agriculture, forestry, fishing, and hunting	---	---	---	30.5	32.5	30.0	27.9
Mining	---	---	---	28.3	25.6	28.1	25.1
Utilities	---	---	---	6.1	3.6	6.3	4.0
Construction	---	---	---	12.0	11.1	10.9	10.5
Manufacturing	---	---	---	2.8	2.4	2.8	2.5
Wholesale trade	---	---	---	4.5	4.6	4.9	4.7
Retail trade	---	---	---	2.3	2.4	2.2	2.1
Transportation and warehousing	---	---	---	18.0	17.7	16.8	16.9
Information	---	---	---	1.7	2.0	2.0	2.3
Finance and insurance	---	---	---	0.7	0.6	0.6	0.6
Real estate and rental and leasing	---	---	---	2.4	1.9	2.6	2.4
Professional, scientific, and technical services	---	---	---	0.9	1.0	0.9	0.9
Management of companies and enterprises	---	---	---	*	*	*	*
Administrative and support and waste management and remediation services	---	---	---	6.7	7.2	6.6	6.3
Educational services	---	---	---	1.3	1.3	1.3	0.9
Health care and social assistance	---	---	---	0.8	0.7	0.8	0.7
Arts, entertainment, and recreation	---	---	---	4.3	3.2	3.5	3.9
Accommodation and food services	---	---	---	1.6	1.5	2.0	1.7
Other services (except public administration)	---	---	---	3.0	3.0	2.6	2.5
Government ⁵	---	---	---	2.5	2.4	2.4	2.5
Number of deaths ⁶							
Total workforce	6,275	5,920	5,915	5,764	5,734	5,840	5,657
Sex							
Male	5,736	5,471	5,442	5,349	5,328	5,396	5,228
Female	539	449	473	415	406	444	429
Age							
Under 16 years	26	29	20	13	23	11	18
16–17 years	42	44	33	25	31	21	20
18–19 years	130	127	122	103	111	106	97
20–24 years	486	446	441	421	403	390	424
25–34 years	1,409	1,163	1,142	996	1,017	1,041	991
35–44 years	1,571	1,473	1,478	1,342	1,243	1,288	1,168
45–54 years	1,256	1,313	1,368	1,384	1,389	1,417	1,425
55–64 years	827	831	775	907	933	963	934
65 years and over	515	488	530	569	578	599	574
Unspecified	13	6	6	4	6	4	6

See footnotes at end of table.

Table 45 (page 2 of 2). Occupational injury deaths and rates, by industry, sex, age, race, and Hispanic origin: United States, selected years 1995–2007

[Data are compiled from various federal, state, and local administrative sources]

Characteristic	1995	2000	2001 ¹	2004	2005	2006	2007
Race and Hispanic origin		Number of deaths ⁶					
White	5,120	---	---	---	---	---	---
Black or African American	697	---	---	---	---	---	---
Hispanic or Latino	619	815	895	902	923	990	937
Not Hispanic or Latino	5,656	5,105	5,020	4,862	4,809	4,850	4,734
White	4,599	4,244	4,175	4,066	3,977	4,019	3,867
Black or African American	684	575	565	546	584	565	609
American Indian or Alaska Native	27	33	48	28	50	46	29
Asian ⁷	188	171	173	168	154	148	166
Native Hawaiian or Other Pacific Islander	---	14	9	12	9	11	6
Multiple races	---	---	6	4	---	11	10
Other races or not reported	158	68	44	38	35	50	33
Industry ⁴							
Private sector	---	---	---	5,229	5,214	5,320	5,112
Agriculture, forestry, fishing, and hunting	---	---	---	669	715	655	585
Mining	---	---	---	152	159	192	183
Utilities	---	---	---	51	30	53	34
Construction	---	---	---	1,234	1,192	1,239	1,204
Manufacturing	---	---	---	463	393	456	400
Wholesale trade	---	---	---	205	209	222	207
Retail trade	---	---	---	377	400	359	348
Transportation and warehousing	---	---	---	840	885	860	890
Information	---	---	---	55	65	66	79
Finance and insurance	---	---	---	46	42	44	46
Real estate and rental and leasing	---	---	---	70	57	82	73
Professional, scientific, and technical services	---	---	---	77	83	78	77
Management of companies and enterprises	---	---	---	*	*	*	4
Administrative and support and waste management and remediation services	---	---	---	373	398	381	395
Educational services	---	---	---	44	46	49	34
Health care and social assistance	---	---	---	113	104	129	115
Arts, entertainment, and recreation	---	---	---	99	77	80	96
Accommodation and food services	---	---	---	148	136	185	164
Other services (except public administration)	---	---	---	207	210	183	175
Government ⁵	---	---	---	535	520	520	545

--- Data not available.

* Estimates are unreliable.

¹2,886 fatalities due to the September 11 terrorist attacks are not included.

²Numerator excludes deaths to workers under the age of 16 years. Employment data in denominators are average annual estimates of employed civilians 16 years of age and over from the CPS. These data are supplemented by data for the resident military, which was supplied by the U.S. Census Bureau (1995–1998) and the Department of Defense (1999–2007). Starting with 2004 data, rates are taken directly from the U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries. Revised annual data.

³Employment data for American Indian or Alaska Native workers and, prior to 2003, Asian or Pacific Islander workers, were not available for the calculation of rates. Employment data for non-Hispanic white and non-Hispanic black workers were not available before the year 2000. In 1999 and earlier years, the race groups white and black included persons of Hispanic and non-Hispanic origin.

⁴Starting with 2003 data, establishments were classified by industry according to the North American Industry Classification System (NAICS). Prior to 2003, the Standard Industrial Classification (SIC) system was used. Because of substantial differences between these systems, industry data classified by these two systems are not comparable. Industry data for 1995–2002 classified by SIC are available in *Health, United States, 2004*, Table 49 available from: <http://www.cdc.gov/nchs/hus.htm>. See [Appendix II, Industry of employment](#).

⁵Includes fatalities to workers employed by governmental organizations, regardless of industry.

⁶Includes fatalities to all workers, regardless of age.

⁷In 1999 and earlier years, category also included Native Hawaiian or Other Pacific Islander.

NOTES: Fatalities and rates are based on revised data and may differ from originally published data from the Census of Fatal Occupational Injuries (CFOI). See [Appendix I, Census of Fatal Occupational Injuries](#). CFOI began collecting fatality data in 1992. For data for prior years, see CDC. Fatal Occupational Injuries—United States, 1980–1997. *MMWR* 2001;50(16):317–20, which reports trend data from the National Traumatic Occupational Fatalities (NTOF) surveillance system. NTOF was established at the National Institute of Occupational Safety and Health (NIOSH) to monitor occupational injury deaths through death certificates. Because of methodological differences between CFOI and NTOF, the data are not directly comparable. Industry categories presented in this table differ from those shown in some previous editions of *Health, United States*. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries. Revised annual data.

Table 46. Nonfatal occupational injuries and illnesses with days away from work, job transfer, or restriction, by industry: United States, 2003–2007

[Data are based on employer records from a sample of business establishments]

Industry	<i>Injuries and illnesses with days away from work, job transfer, or restriction</i>							
	Cases per 100 full-time workers ¹				Number of cases in thousands ²			
	2003	2005	2006	2007	2003	2005	2006	2007
Total private sector ³	2.6	2.4	2.3	2.1	2,301.9	2,184.8	2,114.6	2,036.0
Agriculture, forestry, fishing, and hunting ⁴	3.3	3.3	3.2	2.8	29.3	29.5	27.6	26.6
Mining	2.0	2.2	2.1	2.0	11.2	13.7	14.0	14.1
Utilities	2.2	2.4	2.2	2.1	12.2	12.9	11.8	11.4
Construction	3.6	3.4	3.2	2.8	218.0	222.5	223.7	197.5
Manufacturing	3.8	3.5	3.3	3.0	538.0	490.8	473.4	427.1
Wholesale trade	2.8	2.7	2.5	2.4	147.4	146.8	140.6	139.3
Retail trade	2.7	2.6	2.6	2.5	319.6	314.2	308.6	309.1
Transportation and warehousing	5.4	4.6	4.3	4.3	204.0	185.6	176.3	179.4
Information	1.1	1.1	1.0	1.1	30.8	30.9	28.3	29.1
Finance and insurance	0.4	0.4	0.3	0.4	21.3	19.1	17.7	20.7
Real estate and rental and leasing	2.1	2.1	1.8	1.6	35.6	37.1	33.0	29.0
Professional, scientific, and technical services	0.6	0.6	0.5	0.5	36.0	38.4	34.5	31.8
Management of companies and enterprises	1.6	1.3	1.1	0.9	25.1	20.8	17.9	15.1
Administrative and support and waste management and remediation services	2.4	2.0	1.9	1.8	96.7	89.5	87.0	89.2
Educational services	1.2	1.0	0.9	1.0	17.9	14.8	14.5	15.8
Health care and social assistance	3.1	2.8	2.7	2.5	337.9	318.4	310.0	303.7
Arts, entertainment, and recreation	2.9	2.9	2.5	2.5	34.1	34.1	28.7	31.9
Accommodation and food services	2.0	1.7	1.7	1.6	135.2	120.8	124.6	119.6
Other services, except public administration	1.7	1.5	1.4	1.5	51.7	44.8	42.4	45.7

¹Incidence rate calculated as (N/EH) x 200,000, where N = total number of injuries and illnesses, EH = total hours worked by all employees during the calendar year, and 200,000 = base for 100 full-time equivalent employees working 40 hours per week, 50 weeks per year.

²Because of rounding, components may not add to total number of cases in private sector.

³Totals include data for industries not shown separately. Excludes self-employed, private households, and employees in federal, state, and local government agencies.

⁴Excludes farms with fewer than 11 employees.

NOTES: Starting with 2003 data, the Survey of Occupational Injuries and Illnesses began using the North American Industry Classification System (NAICS) to classify establishments by industry. Prior to 2003, the survey used the Standard Industrial Classification (SIC) system. Because of substantial differences between these systems, the data measured by these surveys are not directly comparable. See Appendix II, *Industry of employment*. Data for previous years are presented in *Health, United States, 2004*, Table 50. Available from: <http://www.cdc.gov/nchs/hus.htm>. See Appendix I, *Survey of Occupational Injuries and Illnesses (SOII)*. Data for additional years are available. See Appendix III.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses: Workplace injuries and illnesses, 2003–2007 editions. Summary News Release. 2004–2008. Available from: <http://www.bls.gov/iif/home.htm>.

Table 47 (page 1 of 2). Selected notifiable disease rates and number new of cases: United States, selected years 1950–2007

[Data are based on reporting by state health departments]

Disease	1950	1960	1970	1980	1990	2000	2005	2006	2007
New cases per 100,000 population									
Diphtheria	3.83	0.51	0.21	0.00	0.00	0.00	–	–	–
<i>Haemophilus influenzae</i> , invasive.	---	---	---	---	---	0.51	0.78	0.82	0.85
Hepatitis A	---	---	27.87	12.84	12.64	4.91	1.53	1.21	1.00
Hepatitis B	---	---	4.08	8.39	8.48	2.95	1.78	1.62	1.51
Lyme disease.	---	---	---	---	---	6.53	7.94	6.75	9.21
Meningococcal disease.	---	---	1.23	1.25	0.99	0.83	0.42	0.40	0.36
Mumps	---	---	55.55	3.86	2.17	0.13	0.11	2.22	0.27
Pertussis (whooping cough).	79.82	8.23	2.08	0.76	1.84	2.88	8.72	5.27	3.49
Poliomyelitis, total.	22.02	1.77	0.02	0.00	0.00	–	–	–	–
Paralytic ¹	---	1.40	0.02	0.00	0.00	–	–	–	–
Rocky Mountain spotted fever	---	---	0.19	0.52	0.26	0.18	0.66	0.80	0.77
Rubella (German measles)	---	---	27.75	1.72	0.45	0.06	–	–	–
Rubeola (measles)	211.01	245.42	23.23	5.96	11.17	0.03	0.02	0.02	0.01
Salmonellosis, excluding typhoid fever	---	3.85	10.84	14.88	19.54	14.51	15.43	15.45	16.03
Shigellosis	15.45	6.94	6.79	8.41	10.89	8.41	5.51	5.23	6.60
Tuberculosis ²	---	30.83	18.28	12.25	10.33	6.01	4.80	4.65	4.44
Sexually transmitted diseases: ³									
Syphilis ⁴	146.02	68.78	44.79	30.31	54.32	11.20	11.23	12.34	13.67
Primary and secondary.	16.73	9.06	10.78	11.98	20.26	2.12	2.94	3.26	3.83
Early latent	39.71	10.11	8.00	8.94	22.19	3.35	2.76	3.07	3.60
Late and late latent ⁵	70.22	45.91	24.68	9.24	10.32	5.53	5.41	5.89	6.10
Congenital ⁶	368.30	103.70	52.30	7.70	92.95	14.29	8.24	9.07	10.46
Chlamydia ⁷	---	---	---	---	160.19	251.38	329.42	344.33	370.20
Gonorrhea ⁸	192.50	145.40	294.15	442.12	276.43	128.67	114.57	119.70	118.90
Chancroid.	3.34	0.94	0.70	0.30	1.69	0.03	0.01	0.01	0.01
Number of new cases									
Diphtheria	5,796	918	435	3	4	1	–	–	–
<i>Haemophilus influenzae</i> , invasive.	---	---	---	---	---	1,398	2,304	2,496	2,541
Hepatitis A	---	---	56,797	29,087	31,441	13,397	4,488	3,579	2,979
Hepatitis B	---	---	8,310	19,015	21,102	8,036	5,119	4,713	4,519
Lyme disease.	---	---	---	---	---	17,730	23,305	19,931	27,444
Meningococcal disease.	---	---	2,505	2,840	2,451	2,256	1,245	1,194	1,077
Mumps	---	---	104,953	8,576	5,292	338	314	6,584	800
Pertussis (whooping cough).	120,718	14,809	4,249	1,730	4,570	7,867	25,616	15,632	10,454
Poliomyelitis, total.	33,300	3,190	33	9	6	–	–	–	–
Paralytic ¹	---	2,525	31	9	6	–	1	–	–
Rocky Mountain spotted fever	---	---	380	1,163	651	495	1,936	2,288	2,221
Rubella (German measles)	---	---	56,552	3,904	1,125	176	11	11	12
Rubeola (measles)	319,124	441,703	47,351	13,506	27,786	86	66	55	43
Salmonellosis, excluding typhoid fever	---	6,929	22,096	33,715	48,603	39,574	45,322	45,808	47,995
Shigellosis	23,367	12,487	13,845	19,041	27,077	22,922	16,168	15,503	19,758
Tuberculosis ²	---	55,494	37,137	27,749	25,701	16,377	14,097	13,779	13,299
Sexually transmitted diseases: ³									
Syphilis ⁴	217,558	122,538	91,382	68,832	135,590	31,618	33,288	36,959	40,920
Primary and secondary.	23,939	16,145	21,982	27,204	50,578	5,979	8,724	9,756	11,466
Early latent	59,256	18,017	16,311	20,297	55,397	9,465	8,176	9,186	10,768
Late and late latent ⁵	113,569	81,798	50,348	20,979	25,750	15,594	16,049	17,644	18,256
Congenital ⁶	13,377	4,416	1,953	277	3,865	580	339	373	430
Chlamydia ⁷	---	---	---	---	323,663	709,452	976,445	1,030,911	1,108,374
Gonorrhea ⁸	286,746	258,933	600,072	1,004,029	690,042	363,136	339,593	358,366	355,991
Chancroid.	4,977	1,680	1,416	788	4,212	78	17	19	23

See footnotes at end of table.

Table 47 (page 2 of 2). Selected notifiable disease rates and number new of cases: United States, selected years 1950–2007

[Data are based on reporting by state health departments]

0.00 Rate greater than zero but less than 0.005.

– Quantity zero.

- - - Data not available.

¹Cases of vaccine-associated paralytic poliomyelitis caused by polio vaccine virus.

²Case reporting for tuberculosis began in 1953. Data prior to 1975 are not comparable with subsequent years because of changes in reporting criteria effective in 1975. Data from 1993 to 2007, were updated through the Division of Tuberculosis Elimination, NCHHSTP, as of April 23, 2008.

³Starting with 1991, data include both civilian and military cases. Adjustments to the number of cases reported from state health departments were made for hardcopy forms and for electronic data submissions through June 25, 2008. For 1950, data for Alaska and Hawaii were not included.

⁴Includes stage of syphilis not stated.

⁵Includes cases of unknown duration.

⁶Rates include all cases of congenitally acquired syphilis per 100,000 live births. Cases of congenitally-acquired syphilis were reported through 1994; starting with 1995 data, only congenital syphilis for cases less than one year of age were reported. See STD Surveillance Report for congenital syphilis rates per 100,000 live births.

⁷Prior to 1994, chlamydia was not notifiable. In 1994–1999, cases for New York were exclusively reported by New York City. Starting with 2000 data, includes cases for the entire state.

⁸Data for 1994 do not include cases from Georgia.

NOTES: The total resident population was used to calculate all rates except sexually transmitted diseases (STD), which used the civilian resident population prior to 1991. STD rates for 1990–2002 have been revised and may differ from previous editions of *Health, United States*. Revised rates are due to revision of population estimates to incorporate bridged single-race estimates. 2006 population estimates were used to calculate 2007 rates. See [Appendix I, Population Census and Population Estimates](#). Population data from those states where diseases were not notifiable or not available were excluded from the rate calculation. See [Appendix I, National Notifiable Disease Surveillance System \(NNDSS\)](#), for information on underreporting of notifiable diseases. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC, National Center for Public Health Informatics, Division of Integrated Surveillance Systems and Services; Summary of notifiable diseases, United States, 2007. *MMWR* 2009;56(53):1–100 and CDC. <http://www.cdc.gov/mmwr/PDF/wk/mm5653.pdf>. Sexually transmitted disease surveillance, 2007. Atlanta, GA: U.S. Department of Health and Human Services, 2008. <http://www.cdc.gov/std/stats>.

Table 48 (page 1 of 2). Acquired immunodeficiency syndrome (AIDS) cases, by year of diagnosis and selected characteristics: United States, 2003–2007

[Data are based on reporting by state and the District of Columbia health departments]

Sex, race and Hispanic origin, age at diagnosis, and region of residence	Year of diagnosis					
	All years ¹	2003	2004	2005	2006	2007
		Estimated number of cases ²				
All persons ³	1,018,428	38,893	37,633	36,127	35,695	35,962
Male, 13 years and over	810,676	28,370	27,545	26,525	26,185	26,355
Female, 13 years and over	198,544	10,450	10,033	9,548	9,471	9,579
Children, under 13 years	9,209	73	55	54	38	28
Male, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latino:						
White	362,992	9,479	9,366	9,059	8,960	8,802
Black or African American	297,172	12,512	12,048	11,359	11,082	11,243
Asian ⁴	6,415	322	317	302	351	381
Native Hawaiian or Other Pacific Islander	594	43	39	46	46	64
American Indian or Alaska Native	2,730	138	124	127	112	112
Hispanic or Latino ⁵	135,641	5,604	5,383	5,319	5,350	5,466
Age at diagnosis:						
13–14 years	643	30	42	33	26	29
15–24 years	30,454	1,220	1,324	1,434	1,416	1,755
25–34 years	256,477	5,977	5,843	5,466	5,288	5,452
35–44 years	323,350	11,754	10,989	10,226	9,981	9,407
45–54 years	144,758	6,868	6,677	6,820	6,655	6,956
55–64 years	42,768	1,956	2,073	2,015	2,204	2,181
65 years and over	12,225	566	597	532	615	575
Female, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latina:						
White	39,871	1,570	1,690	1,516	1,558	1,600
Black or African American	123,131	7,019	6,637	6,292	6,146	6,243
Asian ⁴	1,050	72	72	75	73	93
Native Hawaiian or Other Pacific Islander	119	9	11	12	15	12
American Indian or Alaska Native	730	44	59	37	36	46
Hispanic or Latina ⁵	31,740	1,600	1,424	1,476	1,521	1,452
Age at diagnosis:						
13–14 years	525	42	29	37	45	51
15–24 years	13,810	659	643	644	579	628
25–34 years	65,892	2,673	2,475	2,243	2,195	2,115
35–44 years	73,501	4,050	3,748	3,451	3,309	3,294
45–54 years	31,546	2,201	2,295	2,314	2,379	2,428
55–64 years	9,641	620	655	681	749	838
65 years and over	3,628	204	189	179	214	225
Children, under 13 years						
Hispanic origin and race:						
Not Hispanic or Latino:						
White	1,602	12	8	4	3	5
Black or African American	5,699	49	34	39	29	21
Asian ⁴	47	0	0	1	1	0
Native Hawaiian or Other Pacific Islander	7	0	1	0	0	0
American Indian or Alaska Native	32	0	1	0	0	0
Hispanic or Latino ⁵	1,757	10	9	9	4	2
Region of residence						
Northeast	314,277	10,432	9,349	9,115	9,143	8,973
Midwest	105,573	4,264	4,074	4,328	4,082	4,074
South	390,479	17,643	18,089	16,641	16,271	16,683
West	208,099	6,555	6,122	6,043	6,199	6,232

See footnotes at end of table.

Table 48 (page 2 of 2). Acquired immunodeficiency syndrome (AIDS) cases, by year of diagnosis and selected characteristics: United States, 2003–2007

[Data are based on reporting by state and the District of Columbia health departments]

Sex, race and Hispanic origin, age at diagnosis, and region of residence	Year of diagnosis					
	All years ¹	2003	2004	2005	2006	2007
	Percent distribution ⁶					
All persons ³	100.0	100.0	100.0	100.0	100.0	100.0
Male, 13 years and over	79.6	72.9	73.2	73.4	73.4	73.3
Female, 13 years and over	19.5	26.9	26.7	26.4	26.5	26.6
Children, under 13 years	0.9	0.2	0.1	0.1	0.1	0.1
Male, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latino:						
White	44.8	33.4	34.0	34.2	34.2	33.4
Black or African American	36.7	44.1	43.7	42.8	42.3	42.7
Asian ⁴	0.8	1.1	1.2	1.1	1.3	1.4
Native Hawaiian or Other Pacific Islander	0.1	0.2	0.1	0.2	0.2	0.2
American Indian or Alaska Native	0.3	0.5	0.5	0.5	0.4	0.4
Hispanic or Latino ⁵	16.7	19.8	19.5	20.1	20.4	20.7
Age at diagnosis:						
13–14 years	0.1	0.1	0.2	0.1	0.1	0.1
15–24 years	3.8	4.3	4.8	5.4	5.4	6.7
25–34 years	31.6	21.1	21.2	20.6	20.2	20.7
35–44 years	39.9	41.4	39.9	38.6	38.1	35.7
45–54 years	17.9	24.2	24.2	25.7	25.4	26.4
55–64 years	5.3	6.9	7.5	7.6	8.4	8.3
65 years and over	1.5	2.0	2.2	2.0	2.3	2.2
Female, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latina:						
White	20.1	15.0	16.8	15.9	16.5	16.7
Black or African American	62.0	67.2	66.2	65.9	64.9	65.2
Asian ⁴	0.5	0.7	0.7	0.8	0.8	1.0
Native Hawaiian or Other Pacific Islander	0.1	0.1	0.1	0.1	0.2	0.1
American Indian or Alaska Native	0.4	0.4	0.6	0.4	0.4	0.5
Hispanic or Latina ⁵	16.0	15.3	14.2	15.5	16.1	15.2
Age at diagnosis:						
13–14 years	0.3	0.4	0.3	0.4	0.5	0.5
15–24 years	7.0	6.3	6.4	6.7	6.1	6.6
25–34 years	33.2	25.6	24.7	23.5	23.2	22.1
35–44 years	37.0	38.8	37.4	36.1	34.9	34.4
45–54 years	15.9	21.1	22.9	24.2	25.1	25.3
55–64 years	4.9	5.9	6.5	7.1	7.9	8.7
65 years and over	1.8	2.0	1.9	1.9	2.3	2.4
Children, under 13 years						
Hispanic origin and race:						
Not Hispanic or Latino:						
White	17.4	16.7	14.8	7.6	8.5	17.6
Black or African American	61.9	66.7	61.2	72.5	74.4	73.8
Asian ⁴	0.5	–	–	2.1	2.7	–
Native Hawaiian or Other Pacific Islander	0.1	–	1.9	–	–	–
American Indian or Alaska Native	0.3	–	1.8	–	–	–
Hispanic or Latino ⁵	19.1	13.9	16.7	15.9	11.6	8.6
Region of residence						
Northeast	30.9	26.8	24.8	25.2	25.6	25.0
Midwest	10.4	11.0	10.8	12.0	11.4	11.3
South	38.3	45.4	48.1	46.1	45.6	46.4
West	20.4	16.9	16.3	16.7	17.4	17.3

– Quantity zero.

¹Based on cases reported to CDC from the beginning of the epidemic (1981) through June 30, 2008.

²Numbers are point estimates that result from adjustments for reporting delays to AIDS case counts. The estimates do not include adjustments for incomplete reporting. Data are provisional. See [Appendix I, AIDS Surveillance](#).

³Total for all years includes 7,099 persons of unknown race or multiple races, 0 persons of unknown sex. All persons totals were calculated independent of values for subpopulations. Consequently, sums of subpopulations may not equal totals for all persons.

⁴Includes Asian and Pacific Islander legacy cases.

⁵Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

⁶Percentages may not sum to 100% due to rounding and because persons of unknown race and Hispanic origin are included in totals.

NOTES: See [Appendix II, Acquired immunodeficiency syndrome \(AIDS\)](#), for discussion of AIDS case reporting definitions and other issues affecting interpretation of trends. Data are for the 50 states and the District of Columbia. This table replaces surveillance data by year of report in previous editions of *Health, United States*.

SOURCES: CDC, National Center for HIV, STD, and TB Prevention, Division of HIV/AIDS Prevention—Surveillance and Epidemiology; HIV/AIDS Surveillance Report, 2007 (vol. 19). Atlanta, GA: US Department of Health and Human Services, CDC. 2009. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>.

Table 49 (page 1 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2006

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	2006	1990–2006 APC ¹
All sites										
	Number of new cases per 100,000 population ²									
All persons	475.4	470.3	472.7	475.0	469.3	456.9	456.0	447.5	439.9	~0.6
White	483.1	476.9	484.0	487.1	479.7	467.1	465.8	458.7	449.7	~0.5
Black or African American	512.5	533.7	517.2	507.6	514.7	501.5	501.6	479.0	464.6	~0.8
American Indian or Alaska Native ³	343.4	364.6	350.6	374.8	341.7	358.1	386.2	380.9	354.6	0.2
Asian or Pacific Islander	334.7	336.3	334.6	339.7	338.6	326.6	329.1	320.4	310.5	~0.5
Hispanic or Latino ⁴	354.0	355.4	353.8	354.7	357.6	342.0	350.6	344.8	324.5	~0.5
White, not Hispanic or Latino ⁴	495.2	491.2	502.6	506.8	498.6	487.0	484.7	478.2	471.7	~0.3
Male	583.7	563.3	561.9	561.5	551.8	537.4	534.6	516.5	506.9	~1.1
White	590.7	562.7	566.6	568.1	556.9	541.7	540.1	523.9	511.9	~1.1
Black or African American	685.5	733.0	695.0	677.8	676.0	651.9	644.8	595.9	572.8	~1.5
American Indian or Alaska Native ³	391.3	418.9	363.6	430.1	367.0	415.4	382.4	402.2	343.7	-0.7
Asian or Pacific Islander	385.8	394.3	391.5	384.8	379.4	376.4	372.1	355.9	348.1	~0.9
Hispanic or Latino ⁴	416.0	435.8	426.0	422.7	424.2	402.2	414.7	396.8	371.4	~0.9
White, not Hispanic or Latino ⁴	606.4	577.0	586.4	588.3	576.3	562.3	559.6	544.4	535.0	~1.0
Female	411.1	409.9	412.4	415.8	413.1	401.8	401.9	400.4	393.6	-0.2
White	421.2	422.9	429.3	432.7	427.8	416.8	415.1	414.8	407.4	-0.1
Black or African American	403.8	400.5	397.3	391.6	406.3	399.5	405.5	399.7	390.4	-0.1
American Indian or Alaska Native ³	310.9	329.6	347.4	339.1	322.3	319.7	394.2	366.9	367.0	^1.1
Asian or Pacific Islander	294.6	293.7	295.4	309.8	313.3	294.2	301.9	298.6	287.6	0.0
Hispanic or Latino ⁴	320.0	306.0	310.9	312.1	316.5	304.7	310.9	312.8	296.2	-0.2
White, not Hispanic or Latino ⁴	430.9	437.0	446.2	451.4	445.7	435.6	432.7	433.1	427.9	0.1
Lung and bronchus										
Male	95.0	86.8	77.6	76.9	75.2	74.8	70.7	69.8	66.6	~2.1
White	94.2	85.0	76.2	76.0	74.5	73.7	69.6	69.3	65.6	~2.1
Black or African American	133.8	136.5	110.1	111.9	108.1	110.1	99.8	94.1	92.3	~2.5
Asian or Pacific Islander	64.3	60.0	63.1	56.6	57.0	57.5	58.1	56.2	54.3	~1.0
Hispanic or Latino ⁴	59.4	52.5	44.5	41.8	47.6	44.2	38.6	41.2	35.5	~2.3
White, not Hispanic or Latino ⁴	97.5	88.4	80.2	80.6	78.2	77.6	74.0	73.4	70.1	~1.9
Female	47.2	49.3	48.5	48.7	49.1	49.4	48.4	49.0	47.3	0.0
White	48.4	51.8	50.8	50.7	51.3	52.0	50.0	51.0	49.2	0.1
Black or African American	52.8	49.7	54.2	54.4	54.9	54.0	56.5	56.8	54.8	^0.4
Asian or Pacific Islander	28.3	27.2	27.2	29.7	29.1	28.7	30.4	29.9	28.6	^0.4
Hispanic or Latino ⁴	26.0	24.8	23.9	24.2	23.4	23.0	24.3	21.3	21.1	~1.3
White, not Hispanic or Latino ⁴	50.8	54.9	54.4	54.5	55.3	56.4	54.0	55.6	53.8	0.3
Colon and rectum										
Male	72.2	63.2	62.5	61.3	59.5	57.7	55.8	53.2	51.1	~1.8
White	73.0	62.5	62.1	60.8	58.4	56.5	55.0	52.8	50.0	~1.9
Black or African American	72.6	74.3	72.7	71.1	71.0	74.3	72.1	63.3	61.4	~0.8
Asian or Pacific Islander	61.2	58.1	57.2	55.9	57.6	51.7	48.9	46.0	48.8	~1.4
Hispanic or Latino ⁴	47.6	45.5	49.5	48.3	44.3	45.7	46.0	43.4	42.6	~0.7
White, not Hispanic or Latino ⁴	75.1	64.1	63.5	62.3	59.9	57.8	56.1	53.9	51.1	~1.9
Female	50.2	45.8	46.0	45.2	44.8	43.1	41.5	40.5	40.2	~1.1
White	49.8	45.5	45.6	44.3	43.9	42.5	40.3	39.5	39.2	~1.2
Black or African American	61.0	54.9	57.6	56.0	55.3	54.2	53.0	52.0	51.9	~0.6
Asian or Pacific Islander	37.8	38.3	37.0	40.8	40.9	36.0	36.7	36.1	34.1	~0.7
Hispanic or Latino ⁴	34.2	31.4	33.2	31.5	31.1	32.4	31.6	31.7	30.6	~0.4
White, not Hispanic or Latino ⁴	50.9	46.8	46.9	45.9	45.5	43.7	41.5	40.7	40.5	~1.2
Prostate										
Male	166.7	165.8	177.6	178.5	176.0	163.1	162.3	148.6	155.1	~1.6
White	168.3	160.9	173.6	175.9	172.3	158.8	158.7	143.9	150.2	~1.8
Black or African American	218.2	273.7	285.4	266.5	274.8	246.1	241.8	223.5	217.1	~1.6
American Indian or Alaska Native ³	98.4	91.9	64.2	88.3	84.9	103.6	81.3	78.7	75.2	~2.4
Asian or Pacific Islander	88.4	102.8	104.6	106.0	100.1	101.2	98.4	91.0	90.7	~1.0
Hispanic or Latino ⁴	118.4	138.0	145.6	142.4	144.5	130.9	142.6	123.9	119.5	~0.8
White, not Hispanic or Latino ⁴	172.1	163.5	177.7	180.4	176.1	162.9	161.3	147.0	155.3	~1.8
Breast										
Female	129.3	130.7	133.8	135.0	131.6	122.6	122.7	121.9	119.6	-0.4
White	134.2	136.3	140.7	142.0	137.7	127.5	126.9	127.1	123.6	-0.4
Black or African American	116.5	122.1	119.9	115.4	121.0	120.9	120.0	114.8	118.7	0.0
American Indian or Alaska Native ³	66.1	94.0	92.2	86.2	75.7	90.5	98.3	102.4	79.7	0.5
Asian or Pacific Islander	87.3	86.6	92.7	99.4	98.8	89.7	95.0	92.3	90.7	0.6
Hispanic or Latino ⁴	89.3	87.2	93.9	88.5	90.1	85.2	87.8	89.8	85.8	-0.1
White, not Hispanic or Latino ⁴	138.8	142.1	147.5	150.3	145.1	134.4	133.8	133.9	130.3	-0.2

See footnotes at end of table.

Table 49 (page 2 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2006

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	2006	1990–2006 APC ¹
Cervix uteri										
Number of new cases per 100,000 population ²										
Female.....	11.9	9.9	8.9	8.7	8.3	8.1	7.7	7.7	7.3	~2.8
White.....	11.3	9.2	8.9	8.4	8.2	7.8	7.7	7.6	7.3	~2.4
Black or African American.....	16.4	14.6	10.6	10.7	9.9	10.5	9.6	8.7	7.8	~4.0
Asian or Pacific Islander.....	12.1	10.9	7.9	9.5	8.1	8.0	7.0	7.8	6.8	~4.0
Hispanic or Latina ⁴	21.3	17.6	17.0	14.8	14.4	13.9	12.9	13.6	11.2	~3.5
White, not Hispanic or Latina ⁴	9.7	7.8	7.1	7.0	6.9	6.4	6.5	6.2	6.4	~2.5
Corpus uteri ⁵										
Female.....	24.2	24.4	23.4	24.1	23.4	22.8	23.2	23.2	23.0	~0.3
White.....	26.0	26.0	25.2	25.6	24.3	24.2	24.4	24.5	24.3	~0.4
Black or African American.....	16.2	17.1	16.3	19.0	21.1	18.6	18.9	20.0	17.5	^1.2
Asian or Pacific Islander.....	13.0	17.0	16.2	17.2	18.5	16.3	18.5	18.3	17.5	^1.4
Hispanic or Latina ⁴	17.2	16.1	14.9	16.4	16.6	16.9	18.7	18.2	16.8	0.5
White, not Hispanic or Latina ⁴	26.7	27.1	26.5	26.9	25.3	25.2	25.1	25.3	25.4	~0.4
Ovary										
Female.....	15.6	14.5	14.1	14.1	13.7	13.3	12.9	12.8	12.3	~1.2
White.....	16.4	15.4	15.1	15.3	14.5	14.1	13.6	13.5	13.0	~1.2
Black or African American.....	11.3	10.8	10.7	9.3	9.8	11.2	10.4	10.2	8.4	~0.8
Asian or Pacific Islander.....	11.2	10.4	9.9	9.6	11.9	9.9	9.9	10.6	10.3	-0.1
Hispanic or Latina ⁴	12.3	11.7	10.6	13.4	13.5	10.9	11.5	11.4	9.9	-0.5
White, not Hispanic or Latina ⁴	16.7	15.9	15.7	15.6	14.5	14.6	13.8	13.8	13.6	~1.1
Oral cavity and pharynx										
Male.....	18.5	16.5	15.7	15.0	15.6	15.0	15.0	14.5	13.9	~1.6
White.....	17.9	16.4	15.6	15.2	15.7	15.1	15.3	14.8	14.0	~1.3
Black or African American.....	25.4	22.1	19.2	18.1	17.8	17.1	15.7	15.2	15.0	~3.0
Asian or Pacific Islander.....	14.8	11.7	13.2	9.8	12.7	11.5	11.3	11.0	11.0	~1.6
Hispanic or Latino ⁴	10.8	12.4	9.1	9.4	9.3	8.2	9.8	9.3	6.9	~2.2
White, not Hispanic or Latino ⁴	18.7	16.9	16.6	16.1	16.7	16.1	16.2	15.8	15.2	~1.1
Female.....	7.3	7.0	6.2	6.6	6.4	5.9	6.1	6.0	6.0	~1.3
White.....	7.4	7.1	6.2	6.6	6.5	5.8	6.1	5.8	6.1	~1.4
Black or African American.....	6.4	6.6	5.3	6.5	6.2	6.7	5.8	6.8	5.3	~1.0
Asian or Pacific Islander.....	6.1	5.2	6.1	5.7	5.8	5.1	5.7	5.7	5.0	-0.9
Hispanic or Latina ⁴	3.9	3.7	3.7	4.2	3.5	3.6	3.4	3.4	3.6	~1.5
White, not Hispanic or Latina ⁴	7.8	7.6	6.6	7.0	7.0	6.2	6.5	6.3	6.5	~1.2
Stomach										
Male.....	14.6	13.5	12.5	11.8	11.9	11.6	11.7	11.2	10.9	~1.9
White.....	12.8	11.9	10.7	10.2	10.4	10.0	10.2	9.4	9.4	~2.0
Black or African American.....	21.5	18.5	18.4	17.5	15.6	18.0	15.8	16.6	15.3	~2.5
Asian or Pacific Islander.....	26.8	24.3	22.4	19.0	20.1	18.7	19.7	19.5	17.3	~2.8
Hispanic or Latino ⁴	20.2	19.4	16.0	15.5	15.8	15.5	16.2	14.6	13.9	~2.4
White, not Hispanic or Latino ⁴	12.1	11.1	10.0	9.4	9.6	9.1	9.3	8.6	8.5	~2.2
Female.....	6.7	6.2	6.1	5.8	6.2	5.9	5.9	5.6	5.7	~1.0
White.....	5.7	5.1	5.0	4.6	5.0	4.9	5.0	4.6	4.8	~1.1
Black or African American.....	9.9	9.8	8.6	9.0	9.7	9.3	7.4	7.7	9.0	~1.2
Asian or Pacific Islander.....	15.4	13.0	12.9	12.1	11.2	11.0	11.0	10.1	8.9	~3.0
Hispanic or Latina ⁴	10.8	11.1	10.7	10.0	10.4	9.8	9.8	9.9	9.3	~0.8
White, not Hispanic or Latina ⁴	5.1	4.5	4.2	3.8	4.2	4.1	4.1	3.7	4.0	~1.8
Pancreas										
Male.....	13.0	12.7	12.8	12.7	12.7	12.3	13.3	13.3	12.9	0.1
White.....	12.7	12.4	12.6	12.9	12.9	12.2	13.1	13.1	13.1	^0.3
Black or African American.....	19.3	19.1	18.1	15.4	13.7	17.0	17.6	17.4	16.1	~1.1
Asian or Pacific Islander.....	11.0	10.3	10.7	9.8	9.7	10.1	11.7	11.4	9.7	-0.6
Hispanic or Latino ⁴	10.7	12.1	12.2	9.7	10.5	9.6	11.0	11.5	11.1	0.1
White, not Hispanic or Latino ⁴	12.8	12.4	12.7	13.2	13.2	12.6	13.3	13.3	13.4	^0.4
Female.....	10.0	9.9	9.9	9.8	10.4	10.3	10.2	10.6	10.4	0.2
White.....	9.7	9.6	9.6	9.5	10.0	10.1	10.0	10.4	10.0	^0.3
Black or African American.....	12.9	15.5	12.7	13.4	15.7	14.2	14.1	15.8	14.6	-0.3
Asian or Pacific Islander.....	9.9	8.1	9.2	9.0	8.8	8.1	8.9	7.8	8.9	0.4
Hispanic or Latina ⁴	9.8	8.9	9.1	9.8	10.8	8.1	8.7	10.7	8.7	-0.3
White, not Hispanic or Latina ⁴	9.7	9.7	9.7	9.5	10.0	10.4	10.2	10.3	10.2	^0.4

See footnotes at end of table.

Table 49 (page 3 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2006

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	2006	1990–2006 APC ¹
Urinary bladder										
Number of new cases per 100,000 population ²										
Male	37.2	35.3	36.7	36.6	35.4	36.4	36.3	35.8	34.2	^–0.2
White	40.7	38.8	40.7	40.7	38.9	40.2	40.3	39.6	37.6	–0.2
Black or African American	19.6	19.4	19.9	19.2	20.4	22.3	21.6	21.2	18.1	0.1
Asian or Pacific Islander	15.5	16.4	16.6	17.0	18.9	17.2	16.9	16.5	17.5	^1.0
Hispanic or Latino ⁴	22.1	17.4	19.9	20.7	19.6	19.1	18.3	18.5	18.2	^–0.6
White, not Hispanic or Latino ⁴	42.4	41.0	43.1	43.2	41.4	42.9	43.3	42.5	40.4	0.0
Female	9.5	9.3	9.0	9.0	9.1	9.1	9.1	8.8	8.5	^–0.4
White	10.0	10.1	9.9	9.9	10.0	9.9	10.0	9.5	9.2	^–0.2
Black or African American	8.6	7.2	7.7	7.1	8.3	7.6	8.1	7.6	8.2	0.1
Asian or Pacific Islander	5.3	4.5	4.1	4.6	3.2	4.8	3.8	5.0	3.6	–0.5
Hispanic or Latina ⁴	5.7	5.1	5.6	5.1	6.1	4.1	5.2	5.8	5.0	–0.4
White, not Hispanic or Latina ⁴	10.4	10.6	10.4	10.6	10.6	10.8	10.6	10.1	9.9	–0.1
Non-Hodgkin's lymphoma										
Male	22.6	25.0	23.4	23.9	23.5	23.8	24.5	23.9	22.6	0.0
White	23.6	26.2	24.7	25.1	24.8	25.2	25.8	25.0	23.9	0.1
Black or African American	17.4	21.3	17.5	18.1	17.9	18.8	21.3	18.6	18.6	0.1
Asian or Pacific Islander	16.6	16.5	15.9	17.6	16.0	15.8	16.0	17.4	14.1	–0.3
Hispanic or Latino ⁴	17.3	20.9	20.1	18.2	19.7	18.6	20.5	18.4	17.3	–0.2
White, not Hispanic or Latino ⁴	24.3	26.7	25.3	25.9	25.4	26.1	26.5	26.2	25.0	0.2
Female	14.5	15.1	15.9	16.1	16.3	17.0	17.0	16.1	16.3	^1.0
White	15.4	15.9	16.8	16.8	17.2	17.8	18.0	17.2	17.3	^1.0
Black or African American	10.2	10.1	11.9	12.2	11.5	13.1	13.1	12.8	11.9	^1.9
Asian or Pacific Islander	9.1	11.8	11.3	12.9	12.1	12.6	12.0	9.5	10.5	0.6
Hispanic or Latina ⁴	13.5	12.6	13.2	14.2	12.8	14.6	14.8	14.3	14.2	^0.8
White, not Hispanic or Latina ⁴	15.6	16.2	17.3	17.3	17.9	18.2	18.4	17.6	17.9	^1.1
Leukemia										
Male	17.1	17.5	16.5	17.3	16.4	16.4	16.2	15.7	14.4	^–0.6
White	18.0	18.8	17.6	18.5	17.7	17.4	17.0	16.9	15.4	^–0.6
Black or African American	16.0	13.1	13.3	12.7	12.1	13.5	15.0	11.5	11.7	–0.7
Asian or Pacific Islander	8.5	10.0	10.3	10.1	9.0	10.1	9.8	8.5	8.2	–0.7
Hispanic or Latino ⁴	12.0	14.4	12.5	10.7	11.9	11.2	12.1	12.1	11.6	–0.1
White, not Hispanic or Latino ⁴	18.3	19.1	18.0	19.3	18.3	18.0	17.4	17.2	15.5	^–0.5
Female	9.8	10.1	10.1	10.2	9.7	9.6	9.8	9.3	9.5	^–0.3
White	10.2	10.8	10.7	10.9	10.3	10.0	10.3	9.7	10.1	–0.2
Black or African American	8.4	8.1	9.4	8.7	7.1	8.6	8.8	8.4	7.0	–0.5
Asian or Pacific Islander	5.8	6.3	6.3	5.1	6.3	6.3	6.2	6.1	6.1	–0.4
Hispanic or Latina ⁴	8.4	8.1	7.5	7.1	8.2	6.8	8.5	7.8	8.1	–0.3
White, not Hispanic or Latina ⁴	10.2	10.9	10.8	11.3	10.4	10.4	10.5	9.7	10.3	–0.1

¹ Annual percent change (APC) is significantly different from 0 ($p < 0.05$).

0.0 APC is greater than –0.05 but less than 0.05.

² APC has been calculated by fitting a linear regression model to the natural logarithm of the yearly rates from 1990–2006.

³ Age-adjusted by 5-year age groups to the year 2000 U.S. standard population. Age-adjusted rates are based on at least 25 cases. See [Appendix II, Age adjustment](#).

⁴ Starting with *Health, United States, 2007*, estimates for American Indian or Alaska Native population are based on the Contract Health Service Delivery Area (CHSDA) counties within SEER areas. Estimates for American Indian or Alaska Native are not shown for some sites because of the small number of annual cases.

⁵ Starting with *Health, United States, 2007*, Hispanic data exclude cases from Alaska. The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. The NAACCR Hispanic Identification Algorithm was used on a combination of variables to classify cases as Hispanic for analytic purposes. See the report, NAACCR Guideline for Enhancing Hispanic-Latino Identification, for more information; available from: http://seer.cancer.gov/seerstat/variables/seer/yr1973_2006/race_ethnicity/. See [Appendix II, Hispanic origin](#).

⁶ Includes corpus uteri only cases and not uterus, not elsewhere specified cases.

NOTES: See [Appendix II, Incidence](#). Estimates are based on 13 SEER areas November 2008 submission and differ from published estimates based on 9 SEER areas or other submission dates. See [Appendix I, Surveillance, Epidemiology, and End Results Program \(SEER\)](#). The site variable distinguishes Kaposi Sarcoma and Mesothelioma as individual cancer sites. As a result, Kaposi Sarcoma and Mesothelioma cases do not contribute to other cancer sites. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER) Program. Available from: <http://www.seer.cancer.gov>.

Table 50. Five-year relative cancer survival rates for selected cancer sites, by race and sex: United States, selected geographic areas, selected years 1975–1977 through 1999–2005

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 9 population-based cancer registries]

Sex and site	White					Black or African American				
	1975–1977	1981–1983	1987–1989	1996–1998	1999–2005	1975–1977	1981–1983	1987–1989	1996–1998	1999–2005
Both sexes										
Percent of patients										
All sites	51.0	52.8	57.8	65.6	69.1	39.7	39.6	43.7	55.5	59.4
Oral cavity and pharynx	54.6	55.0	56.6	61.1	64.4	36.2	31.8	34.4	36.3	46.1
Esophagus	5.6	7.6	11.1	14.9	19.8	3.1	4.3	6.4	10.1	12.5
Stomach	14.8	16.9	19.1	21.0	25.3	16.3	17.2	20.0	23.8	26.1
Colon	51.7	56.7	61.8	63.8	67.4	46.4	49.7	53.3	54.7	55.6
Rectum	49.4	53.7	59.6	64.7	69.4	45.0	40.6	53.7	56.5	61.0
Pancreas	2.6	2.8	3.4	4.4	5.7	2.3	3.7	5.9	3.6	5.3
Lung and bronchus	12.8	13.9	13.8	15.4	16.6	11.5	11.7	11.2	12.7	12.9
Urinary bladder	74.5	79.3	81.5	80.7	82.6	50.6	60.1	63.3	62.3	67.8
Non-Hodgkin's lymphoma	48.4	52.8	52.8	61.0	70.1	49.0	50.4	47.4	54.4	59.9
Leukemia	36.0	40.2	45.6	50.8	54.8	33.5	34.2	36.7	39.1	46.3
Male										
All sites	43.3	47.6	53.3	64.7	69.3	32.7	34.3	38.8	57.2	62.2
Oral cavity and pharynx	54.1	53.8	54.4	60.0	64.1	29.7	26.4	30.1	31.4	41.0
Esophagus	4.9	6.8	11.4	14.4	19.6	1.6	3.6	5.0	8.5	10.2
Stomach	13.7	16.1	16.1	19.1	23.4	16.4	16.8	17.2	21.0	25.1
Colon	51.0	57.5	62.6	63.7	67.9	45.5	45.9	51.6	55.6	55.0
Rectum	48.4	52.3	59.8	63.5	69.5	41.9	38.3	49.5	54.7	60.2
Pancreas	2.7	2.3	3.2	5.0	6.0	2.7	4.0	5.5	3.3	3.6
Lung and bronchus	11.5	12.3	12.5	13.5	14.4	10.8	10.5	11.1	11.0	11.1
Prostate gland	69.8	74.9	85.4	98.0	99.9	61.3	63.7	72.2	94.2	97.9
Urinary bladder	75.5	80.4	83.5	81.7	83.5	56.8	65.4	68.1	65.1	71.5
Non-Hodgkin's lymphoma	47.8	52.6	49.2	58.7	68.4	42.6	49.5	42.2	52.3	55.0
Leukemia	35.1	40.0	47.6	50.6	55.6	30.4	33.4	35.0	39.5	46.8
Female										
All sites	57.8	57.6	62.1	66.4	68.9	47.1	45.6	48.9	53.5	56.2
Colon	52.2	56.1	61.0	63.9	66.9	46.8	52.4	54.5	54.0	55.9
Rectum	50.5	55.3	59.5	66.3	69.3	47.5	42.9	57.8	58.2	61.6
Pancreas	2.3	3.2	3.5	3.8	5.3	2.0	3.3	6.1	3.7	6.6
Lung and bronchus	15.9	17.1	15.8	17.7	19.1	14.0	15.1	11.5	15.2	15.2
Melanoma of skin	86.7	87.7	91.5	93.2	95.3	*	*	90.4	78.6	77.6
Breast	75.9	77.7	85.4	89.6	91.3	62.2	64.0	71.3	76.5	78.9
Cervix uteri	70.7	69.0	73.7	74.6	73.1	65.0	61.6	58.1	65.3	64.8
Corpus uteri ¹	89.2	84.0	85.6	86.9	87.2	61.8	54.2	59.1	64.1	63.1
Ovary	36.5	40.3	39.9	45.1	45.5	43.1	38.9	35.2	41.3	37.2
Non-Hodgkin's lymphoma	48.9	53.1	57.2	63.7	72.1	56.1	51.5	53.7	57.7	65.6

* Data for population groups with fewer than 25 cases are not shown because estimates are considered unreliable.

¹Includes corpus uteri only cases and not uterus, not elsewhere specified cases.

NOTES: Rates are based on followup of patients through 2006. The rate is the ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. It estimates the chance of surviving the effects of cancer. The site variable distinguishes Kaposi Sarcoma and Mesothelioma as individual cancer sites. As a result, Kaposi Sarcoma and Mesothelioma cases are excluded from each of the sites shown except all sites combined. The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Due to death certificate race-ethnicity classification and other methodological issues related to developing life tables, survival rates for race-ethnicity groups other than white and black are not calculated. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER) Program. Available from: <http://www.seer.cancer.gov>.

Table 51. Diabetes among adults 20 years of age and over, by sex, age, and race and Hispanic origin: United States, 1988–1994, 1999–2002, and 2003–2006

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

Sex, age, and race and Hispanic origin ³	Physician-diagnosed and undiagnosed diabetes ^{1,2}			Physician-diagnosed diabetes ¹			Undiagnosed diabetes ²		
	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006
Percent of population									
20 years and over, age-adjusted ⁴									
All persons ⁵	8.3	9.4	10.2	5.4	6.6	7.7	2.9	2.8	2.5
Male	8.8	10.7	11.2	5.4	7.0	7.6	3.4	3.6	3.6
Female	7.9	8.3	9.4	5.4	6.2	7.8	2.5	2.1	*1.6
Not Hispanic or Latino:									
White only	7.5	7.9	8.8	5.0	5.2	6.4	2.5	2.7	2.4
Black or African American only	12.6	14.9	16.0	8.6	11.3	13.2	4.0	3.6	2.8
Mexican	14.2	13.7	15.7	9.7	10.5	12.4	4.5	3.1	*3.3
20 years and over, crude									
All persons ⁵	7.8	9.3	10.3	5.1	6.5	7.7	2.7	2.8	2.5
Male	7.9	10.2	10.9	4.8	6.7	7.4	3.0	3.5	3.5
Female	7.8	8.5	9.7	5.4	6.3	8.1	2.4	2.2	1.7
Not Hispanic or Latino:									
White only	7.5	8.4	9.5	5.0	5.5	6.9	2.5	2.9	2.6
Black or African American only	10.4	13.4	14.4	6.9	10.1	11.8	3.4	*3.3	2.5
Mexican	9.0	8.3	10.9	5.6	6.5	7.9	3.4	1.8	*3.0
Age									
20–39 years	1.6	*2.3	2.5	1.1	1.7	1.7	*0.6	*	*
40–59 years	8.8	9.8	10.6	5.5	6.6	8.3	3.3	3.3	*2.3
60 years and over	18.9	20.9	22.9	12.8	15.1	16.9	6.1	5.8	6.0

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹Physician-diagnosed diabetes was obtained by self-report and excludes women who reported having diabetes only during pregnancy.

²Undiagnosed diabetes is defined as a fasting blood glucose (FBG) of at least 126 mg/dL and no reported physician diagnosis. Respondents had fasted for at least 8 hours and less than 24 hours. Estimates in some prior editions of *Health, United States* included data from respondents who had fasted for at least 9 hours and less than 24 hours. In 2005–2006, FBG testing was performed at a different laboratory and using a different instrument than testing in earlier years. NHANES conducted a crossover study to evaluate the impact of these changes on FBG measurements. As a result of that study, NHANES recommended that 2005–2006 data on FBG measurements be adjusted to be compatible with earlier years. Undiagnosed diabetes estimates in *Health, United States* were produced after adjusting the 2005–2006 FBG data as recommended. For more information, see http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/glu_d.pdf.

³Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

⁴Estimates are age-adjusted to the year 2000 standard population using three age groups: 20–39 years, 40–59 years, and 60 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁵Includes all other races and Hispanic origins not shown separately.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Starting with *Health, United States, 2007*, data use a revised weighting scheme. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 52. Incidence and prevalence of end-stage renal disease, by selected characteristics: United States, selected years 1980–2006

[Data are based on the Centers for Medicare & Medicaid Services' Renal Beneficiary and Utilization System]

Characteristic	Incidence					Prevalence				
	1980	1990	2000	2005	2006	1980	1990	2000	2005	2006
	Number of new patients					Number of patients alive on December 31				
Total	17,339	49,762	92,015	104,578	108,730	58,194	182,472	383,386	473,472	493,624
	New patients per million population					Patients alive on December 31 per million population				
Total	76.3	199.4	326.0	352.7	363.2	254.8	726.1	1,351.3	1,589.1	1,640.8
Age										
Under 20 years	10.2	14.6	14.6	15.1	15.0	32.7	62.1	78.0	85.3	86.1
20–44 years	55.6	103.4	122.9	126.3	129.5	236.0	565.5	840.4	877.6	889.2
45–64 years	156.2	370.4	514.3	527.8	544.8	530.5	1,439.1	2,468.4	2,798.0	2,868.2
65–74 years	232.8	736.9	1,270.1	1,298.8	1,325.7	583.5	1,953.0	4,149.5	4,912.2	5,101.9
75 years and over	129.9	598.7	1,353.1	1,511.3	1,526.8	273.5	1,372.8	3,361.6	4,128.6	4,235.2
Sex										
Male	87.5	219.2	354.9	397.2	411.4	289.5	802.6	1,502.5	1,795.7	1,861.7
Female	65.7	180.5	298.3	309.6	316.3	221.9	653.3	1,205.5	1,388.6	1,426.1
Race¹										
White	63.0	158.3	264.6	287.7	296.9	209.2	562.6	1,021.9	1,212.5	1,252.9
Black or African American	179.7	483.9	725.6	774.7	786.7	608.7	1,851.7	3,410.3	3,900.0	4,004.0
American Indian or Alaska Native	86.7	290.5	403.6	383.4	369.8	255.7	1,037.8	1,800.0	2,035.9	2,075.9
Asian or Pacific Islander	27.1	158.4	264.3	283.1	313.2	99.4	583.9	1,253.8	1,487.5	1,559.9
Hispanic origin^{1,2}										
Hispanic	---	---	300.7	282.6	301.7	---	---	1,164.0	1,374.1	1,432.3
Not Hispanic ³	---	---	329.7	364.6	373.8	---	---	1,378.8	1,625.9	1,677.5
Primary diagnosis										
Diabetes	11.4	70.9	145.6	155.3	160.9	24.4	186.7	478.9	587.7	610.6
Hypertension	13.6	60.9	87.3	96.3	98.3	41.2	187.8	332.9	389.5	399.9
Glomerulonephritis	12.0	27.7	29.8	27.0	26.2	58.4	157.9	238.1	257.0	259.7
Cystic kidney	3.3	6.2	7.6	8.4	8.8	15.9	39.7	62.9	74.3	77.5
Other urologic	2.0	5.1	9.5	7.2	5.5	7.0	24.3	41.2	44.6	43.4
Other cause	7.8	19.2	31.6	41.1	45.4	28.5	84.8	137.7	163.6	173.3
Unknown cause	6.7	7.5	13.1	15.6	16.0	25.7	32.9	49.8	60.7	64.0
Missing disease	19.4	1.9	1.6	2.0	2.2	53.7	12.1	9.8	11.7	12.3

--- Data not available.

¹The race groups, white, black or African American, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin; Race](#).

²Centers for Medicare & Medicaid Services began collecting Hispanic ethnicity data in April 1995.

³Not Hispanic includes unknown ethnicity.

NOTES: Persons with unknown age, gender, or race are excluded. For incidence estimates, age is determined as of the date of diagnosis with end-stage renal disease (ESRD). For prevalence estimates, age is calculated as of December 31 of each year. Prevalence estimates include patients with a functioning transplant. See [Appendix I, United States Renal Data System \(USRDS\)](#). See [Appendix II, End-stage renal disease; Incidence; Prevalence](#).

SOURCE: United States Renal Data System, USRDS 2008 Annual data report: Atlas of chronic kidney disease and end-stage renal disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2008. Available from: <http://www.usrds.org/reference.htm>.

Table 53 (page 1 of 2). Severe headache or migraine, low back pain, and neck pain among adults 18 years of age and over, by selected characteristics: United States, selected years 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Severe headache or migraine ¹			Low back pain ¹			Neck pain ¹		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent of adults with pain during past 3 months									
18 years and over, age-adjusted ^{2,3}	15.8	15.1	12.3	28.2	27.3	25.4	14.7	14.3	12.8
18 years and over, crude ³	16.0	15.1	12.3	28.1	27.6	25.6	14.6	14.6	13.0
Age									
18–44 years	18.7	17.8	14.8	26.1	23.9	22.2	13.3	11.7	10.7
18–24 years	18.7	16.5	12.5	21.9	18.6	17.7	9.8	8.1	7.0
25–44 years	18.7	18.2	15.6	27.3	25.7	23.7	14.3	13.0	12.0
45–64 years	15.8	14.7	12.2	31.3	31.1	28.7	17.0	18.6	15.9
45–54 years	17.8	16.9	14.0	31.3	30.0	27.9	17.3	18.9	16.8
55–64 years	12.7	11.8	9.9	31.2	32.7	29.8	16.6	18.1	14.7
65 years and over	7.0	7.3	4.6	29.5	31.7	29.5	15.0	14.9	14.2
65–74 years	8.2	8.5	5.6	30.2	31.2	29.4	15.0	15.8	14.7
75 years and over	5.4	5.9	3.5	28.6	32.2	29.7	15.0	13.9	13.5
Sex ²									
Male	9.9	9.7	7.3	26.5	25.7	23.4	12.6	12.1	10.7
Female	21.4	20.4	17.2	29.6	28.9	27.1	16.6	16.5	14.9
Sex and age									
Male:									
18–44 years	11.9	11.1	8.5	24.8	22.4	20.8	11.6	9.6	8.3
45–54 years	10.3	10.6	8.5	29.4	28.9	26.7	13.9	16.0	14.7
55–64 years	8.8	7.8	6.6	30.7	29.8	27.5	14.6	15.9	13.1
65–74 years	5.0	6.3	3.4	29.0	27.6	25.0	13.6	13.1	13.0
75 years and over	*2.4	*4.8	*2.2	22.5	31.9	25.1	12.6	12.2	11.5
Female:									
18–44 years	25.4	24.4	21.1	27.3	25.3	23.5	14.9	13.8	13.1
45–54 years	24.9	22.9	19.2	33.1	31.0	29.1	20.6	21.6	18.8
55–64 years	16.3	15.4	12.9	31.7	35.3	32.0	18.4	20.2	16.2
65–74 years	10.7	10.3	7.4	31.1	34.3	33.1	16.1	18.1	16.2
75 years and over	7.4	6.6	4.3	32.4	32.3	32.6	16.5	15.1	14.8
Race ^{2,4}									
White only	15.9	15.3	12.5	28.7	28.1	26.0	15.1	15.1	13.5
Black or African American only	16.7	15.8	11.1	26.9	24.3	23.0	13.3	11.0	9.6
American Indian or Alaska Native only	18.9	19.6	*18.4	33.3	34.0	24.0	16.2	15.6	15.8
Asian only	11.7	9.7	9.7	21.0	18.1	17.8	9.2	9.4	8.8
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	21.2	18.2	---	40.7	36.3	---	21.2	17.2
Hispanic origin and race ^{2,4}									
Hispanic or Latino	15.5	14.1	11.4	26.4	25.0	24.3	13.9	13.6	12.4
Mexican	14.6	13.0	10.5	25.2	23.3	23.5	12.9	12.1	12.7
Not Hispanic or Latino	15.9	15.4	12.7	28.4	27.8	25.6	14.9	14.6	13.1
White only	16.1	15.7	13.1	29.1	29.0	26.7	15.4	15.7	13.9
Black or African American only	16.8	15.8	11.2	26.9	24.2	22.4	13.3	10.9	9.5
Education ^{5,6}									
25 years and over:									
No high school diploma or GED	19.2	17.1	14.0	33.6	31.6	31.0	16.5	16.4	15.2
High school diploma or GED	16.0	15.1	12.9	30.2	30.4	28.3	15.5	14.6	13.1
Some college or more	13.8	14.2	11.7	26.9	27.2	24.7	14.6	15.4	13.7

See footnotes at end of table.

Table 53 (page 2 of 2). Severe headache or migraine, low back pain, and neck pain among adults 18 years of age and over, by selected characteristics: United States, selected years 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Severe headache or migraine ¹			Low back pain ¹			Neck pain ¹		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent of poverty level ^{2,7}									
Below 100%	23.3	21.2	17.9	35.4	35.3	32.5	18.6	18.4	16.9
100%–less than 200%	18.9	16.3	14.8	30.8	31.0	29.1	16.1	15.8	15.0
200% or more	13.8	13.7	10.8	26.3	25.0	23.5	13.8	13.4	11.9
Hispanic origin and race and percent of poverty level ^{2,4,7}									
Hispanic or Latino:									
Below 100%	18.9	17.6	15.8	29.5	31.2	31.3	16.4	18.0	17.3
100%–less than 200%	15.7	12.5	11.8	26.8	25.5	22.6	12.9	11.7	11.7
200% or more	13.4	13.4	9.8	24.3	21.3	23.0	13.3	12.7	11.2
Not Hispanic or Latino:									
White only:									
Below 100%	26.1	24.1	21.4	38.9	40.6	36.5	20.5	20.7	19.7
100%–less than 200%	20.4	18.3	16.7	33.3	35.1	33.4	18.0	18.9	18.2
200% or more	14.1	14.1	11.4	27.1	26.4	24.5	14.4	14.5	12.7
Black or African American only:									
Below 100%	22.7	19.6	15.0	34.5	29.1	27.6	17.9	14.5	14.0
100%–less than 200%	17.6	14.8	13.4	27.7	25.6	26.8	14.0	11.8	11.1
200% or more	13.4	14.7	8.8	23.1	21.3	18.7	10.9	8.9	7.5
Geographic region ²									
Northeast	14.5	14.3	11.6	27.1	28.2	25.7	14.0	14.5	12.5
Midwest	15.6	15.1	12.0	28.7	29.0	25.9	15.3	15.3	12.7
South	17.1	15.6	12.5	27.5	25.9	23.8	13.9	12.8	12.1
West	15.3	14.9	13.0	30.0	27.4	27.2	16.1	15.9	14.6
Location of residence ²									
Within MSA ⁸	15.2	14.7	12.0	27.0	26.7	24.8	14.2	14.2	12.5
Outside MSA ⁸	18.1	17.1	14.4	32.5	30.6	28.4	16.4	15.1	14.5

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

¹In three separate questions, respondents were asked, “During the past 3 months, did you have a severe headache or migraine? ...low back pain? ...neck pain?” Respondents were instructed to report pain that had lasted a whole day or more, and not to report fleeting or minor aches or pains. Persons may be represented in more than one column.

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³Includes all other races not shown separately and unknown education level.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁶GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family Income; Poverty](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

Table 54 (page 1 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any joint pain ¹			Knee pain ¹			Shoulder pain ¹		
	2002	2006	2007	2002	2006	2007	2002	2006	2007
Percent of adults reporting joint pain in past 30 days									
18 years and over, age-adjusted ^{2,3}	29.5	29.2	27.0	16.5	17.5	16.1	8.6	8.3	7.8
18 years and over, crude ³	29.5	29.7	27.6	16.5	17.8	16.5	8.7	8.6	8.1
Age									
18–44 years	19.3	18.0	16.3	10.5	11.0	9.3	4.9	4.4	4.1
18–24 years.	14.2	11.7	9.9	8.3	6.9	5.2	3.4	1.7	1.8
25–44 years.	21.0	20.2	18.5	11.2	12.5	10.8	5.4	5.3	4.9
45–64 years	37.5	38.3	36.4	20.4	22.8	22.2	12.3	12.1	11.4
45–54 years.	34.3	34.8	33.2	18.4	20.9	19.8	10.5	11.4	10.6
55–64 years.	42.3	43.2	40.7	23.4	25.4	25.5	15.1	13.2	12.5
65 years and over	47.2	48.2	43.9	28.6	28.6	26.5	14.1	14.1	13.3
65–74 years.	46.0	47.6	41.6	27.6	27.8	25.6	14.0	14.5	13.4
75 years and over	48.7	48.8	46.6	29.7	29.4	27.7	14.1	13.7	13.1
Sex ²									
Male.	28.0	27.8	25.1	15.2	16.4	14.8	8.4	8.7	7.5
Female.	30.7	30.3	28.5	17.6	18.5	17.2	8.8	7.9	8.0
Sex and age									
Male:									
18–44 years.	20.1	18.6	16.5	10.7	11.2	9.5	5.5	5.0	4.8
45–54 years.	31.1	33.2	30.9	16.2	20.1	18.2	9.5	12.0	9.6
55–64 years.	37.3	38.4	34.2	20.1	20.8	20.6	13.7	13.6	11.2
65–74 years.	41.7	41.7	36.1	24.1	22.8	21.3	13.3	14.0	11.5
75 years and over	43.9	45.1	43.5	25.7	28.5	26.2	11.4	13.2	10.9
Female:									
18–44 years.	18.4	17.5	16.1	10.2	10.8	9.2	4.2	3.8	3.4
45–54 years.	37.3	36.3	35.4	20.5	21.6	21.3	11.4	10.8	11.5
55–64 years.	46.8	47.6	46.7	26.4	29.6	30.0	16.3	12.8	13.8
65–74 years.	49.6	52.7	46.2	30.5	32.1	29.2	14.7	14.9	15.0
75 years and over	51.6	51.2	48.6	32.1	30.0	28.6	15.7	14.1	14.5
Race ^{2,4}									
White only.	29.8	29.9	27.3	16.3	17.8	16.2	8.8	8.6	8.0
Black or African American only	30.8	28.7	26.1	20.2	18.7	16.8	8.3	7.8	7.5
American Indian or Alaska Native only	36.7	40.7	35.5	24.5	24.5	25.0	*11.3	*10.9	*10.1
Asian only.	18.1	16.3	18.0	8.5	9.2	9.4	3.9	4.1	5.3
Native Hawaiian or Other Pacific Islander only	*	*	*	*	*	*	*	*	*
2 or more races.	42.7	34.7	40.8	28.1	23.7	22.7	15.4	10.8	10.3
Hispanic origin and race ^{2,4}									
Hispanic or Latino	23.4	23.3	21.2	13.6	13.9	12.4	7.6	7.5	6.5
Mexican.	24.6	23.8	21.3	14.1	15.2	12.2	8.3	7.2	7.1
Not Hispanic or Latino	30.4	30.1	27.9	17.0	18.1	16.7	8.9	8.5	8.1
White only	30.8	31.2	28.7	16.9	18.7	17.1	9.1	9.0	8.3
Black or African American only.	30.8	28.7	26.3	20.1	18.7	17.0	8.3	7.8	7.6
Education ^{5,6}									
25 years of age and over:									
No high school diploma or GED.	33.0	31.1	30.2	19.5	19.1	18.2	10.8	10.4	9.8
High school diploma or GED	32.9	32.4	29.4	18.6	19.1	17.1	10.2	9.8	9.3
Some college or more.	31.1	31.8	29.4	16.9	18.9	17.8	8.8	8.9	8.2

See footnotes at end of table.

Table 54 (page 2 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any joint pain ¹			Knee pain ¹			Shoulder pain ¹		
	2002	2006	2007	2002	2006	2007	2002	2006	2007
Percent of poverty level ^{2,7}									
Below 100%	31.7	34.6	30.7	19.9	22.9	19.0	11.2	11.8	10.3
100%–less than 200%	31.7	30.4	29.8	19.0	18.9	18.5	10.4	9.1	9.4
200% or more	28.7	28.2	25.8	15.6	16.4	15.1	8.0	7.6	7.2
Hispanic origin and race and percent of poverty level ^{2,4,7}									
Hispanic or Latino:									
Below 100%	26.8	27.0	23.5	16.1	18.1	14.5	11.5	9.4	8.6
100%–less than 200%	24.5	21.6	19.4	14.4	12.0	11.4	8.2	7.2	6.0
200% or more	21.4	22.9	21.8	11.7	12.9	12.6	5.4	7.4	6.3
Not Hispanic or Latino:									
White only:									
Below 100%	34.2	39.3	34.7	21.3	26.2	21.6	12.4	13.5	11.8
100%–less than 200%	34.9	35.1	34.6	20.3	22.5	21.6	11.6	10.8	11.3
200% or more	29.8	29.8	27.0	15.9	17.2	15.8	8.4	8.2	7.6
Black or African American only:									
Below 100%	31.6	33.6	29.2	20.8	22.5	19.0	9.1	10.7	10.3
100%–less than 200%	34.0	28.5	28.3	23.2	18.1	17.9	10.9	7.7	8.4
200% or more	29.1	26.8	24.2	18.5	17.2	15.5	7.1	6.6	6.2
Geographic region ²									
Northeast	27.5	27.3	25.6	15.8	16.1	15.0	7.9	7.2	6.8
Midwest	32.1	33.4	28.5	18.4	19.8	16.9	8.6	9.7	7.9
South	29.3	27.9	26.1	16.7	17.3	15.7	9.1	7.7	7.8
West	28.4	28.1	27.8	14.6	16.3	16.5	8.6	8.8	8.7
Location of residence ²									
Within MSA ⁸	28.3	28.4	26.2	16.0	16.8	15.5	8.1	8.1	7.5
Outside MSA ⁸	33.9	32.5	30.4	18.7	20.4	18.7	10.8	9.6	9.5

See footnotes at end of table.

Table 54 (page 3 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Finger pain ¹			Hip pain ¹		
	2002	2006	2007	2002	2006	2007
Percent of adults reporting joint pain in past 30 days						
18 years and over, age-adjusted ^{2,3}	7.5	7.2	6.5	6.6	6.7	6.1
18 years and over, crude ³	7.5	7.4	6.8	6.6	6.8	6.3
Age						
18–44 years	3.4	3.2	2.5	3.2	3.0	2.6
18–24 years.	2.0	1.6	*1.1	1.6	1.6	*0.6
25–44 years.	3.9	3.8	3.0	3.8	3.5	3.3
45–64 years	11.0	10.3	9.8	9.1	9.5	8.9
45–54 years.	9.1	8.0	7.9	7.8	8.1	7.6
55–64 years.	13.9	13.6	12.5	11.0	11.4	10.7
65 years and over	13.9	14.6	13.4	12.9	13.4	11.8
65–74 years.	14.4	14.3	12.4	12.6	13.3	10.2
75 years and over	13.3	15.0	14.5	13.3	13.5	13.7
Sex ²						
Male.	5.8	5.8	4.8	5.1	5.5	4.1
Female.	8.9	8.5	8.0	8.0	7.7	7.8
Sex and age						
Male:						
18–44 years.	3.0	3.1	2.2	2.5	2.4	1.6
45–54 years.	6.6	7.0	5.3	5.6	6.3	5.0
55–64 years.	10.5	8.9	9.3	8.0	9.1	6.9
65–74 years.	11.2	10.1	8.5	10.5	11.7	7.1
75 years and over	10.0	11.4	9.9	10.1	11.8	10.7
Female:						
18–44 years.	3.8	3.3	2.8	3.9	3.5	3.6
45–54 years.	11.5	8.9	10.3	9.9	9.8	10.1
55–64 years.	17.0	17.9	15.5	13.7	13.5	14.3
65–74 years.	17.1	18.0	15.6	14.2	14.8	12.8
75 years and over	15.3	17.3	17.5	15.2	14.6	15.6
Race ^{2,4}						
White only.	7.6	7.6	6.8	6.9	6.9	6.2
Black or African American only	6.5	5.6	5.2	5.6	6.3	5.7
American Indian or Alaska Native only	*12.9	*13.9	*5.4	*10.4	*7.2	*
Asian only.	*3.2	3.2	4.4	*2.3	*2.1	*3.3
Native Hawaiian or Other Pacific Islander only	*	*	*	*	*	*
2 or more races.	12.8	12.5	10.2	10.0	*8.4	11.3
Hispanic origin and race ^{2,4}						
Hispanic or Latino	6.8	5.8	5.8	3.8	4.0	3.5
Mexican.	7.8	6.5	6.2	4.0	4.1	4.1
Not Hispanic or Latino	7.6	7.4	6.6	6.9	7.0	6.4
White only	7.8	7.9	7.0	7.3	7.4	6.7
Black or African American only.	6.5	5.6	5.1	5.7	6.2	5.8
Education ^{5,6}						
25 years of age and over:						
No high school diploma or GED.	9.5	8.2	8.5	7.3	7.1	7.0
High school diploma or GED	8.3	8.0	7.0	7.3	7.4	7.1
Some college or more.	8.2	8.2	7.3	7.5	7.6	6.8

See footnotes at end of table.

Table 54 (page 4 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Finger pain ¹			Hip pain ¹		
	2002	2006	2007	2002	2006	2007
Percent of poverty level ^{2,7}						
Below 100%	9.8	9.2	8.4	8.5	8.9	8.5
100%–less than 200%	8.9	7.8	7.6	7.5	7.3	7.1
200% or more	6.9	6.9	6.0	6.2	6.2	5.6
Hispanic origin and race and percent of poverty level ^{2,4,7}						
Hispanic or Latino:						
Below 100%	8.6	8.6	7.5	5.9	4.5	4.0
100%–less than 200%	8.2	5.0	6.0	3.9	4.0	*3.5
200% or more	5.5	5.0	5.1	2.5	*3.9	3.3
Not Hispanic or Latino:						
White only:						
Below 100%	10.9	10.5	9.0	9.9	11.0	10.2
100%–less than 200%	9.9	9.2	8.9	9.1	8.7	9.0
200% or more	7.3	7.5	6.5	6.7	6.7	6.0
Black or African American only:						
Below 100%	7.9	7.5	7.1	8.1	8.8	8.5
100%–less than 200%	7.4	6.5	6.3	6.4	6.4	6.8
200% or more	5.6	4.5	3.8	4.5	5.2	4.4
Geographic region ²						
Northeast	6.6	6.3	5.2	5.7	5.3	5.0
Midwest	7.5	8.2	5.8	6.9	7.5	5.7
South	7.6	7.0	7.3	7.0	6.7	6.7
West	8.0	7.3	7.1	6.4	6.8	6.3
Location of residence ²						
Within MSA ⁸	7.2	7.0	6.3	6.2	6.3	5.7
Outside MSA ⁸	8.4	8.2	7.6	8.0	8.1	7.9

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹Starting with 2002 data, respondents were asked, “During the past 30 days, have you had any symptoms of pain, aching, or stiffness in or around a joint?” Respondents were instructed not to include the back or neck. To facilitate their response, respondents were shown a card illustrating the body joints. Respondents reporting more than one type of joint pain were included in each response category. This table shows the most commonly reported joints.

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

³Includes all other races not shown separately and unknown education level.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁶GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 33%–35% of persons 18 years of age and over in 2002–2007. See [Appendix II, Family Income; Poverty](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

Table 55 (page 1 of 2). Basic actions difficulty and complex activity limitation among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	18 years and over				18–64 years				65 years and over			
	1997	2000	2006	2007 ¹	1997	2000	2006	2007 ¹	1997	2000	2006	2007 ¹
Number in millions												
At least one basic actions difficulty or complex activity limitation ^{2,3}	60.9	59.0	68.0	68.9	41.3	39.3	46.1	47.2	19.6	19.7	21.9	21.6
At least one basic actions difficulty ³	56.7	55.2	63.8	64.3	38.1	36.4	42.8	43.7	18.6	18.7	21.0	20.6
At least one complex activity limitation ⁴	29.0	27.2	31.4	33.0	18.1	16.7	19.9	21.2	11.0	10.5	11.5	11.8
At least one basic actions difficulty or complex activity limitation ^{2,3}												
Percent												
Total, age-adjusted ^{4,5}	32.3	29.6	31.1	31.0	...	...	...	...	...	...	...	...
Total, crude ⁴	31.6	29.2	31.4	31.4	25.6	23.2	25.3	25.6	62.0	60.4	63.5	61.8
At least one basic actions difficulty ²												
Percent												
Total, age-adjusted ^{4,5}	29.9	27.7	29.2	29.0	...	...	...	...	...	...	...	...
Total, crude ⁴	29.2	27.2	29.4	29.3	23.5	21.4	23.4	23.7	58.6	57.7	61.3	59.2
Sex												
Male	25.4	23.4	25.8	25.7	20.6	18.6	20.7	21.0	54.3	52.8	56.9	54.2
Female	32.7	30.7	32.8	32.7	26.3	24.1	26.1	26.3	61.7	61.2	64.7	62.9
Race ⁶												
White only	29.4	27.8	30.1	29.9	23.3	21.5	23.7	23.9	58.3	57.6	61.3	59.0
Black or African American only	31.1	26.9	28.8	29.0	26.7	22.5	24.1	24.6	64.2	60.3	63.6	63.5
American Indian or Alaska Native only	43.6	36.8	42.0	37.0	41.7	34.1	37.7	34.4	66.0	70.2	76.6	68.3
Asian only	15.3	15.1	16.1	16.2	12.8	12.3	12.0	12.1	45.9	44.7	49.8	48.5
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	37.3	34.8	37.6	---	33.8	30.7	33.4	---	69.0	76.3	82.1
Hispanic origin and race ⁶												
Hispanic or Latino	23.7	19.5	21.7	21.2	20.8	16.5	18.7	17.8	54.4	57.1	56.2	59.0
Not Hispanic or Latino	29.8	28.2	30.6	30.6	23.8	22.1	24.2	24.7	58.8	57.8	61.7	59.2
White only	30.1	28.8	31.6	31.5	23.7	22.2	24.8	25.2	58.5	57.7	61.6	59.0
Black or African American only	31.2	27.0	28.9	29.3	26.8	22.6	24.1	24.8	64.3	60.1	64.3	63.7
Percent of poverty level ⁷												
Below 100%	41.6	37.8	39.2	39.9	35.8	31.4	33.9	34.4	73.8	71.2	74.9	76.4
100%–less than 200%	37.9	36.7	38.0	37.8	28.9	26.2	29.1	29.6	66.2	69.0	68.4	67.7
200% or more	24.4	23.1	25.2	25.3	19.8	18.8	20.0	20.4	52.0	50.0	56.0	53.3
Location of residence ⁸												
Within MSA	27.5	25.6	28.1	27.9	22.2	20.1	22.2	22.6	56.4	56.2	61.5	58.3
Outside MSA	35.4	33.3	35.6	36.3	28.5	26.5	29.5	29.4	65.5	62.3	60.7	62.3

See footnotes at end of table.

Table 55 (page 2 of 2). Basic actions difficulty and complex activity limitation among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	18 years and over				18–64 years				65 years and over			
	1997	2000	2006	2007	1997	2000	2006	2007	1997	2000	2006	2007
At least one complex activity limitation ³												
Percent												
Total, age-adjusted ^{4,5}	15.6	13.7	14.3	14.8	...	...	...	...	...	...	...	...
Total, crude ⁴	15.1	13.4	14.4	15.0	11.2	9.8	10.9	11.5	35.1	32.0	33.2	33.5
Sex												
Male	13.7	12.0	13.0	13.5	10.6	9.4	10.1	10.9	31.9	28.1	30.3	29.8
Female	16.5	14.7	15.8	16.4	11.9	10.3	11.6	12.1	37.4	34.9	35.5	36.3
Race ⁶												
White only	15.0	13.6	14.4	14.8	10.9	9.8	10.7	11.1	34.3	31.5	32.6	32.7
Black or African American only	19.0	15.0	16.5	17.9	15.2	11.7	13.2	14.9	47.1	40.4	40.6	41.9
American Indian or Alaska Native only	23.7	20.6	20.0	15.5	22.1	17.8	17.5	12.4	*42.6	*54.9	*	*55.0
Asian only	5.7	4.7	6.7	7.5	4.9	3.6	4.5	4.9	*14.8	*15.5	24.8	27.8
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	22.5	22.6	25.1	---	20.3	19.6	23.1	---	*42.2	51.9	*47.1
Hispanic origin and race ⁶												
Hispanic or Latino	11.9	9.1	9.7	10.3	9.8	7.3	7.6	8.2	33.9	32.4	33.5	34.6
Not Hispanic or Latino	15.5	14.0	15.2	15.7	11.4	10.2	11.4	12.0	35.1	32.0	33.2	33.4
White only	15.4	14.1	15.2	15.7	11.1	10.1	11.3	11.8	34.4	31.5	32.5	32.6
Black or African American only	18.8	15.1	16.8	18.1	15.0	11.7	13.5	15.0	46.8	40.3	41.0	42.1
Percent of poverty level ⁷												
Below 100%	30.0	26.0	26.5	28.7	25.2	22.0	23.1	24.8	56.9	46.7	50.0	54.8
100%–less than 200%	23.3	22.0	21.9	23.3	16.7	15.1	16.2	17.6	43.9	42.8	41.4	43.9
200% or more	10.2	9.3	10.1	10.5	7.4	6.8	7.2	7.7	26.8	24.5	27.0	26.4
Location of residence ⁸												
Within MSA	14.1	12.1	13.4	13.8	10.6	8.9	9.9	10.5	32.7	29.8	32.6	32.8
Outside MSA	19.0	18.2	19.3	20.9	13.6	13.4	15.4	16.8	42.8	38.8	35.6	35.8

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

... Category not applicable.

--- Data not available.

¹Starting with 2007 data, the hearing question, a component of the basic actions difficulty measure, was revised. Consequently, data for basic actions difficulty prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

²A basic actions difficulty is defined as having one or more of the following difficulties: movement, emotional, sensory (seeing or hearing), or cognitive. For more information, see [Appendix II, Basic actions difficulty](#). Starting with 2007 data, the hearing question, a component of basic actions difficulty, was revised. The decline from 2006 to 2007 in the estimate of those with hearing trouble is likely due to the changes in the hearing question. Consequently, data prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

³A complex activity limitation is defined as having one or more of the following limitations: self-care (activities of daily living or instrumental activities of daily living), social, or work. For more information, see [Appendix II, Complex activity limitation](#).

⁴Includes all other races not shown separately.

⁵Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁶The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

Table 56 (page 1 of 2). Vision and hearing limitations among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any trouble seeing, even with glasses or contacts ¹				A lot of trouble hearing or deaf ²			
	1997	2000	2006	2007	1997	2000	2006	2007
	Percent of adults							
18 years and over, age-adjusted ^{3,4}	10.0	9.0	9.5	9.9	3.2	3.2	3.4	2.3
18 years and over, crude ⁴	9.8	8.9	9.6	10.0	3.1	3.1	3.4	2.3
Age								
18–44 years	6.2	5.3	5.4	6.9	1.0	0.9	0.8	0.4
18–24 years	5.4	4.2	5.0	6.9	*0.5	*0.7	*0.6	*
25–44 years	6.5	5.7	5.6	6.8	1.2	1.0	0.8	0.5
45–64 years	12.0	10.7	12.2	12.2	3.1	3.0	3.5	2.0
45–54 years	12.2	10.9	11.7	12.3	2.6	2.3	2.7	1.2
55–64 years	11.6	10.5	12.7	12.1	3.9	4.0	4.6	3.0
65 years and over	18.1	17.4	17.4	15.3	9.8	10.5	11.4	8.7
65–74 years	14.2	13.6	13.6	12.9	6.6	7.4	7.1	4.7
75 years and over	23.1	21.9	21.7	17.9	14.1	14.3	16.4	13.3
Sex ³								
Male	8.8	7.9	8.4	8.5	4.2	4.3	4.3	3.1
Female	11.1	10.1	10.5	11.2	2.4	2.3	2.6	1.6
Sex and age								
Male:								
18–44 years	5.3	4.4	4.4	5.6	1.2	1.1	0.6	*0.5
45–54 years	10.1	8.8	10.6	10.6	3.6	2.9	3.3	1.5
55–64 years	10.5	9.5	11.3	10.0	5.4	6.2	7.1	4.7
65–74 years	13.2	12.8	11.9	11.4	9.4	10.8	11.3	7.0
75 years and over	21.4	20.7	21.8	17.2	17.7	18.0	19.6	16.9
Female:								
18–44 years	7.1	6.2	6.5	8.1	0.9	0.8	0.9	*0.3
45–54 years	14.2	12.8	12.8	13.9	1.7	1.8	2.1	*1.0
55–64 years	12.6	11.5	14.0	14.2	2.6	1.9	2.3	*1.3
65–74 years	15.0	14.4	15.1	14.2	4.4	4.5	3.5	2.8
75 years and over	24.2	22.7	21.7	18.4	11.7	12.1	14.4	11.1
Race ^{3,5}								
White only	9.7	8.8	9.5	9.9	3.4	3.4	3.6	2.4
Black or African American only	12.8	10.6	10.4	10.5	2.0	1.6	1.4	1.2
American Indian or Alaska Native only	19.2	16.6	*16.7	18.0	14.1	*	*10.7	*3.8
Asian only	6.2	6.3	7.0	5.7	*	*2.4	*2.2	*
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*
2 or more races	---	16.2	15.5	16.9	---	*5.7	*5.1	*4.9
Hispanic origin and race ^{3,5}								
Hispanic or Latino	10.0	9.7	9.9	9.9	1.5	2.3	2.0	2.5
Mexican	10.2	8.3	11.1	10.1	1.8	3.0	*2.5	2.5
Not Hispanic or Latino	10.0	9.1	9.5	10.0	3.3	3.3	3.5	2.3
White only	9.8	8.9	9.5	10.1	3.5	3.5	3.8	2.5
Black or African American only	12.8	10.6	10.3	10.6	2.0	1.6	1.3	1.2
Education ^{6,7}								
25 years of age and over:								
No high school diploma or GED	15.0	12.2	12.9	13.4	4.8	4.6	4.8	4.1
High school diploma or GED	10.6	9.5	10.6	10.9	3.7	3.9	3.9	2.8
Some college or more	8.9	8.9	9.2	9.2	2.9	2.8	3.6	1.9

See footnotes at end of table.

Table 56 (page 2 of 2). Vision and hearing limitations among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any trouble seeing, even with glasses or contacts ¹				A lot of trouble hearing or deaf ²			
	1997	2000	2006	2007	1997	2000	2006	2007
Percent of poverty level ^{3,8}					Percent of adults			
Below 100%	17.0	12.9	14.2	15.0	4.5	3.7	4.2	3.4
100%–less than 200%	12.9	11.6	12.2	13.0	3.6	4.2	4.1	2.8
200% or more	8.2	7.8	8.1	8.4	3.0	2.8	3.1	2.0
Hispanic origin and race and percent of poverty level ^{3,5,8}								
Hispanic or Latino:								
Below 100%	12.8	11.0	13.2	13.4	*1.9	3.3	*2.8	*
100%–less than 200%	11.2	9.4	9.8	11.1	*1.5	*2.3	*	*2.1
200% or more	7.8	9.7	8.3	8.2	*1.2	*1.7	*	*2.2
Not Hispanic or Latino:								
White only:								
Below 100%	17.9	13.1	14.9	16.3	5.8	4.5	5.6	4.3
100%–less than 200%	13.1	12.0	13.4	14.2	4.3	5.0	5.1	3.3
200% or more	8.2	7.8	8.3	8.8	3.2	3.0	3.4	2.1
Black or African American only:								
Below 100%	17.9	13.6	14.1	15.1	3.3	*1.6	*1.7	*
100%–less than 200%	16.0	12.9	10.9	14.0	*2.0	*2.0	*1.8	*
200% or more	8.5	8.1	8.3	7.2	*	*	*1.0	*
Geographic region ³								
Northeast	8.6	7.4	7.3	8.1	2.2	2.4	3.0	1.7
Midwest	9.5	9.6	10.4	10.3	3.5	3.5	3.4	2.3
South	11.4	9.2	10.2	10.1	3.5	3.3	3.6	2.5
West	9.7	9.9	9.2	10.5	3.4	3.5	3.4	2.4
Location of residence ³								
Within MSA ⁹	9.5	8.5	9.2	9.6	2.9	3.0	3.2	2.1
Outside MSA ⁹	12.0	11.1	10.8	11.4	4.5	3.9	4.3	3.3

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

¹ Respondents were asked, “Do you have any trouble seeing, even when wearing glasses or contact lenses?” Respondents were also asked, “Are you blind or unable to see at all?” In this analysis, any trouble seeing and blind are combined into one category. In 2007, 0.5% of adults 18 years of age and over identified themselves as blind.

² Prior to 2007 data, respondents were asked, “Which statement best describes your hearing without a hearing aid: good, a little trouble, a lot of trouble, or deaf?” In this analysis, a lot of trouble and deaf are combined into one category. Starting with 2007 data, the question was revised to expand the response categories. Respondents were asked, “Which statement best describes your hearing without a hearing aid: excellent, good, a little trouble, moderate trouble, a lot of trouble, or deaf?” For 2007 data, a lot of trouble and deaf are combined into one category. The decline from 2006 to 2007 in the estimate of those with hearing trouble is likely due to the addition of the “moderate trouble” response category. Data prior to 2007 are not comparable with 2007 data due to the revised question. For more information on the impact of this revised question, see [Appendix II, Hearing trouble](#). In 2006, 0.3% of adults 18 years of age and over identified themselves as deaf; in 2007, this estimate was 0.2%.

³ Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁴ Includes all other races not shown separately and unknown education level.

⁵ The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁶ Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁷ GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

⁸ Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family Income; Poverty](#).

⁹ MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

Table 57 (page 1 of 2). Respondent-assessed health status, by selected characteristics: United States, selected years 1991–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1991¹</i>	<i>1995¹</i>	<i>1997</i>	<i>2000</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
	Percent of persons with fair or poor health ²							
All ages, age-adjusted ^{3,4}	10.4	10.6	9.2	9.0	9.3	9.2	9.2	9.5
All ages, crude ⁴	10.0	10.1	8.9	8.9	9.4	9.3	9.5	9.8
Age								
Under 18 years	2.6	2.6	2.1	1.7	1.8	1.8	1.9	1.7
Under 6 years	2.7	2.7	1.9	1.5	1.5	1.6	1.9	1.5
6–17 years	2.6	2.5	2.1	1.8	2.0	1.9	1.9	1.7
18–44 years	6.1	6.6	5.3	5.1	5.7	5.5	5.7	5.9
18–24 years	4.8	4.5	3.4	3.3	3.6	3.3	3.7	3.3
25–44 years	6.4	7.2	5.9	5.7	6.4	6.3	6.3	6.8
45–54 years	13.4	13.4	11.7	11.9	12.3	11.6	12.9	13.3
55–64 years	20.7	21.4	18.2	17.9	17.9	18.3	18.8	17.9
65 years and over	29.0	28.3	26.7	26.9	26.7	26.6	24.8	26.8
65–74 years	26.0	25.6	23.1	22.5	22.4	23.4	21.9	23.4
75 years and over	33.6	32.2	31.5	32.1	31.5	30.2	28.1	30.7
Sex ³								
Male	10.0	10.1	8.8	8.8	9.0	8.8	9.0	9.1
Female	10.8	11.1	9.7	9.3	9.6	9.5	9.5	9.9
Race ^{3,5}								
White only	9.6	9.7	8.3	8.2	8.6	8.6	8.6	8.8
Black or African American only	16.8	17.2	15.8	14.6	14.6	14.3	14.4	14.2
American Indian or Alaska Native only	18.3	18.7	17.3	17.2	16.5	13.2	12.1	17.1
Asian only	7.8	9.3	7.8	7.4	8.6	6.8	6.9	7.1
Native Hawaiian or Other Pacific Islander only	---	---	---	*	*	*	*	*
2 or more races	---	---	---	16.2	12.6	14.5	13.1	16.8
Black or African American; White	---	---	---	*14.5	*10.7	8.3	*15.0	*16.6
American Indian or Alaska Native; White	---	---	---	18.7	12.3	17.2	13.9	19.2
Hispanic origin and race ^{3,5}								
Hispanic or Latino	15.6	15.1	13.0	12.8	13.3	13.3	13.0	13.0
Mexican	17.0	16.7	13.1	12.8	13.4	14.3	14.1	13.2
Not Hispanic or Latino	10.0	10.1	8.9	8.7	8.9	8.7	8.8	9.1
White only	9.1	9.1	8.0	7.9	8.0	8.0	8.0	8.3
Black or African American only	16.8	17.3	15.8	14.6	14.6	14.4	14.4	14.1
Percent of poverty level ^{3,6}								
Below 100%	22.8	23.7	20.8	19.6	21.3	20.4	20.3	21.0
100%–less than 200%	14.7	15.5	13.9	14.1	14.4	14.4	14.4	15.3
200% or more	6.8	6.7	6.1	6.3	6.3	6.2	6.1	6.5
Hispanic origin and race and percent of poverty level ^{3,5,6}								
Hispanic or Latino:								
Below 100%	23.6	22.7	19.9	18.7	20.2	20.2	20.6	21.0
100%–less than 200%	18.0	16.9	13.5	15.3	15.2	15.3	14.4	15.1
200% or more	9.3	8.7	8.5	8.4	8.8	9.2	8.6	9.1
Not Hispanic or Latino:								
White only:								
Below 100%	21.9	22.8	19.7	18.8	20.8	20.1	19.5	20.9
100%–less than 200%	14.0	14.8	13.3	13.4	13.8	13.8	14.2	15.2
200% or more	6.4	6.2	5.6	5.8	5.7	5.7	5.5	5.9
Black or African American only:								
Below 100%	25.8	27.7	25.3	23.8	25.7	23.3	23.0	22.6
100%–less than 200%	17.0	19.3	19.2	18.2	16.7	17.6	16.9	17.7
200% or more	10.9	9.9	9.7	9.7	9.6	9.5	9.2	9.4

See footnotes at end of table.

Table 57 (page 2 of 2). Respondent-assessed health status, by selected characteristics: United States, selected years 1991–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1991¹</i>	<i>1995¹</i>	<i>1997</i>	<i>2000</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Geographic region³			Percent of persons with fair or poor health²					
Northeast	8.3	9.1	8.0	7.6	7.6	7.5	8.2	8.4
Midwest	9.1	9.7	8.1	8.0	8.2	8.3	8.8	8.6
South	13.1	12.3	10.8	10.7	11.2	11.0	10.4	11.0
West	9.7	10.1	8.8	8.8	8.9	8.6	8.5	9.0
Location of residence³								
Within MSA ⁷	9.9	10.1	8.7	8.5	8.8	8.7	8.7	9.0
Outside MSA ⁷	11.9	12.6	11.1	11.1	11.5	11.2	11.7	12.0

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

²See [Appendix II, Health status, respondent-assessed](#).

³Estimates are age-adjusted to the year 2000 standard population using six age groups: Under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁴Includes all other races not shown separately.

⁵The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁶Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 16%–18% of persons in 1991 and 1995, 24%–29% of persons in 1997–1998, and 31%–34% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁷MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, family core questionnaire.

Table 58 (page 1 of 2). Serious psychological distress in the past 30 days among adults 18 years of age and over, by selected characteristics: United States, average annual, selected years 1997–1998 through 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1997–1998	1999–2000	2001–2002	2004–2005	2006–2007
Percent of persons with serious psychological distress ¹					
18 years and over, age-adjusted ^{2,3}	3.2	2.6	3.1	3.0	2.8
18 years and over, crude ³	3.2	2.6	3.1	3.0	2.9
Age					
18–44 years	2.9	2.3	2.9	2.8	2.5
18–24 years	2.7	2.2	2.8	2.5	2.0
25–44 years	3.0	2.4	3.0	2.9	2.7
45–64 years	3.7	3.2	3.9	3.7	3.7
45–54 years	3.9	3.5	4.2	3.9	3.7
55–64 years	3.4	2.6	3.4	3.4	3.8
65 years and over	3.1	2.4	2.4	2.5	2.1
65–74 years	2.5	2.3	2.4	2.2	2.1
75 years and over	3.8	2.5	2.4	2.9	2.0
Sex ²					
Male	2.5	2.0	2.4	2.3	2.1
Female	3.8	3.1	3.8	3.7	3.4
Race ^{2,4}					
White only	3.1	2.5	3.0	2.9	2.7
Black or African American only	4.0	2.9	3.5	3.6	3.2
American Indian or Alaska Native only	7.8	*7.2	8.1	*3.5	*3.9
Asian only	2.0	*1.4	*1.8	1.7	2.0
Native Hawaiian or Other Pacific Islander only	---	*	*	*	*
2 or more races	---	4.8	5.0	7.9	6.5
Hispanic origin and race ^{2,4}					
Hispanic or Latino	5.0	3.5	4.0	3.7	3.4
Mexican	5.2	2.9	3.8	3.6	3.2
Not Hispanic or Latino	3.0	2.5	3.1	3.0	2.8
White only	2.9	2.4	3.0	2.9	2.7
Black or African American only	3.9	2.9	3.5	3.6	3.2
Percent of poverty level ^{2,5}					
Below 100%	9.1	6.8	8.4	8.6	7.2
100%–less than 200%	5.0	4.4	5.2	5.0	5.0
200% or more	1.8	1.6	2.0	1.7	1.6
Hispanic origin and race and percent of poverty level ^{2,4,5}					
Hispanic or Latino:					
Below 100%	8.6	6.1	7.5	6.6	6.0
100%–less than 200%	5.4	3.8	4.1	3.9	2.9
200% or more	2.9	2.2	2.9	2.4	2.6
Not Hispanic or Latino:					
White only:					
Below 100%	9.6	7.8	9.2	10.2	8.8
100%–less than 200%	5.2	4.9	5.9	5.6	6.0
200% or more	1.8	1.6	2.0	1.7	1.5
Black or African American only:					
Below 100%	8.7	6.0	7.2	7.6	6.2
100%–less than 200%	4.3	3.6	4.9	4.8	4.3
200% or more	1.6	1.3	1.7	1.7	1.5

See footnotes at end of table.

Table 58 (page 2 of 2). Serious psychological distress in the past 30 days among adults 18 years of age and over, by selected characteristics: United States, average annual, selected years 1997–1998 through 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1997–1998</i>	<i>1999–2000</i>	<i>2001–2002</i>	<i>2004–2005</i>	<i>2006–2007</i>
Geographic region ²					
Percent of persons with serious psychological distress ¹					
Northeast	2.7	1.9	2.8	2.5	2.6
Midwest	2.6	2.5	2.9	2.7	2.9
South	3.8	2.9	3.5	3.7	3.1
West	3.3	2.8	3.0	2.8	2.5
Location of residence ²					
Within MSA ⁶	3.0	2.3	3.0	2.8	2.6
Outside MSA ⁶	3.9	3.5	3.8	4.0	3.7

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

¹Serious psychological distress is measured by a six-question scale that asks respondents how often they experienced each of six symptoms of psychological distress in the past 30 days. See [Appendix II, Serious psychological distress](#).

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

³Includes all other races not shown separately.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶MSA is metropolitan statistical area. Starting with 2006–2007 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core questionnaire.

Table 59 (page 1 of 2). Suicidal ideation, suicide attempts, and injurious suicide attempts among students in grades 9–12, by sex, grade level, race, and Hispanic origin: United States, selected years 1991–2007

[Data are based on a national sample of high school students, grades 9–12]

<i>Sex, grade level, race, and Hispanic origin</i>	1991	1993	1995	1997	1999	2001	2003	2005	2007
Percent of students who seriously considered suicide ¹									
Total	29.0	24.1	24.1	20.5	19.3	19.0	16.9	16.9	14.5
Male									
Total	20.8	18.8	18.3	15.1	13.7	14.2	12.8	12.0	10.3
9th grade	17.6	17.7	18.2	16.1	11.9	14.7	11.9	12.2	10.8
10th grade	19.5	18.0	16.7	14.5	13.7	13.8	13.2	11.9	9.3
11th grade	25.3	20.6	21.7	16.6	13.7	14.1	12.9	11.9	10.7
12th grade	20.7	18.3	16.3	13.5	15.6	13.7	13.2	11.6	10.2
Not Hispanic or Latina:									
White	21.7	19.1	19.1	14.4	12.5	14.9	12.0	12.4	10.2
Black or African American	13.3	15.4	16.7	10.6	11.7	9.2	10.3	7.0	8.5
Hispanic or Latina	18.0	17.9	15.7	17.1	13.6	12.2	12.9	11.9	10.7
Female									
Total	37.2	29.6	30.4	27.1	24.9	23.6	21.3	21.8	18.7
9th grade	40.3	30.9	34.4	28.9	24.4	26.2	22.2	23.9	19.0
10th grade	39.7	31.6	32.8	30.0	30.1	24.1	23.8	23.0	22.0
11th grade	38.4	28.9	31.1	26.2	23.0	23.6	20.0	21.6	16.3
12th grade	30.7	27.3	23.9	23.6	21.2	18.9	18.0	18.0	16.7
Not Hispanic or Latina:									
White	38.6	29.7	31.6	26.1	23.2	24.2	21.2	21.5	17.8
Black or African American	29.4	24.5	22.2	22.0	18.8	17.2	14.7	17.1	18.0
Hispanic or Latina	34.6	34.1	34.1	30.3	26.1	26.5	23.4	24.2	21.1
Percent of students who attempted suicide ¹									
Total	7.3	8.6	8.7	7.7	8.3	8.8	8.5	8.4	6.9
Male									
Total	3.9	5.0	5.6	4.5	5.7	6.2	5.4	6.0	4.6
9th grade	4.5	5.8	6.8	6.3	6.1	8.2	5.8	6.8	5.3
10th grade	3.3	5.9	5.4	3.8	6.2	6.7	5.5	7.6	4.9
11th grade	4.1	3.4	5.8	4.4	4.8	4.9	4.6	4.5	3.7
12th grade	3.8	4.5	4.7	3.7	5.4	4.4	5.2	4.3	4.2
Not Hispanic or Latino:									
White	3.3	4.4	5.2	3.2	4.5	5.3	3.7	5.2	3.4
Black or African American	3.3	5.4	7.0	5.6	7.1	7.5	7.7	5.2	5.5
Hispanic or Latino	3.7	7.4	5.8	7.2	6.6	8.0	6.1	7.8	6.3
Female									
Total	10.7	12.5	11.9	11.6	10.9	11.2	11.5	10.8	9.3
9th grade	13.8	14.4	14.9	15.1	14.0	13.2	14.7	14.1	10.5
10th grade	12.2	13.1	15.1	14.3	14.8	12.2	12.7	10.8	11.2
11th grade	8.7	13.6	11.4	11.3	7.5	11.5	10.0	11.0	7.8
12th grade	7.8	9.1	6.6	6.2	5.8	6.5	6.9	6.5	6.5
Not Hispanic or Latina:									
White	10.4	11.3	10.4	10.3	9.0	10.3	10.3	9.3	7.7
Black or African American	9.4	11.2	10.8	9.0	7.5	9.8	9.0	9.8	9.9
Hispanic or Latina	11.6	19.7	21.0	14.9	18.9	15.9	15.0	14.9	14.0

See footnotes at end of table.

Table 59 (page 2 of 2). Suicidal ideation, suicide attempts, and injurious suicide attempts among students in grades 9–12, by sex, grade level, race, and Hispanic origin: United States, selected years 1991–2007

[Data are based on a national sample of high school students, grades 9–12]

<i>Sex, grade level, race, and Hispanic origin</i>	1991	1993	1995	1997	1999	2001	2003	2005	2007
Percent of students with an injurious suicide attempt ^{1,2}									
Total	1.7	2.7	2.8	2.6	2.6	2.6	2.9	2.3	2.0
Male									
Total	1.0	1.6	2.2	2.0	2.1	2.1	2.4	1.8	1.5
9th grade	1.0	2.1	2.3	3.2	2.6	2.6	3.1	2.1	1.9
10th grade	0.5	1.3	2.4	1.4	1.8	2.5	2.1	2.2	1.0
11th grade	1.5	1.1	2.0	2.6	2.1	1.6	2.0	1.4	1.4
12th grade	0.9	1.5	2.2	1.0	1.7	1.5	1.8	1.0	1.5
Not Hispanic or Latino:									
White	1.0	1.4	2.1	1.5	1.6	1.7	1.1	1.5	0.9
Black or African American	0.4	2.0	2.8	1.8	3.4	3.6	5.2	1.4	2.5
Hispanic or Latino	0.5	2.0	2.9	2.1	1.4	2.5	4.2	2.8	1.8
Female									
Total	2.5	3.8	3.4	3.3	3.1	3.1	3.2	2.9	2.4
9th grade	2.8	3.5	6.3	5.0	3.8	3.8	3.9	4.0	2.6
10th grade	2.6	5.1	3.8	3.7	4.0	3.6	3.2	2.4	3.1
11th grade	2.1	3.9	2.9	2.8	2.8	2.8	2.9	2.9	1.7
12th grade	2.4	2.9	1.3	2.0	1.3	1.7	2.2	2.2	1.8
Not Hispanic or Latina:									
White	2.3	3.6	2.9	2.6	2.3	2.9	2.4	2.7	2.1
Black or African American	2.9	4.0	3.6	3.0	2.4	3.1	2.2	2.6	2.1
Hispanic or Latina	2.7	5.5	6.6	3.8	4.6	4.2	5.7	3.7	3.9

¹Response is for the 12 months preceding the survey.

²A suicide attempt that required medical attention.

NOTES: Only youths attending school participated in the survey. Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin; Race; Suicidal ideation](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/National Center for Chronic Disease Prevention and Health Promotion, National Youth Risk Behavior Survey (YRBS).

Table 60 (page 1 of 2). Current cigarette smoking among adults 18 years of age and over, by sex, race, and age: United States, selected years 1965–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Sex, race, and age</i>	1965 ¹	1974 ¹	1979 ¹	1985 ¹	1990 ¹	1995 ¹	2000	2004	2005	2006	2007
18 years and over, age-adjusted ²											
Percent of persons who were current cigarette smokers ³											
All persons	41.9	37.0	33.3	29.9	25.3	24.6	23.1	20.8	20.8	20.8	19.7
Male	51.2	42.8	37.0	32.2	28.0	26.5	25.2	23.0	23.4	23.6	22.0
Female	33.7	32.2	30.1	27.9	22.9	22.7	21.1	18.7	18.3	18.1	17.5
White male ⁴	50.4	41.7	36.4	31.3	27.6	26.2	25.4	23.0	23.3	23.5	22.2
Black or African American male ⁴	58.8	53.6	43.9	40.2	32.8	29.4	25.7	23.5	25.9	26.1	23.4
White female ⁴	33.9	32.0	30.3	27.9	23.5	23.4	22.0	19.5	19.1	18.8	18.5
Black or African American female ⁴	31.8	35.6	30.5	30.9	20.8	23.5	20.7	16.9	17.1	18.5	15.6
18 years and over, crude											
All persons	42.4	37.1	33.5	30.1	25.5	24.7	23.2	20.9	20.9	20.8	19.8
Male	51.9	43.1	37.5	32.6	28.4	27.0	25.6	23.4	23.9	23.9	22.3
Female	33.9	32.1	29.9	27.9	22.8	22.6	20.9	18.5	18.1	18.0	17.4
White male ⁴	51.1	41.9	36.8	31.7	28.0	26.6	25.7	23.2	23.6	23.6	22.3
Black or African American male ⁴	60.4	54.3	44.1	39.9	32.5	28.5	26.2	23.9	26.5	27.0	24.6
White female ⁴	34.0	31.7	30.1	27.7	23.4	23.1	21.4	19.1	18.7	18.4	18.1
Black or African American female ⁴	33.7	36.4	31.1	31.0	21.2	23.5	20.8	17.3	17.3	18.8	15.9
All males											
18–24 years	54.1	42.1	35.0	28.0	26.6	27.8	28.1	25.6	28.0	28.5	25.4
25–34 years	60.7	50.5	43.9	38.2	31.6	29.5	28.9	26.1	27.7	27.4	28.8
35–44 years	58.2	51.0	41.8	37.6	34.5	31.5	30.2	26.5	26.0	24.8	23.2
45–64 years	51.9	42.6	39.3	33.4	29.3	27.1	26.4	25.0	25.2	24.5	22.6
65 years and over	28.5	24.8	20.9	19.6	14.6	14.9	10.2	9.8	8.9	12.6	9.3
White male ⁴											
18–24 years	53.0	40.8	34.3	28.4	27.4	28.4	30.4	26.7	29.7	28.9	26.5
25–34 years	60.1	49.5	43.6	37.3	31.6	29.9	29.7	26.3	27.7	27.9	29.0
35–44 years	57.3	50.1	41.3	36.6	33.5	31.2	30.6	26.6	26.3	25.3	24.4
45–64 years	51.3	41.2	38.3	32.1	28.7	26.3	25.8	24.4	24.5	23.4	22.1
65 years and over	27.7	24.3	20.5	18.9	13.7	14.1	9.8	9.4	7.9	12.6	8.9
Black or African American male ⁴											
18–24 years	62.8	54.9	40.2	27.2	21.3	*14.6	20.9	18.0	21.6	31.2	21.4
25–34 years	68.4	58.5	47.5	45.6	33.8	25.1	23.2	21.2	29.8	26.3	32.3
35–44 years	67.3	61.5	48.6	45.0	42.0	36.3	30.7	28.4	23.3	22.2	17.4
45–64 years	57.9	57.8	50.0	46.1	36.7	33.9	32.2	29.2	32.4	32.6	28.3
65 years and over	36.4	29.7	26.2	27.7	21.5	28.5	14.2	14.1	16.8	16.0	14.3
All females											
18–24 years	38.1	34.1	33.8	30.4	22.5	21.8	24.9	21.5	20.7	19.3	19.1
25–34 years	43.7	38.8	33.7	32.0	28.2	26.4	22.3	21.0	21.5	21.5	19.6
35–44 years	43.7	39.8	37.0	31.5	24.8	27.1	26.2	21.6	21.3	20.6	19.6
45–64 years	32.0	33.4	30.7	29.9	24.8	24.0	21.7	19.8	18.8	19.3	19.5
65 years and over	9.6	12.0	13.2	13.5	11.5	11.5	9.3	8.1	8.3	8.3	7.6
White female ⁴											
18–24 years	38.4	34.0	34.5	31.8	25.4	24.9	28.5	22.9	22.6	20.7	21.6
25–34 years	43.4	38.6	34.1	32.0	28.5	27.3	24.9	22.6	23.1	23.7	21.4
35–44 years	43.9	39.3	37.2	31.0	25.0	27.0	26.6	22.7	22.2	21.7	20.7
45–64 years	32.7	33.0	30.6	29.7	25.4	24.3	21.4	20.1	18.9	18.8	19.6
65 years and over	9.8	12.3	13.8	13.3	11.5	11.7	9.1	8.2	8.4	8.4	8.0
Black or African American female ⁴											
18–24 years	37.1	35.6	31.8	23.7	10.0	*8.8	14.2	15.6	14.2	14.8	*8.7
25–34 years	47.8	42.2	35.2	36.2	29.1	26.7	15.5	18.3	16.9	15.4	14.9
35–44 years	42.8	46.4	37.7	40.2	25.5	31.9	30.2	18.9	19.0	21.0	17.7
45–64 years	25.7	38.9	34.2	33.4	22.6	27.5	25.6	20.9	21.0	25.5	22.6
65 years and over	7.1	*8.9	*8.5	14.5	11.1	13.3	10.2	6.7	10.0	9.3	6.4

See footnotes at end of table.

Table 60 (page 2 of 2). Current cigarette smoking among adults 18 years of age and over, by sex, race, and age: United States, selected years 1965–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, 65 years and over.

Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³Starting with 1993 data (shown in spreadsheet version), current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now every day or some days. For previous definition, see [Appendix II, Cigarette smoking](#).

⁴The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The single-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to 1999, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#). For additional data on cigarette smoking by racial groups, see Table 62.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the core questionnaire (1965) and the following questionnaire supplements: hypertension (1974), smoking (1979), alcohol and health practices (1983), health promotion and disease prevention (1985, 1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

Table 61. Age-adjusted prevalence of current cigarette smoking among adults 25 years of age and over, by sex, race, and education level: United States, selected years 1974–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Sex, race, and education level</i>	1974 ¹	1979 ¹	1985 ¹	1990 ¹	1995 ¹	2000	2004	2005	2006	2007
Percent of persons who were current cigarette smokers ³										
25 years and over, age-adjusted ²										
All persons ⁴	36.9	33.1	30.0	25.4	24.5	22.6	20.4	20.3	20.3	19.3
No high school diploma or GED	43.7	40.7	40.8	36.7	35.6	31.6	29.1	28.2	28.8	26.9
High school diploma or GED	36.2	33.6	32.0	29.1	29.1	29.2	25.8	27.0	26.5	26.6
Some college, no bachelor's degree	35.9	33.2	29.5	23.4	22.6	21.7	21.4	21.8	22.1	20.1
Bachelor's degree or higher	27.2	22.6	18.5	13.9	13.6	10.9	10.0	9.1	8.2	9.0
All males ⁴	42.9	37.3	32.8	28.2	26.4	24.7	22.6	22.7	22.9	21.4
No high school diploma or GED	52.3	47.6	45.7	42.0	39.7	36.0	33.6	31.7	31.6	30.8
High school diploma or GED	42.4	38.9	35.5	33.1	32.7	32.1	28.2	29.9	29.7	29.4
Some college, no bachelor's degree	41.8	36.5	32.9	25.9	23.7	23.3	23.4	24.9	25.2	21.6
Bachelor's degree or higher	28.3	22.7	19.6	14.5	13.8	11.6	10.8	9.7	9.2	10.4
White males ^{4,5}	41.9	36.7	31.7	27.6	25.9	24.7	22.4	22.4	22.7	21.6
No high school diploma or GED	51.5	47.6	45.0	41.8	38.7	38.2	32.6	31.6	31.4	30.8
High school diploma or GED	42.0	38.5	34.8	32.9	32.9	32.4	28.9	30.0	29.2	29.9
Some college, no bachelor's degree	41.6	36.4	32.2	25.4	23.3	23.5	22.9	24.5	25.8	21.8
Bachelor's degree or higher	27.8	22.5	19.1	14.4	13.4	11.3	10.5	9.3	8.9	10.5
Black or African American males ^{4,5}	53.4	44.4	42.1	34.5	31.6	26.4	24.4	26.5	25.4	23.7
No high school diploma or GED	58.1	49.7	50.5	41.6	41.9	38.2	36.7	35.9	35.2	30.4
High school diploma or GED	*50.7	48.6	41.8	37.4	36.6	29.0	23.1	30.1	31.3	29.6
Some college, no bachelor's degree	*45.3	39.2	41.8	28.1	26.4	19.9	24.7	27.4	21.0	23.6
Bachelor's degree or higher	*41.4	*36.8	*32.0	*20.8	*17.3	14.6	11.3	10.0	12.9	*13.5
All females ⁴	32.0	29.5	27.5	22.9	22.9	20.5	18.3	18.0	17.9	17.2
No high school diploma or GED	36.6	34.8	36.5	31.8	31.7	27.1	24.5	24.6	26.0	22.7
High school diploma or GED	32.2	29.8	29.5	26.1	26.4	26.6	23.7	24.1	23.4	23.8
Some college, no bachelor's degree	30.1	30.0	26.3	21.0	21.6	20.4	19.7	19.1	19.6	18.9
Bachelor's degree or higher	25.9	22.5	17.1	13.3	13.3	10.1	9.3	8.5	7.2	7.7
White females ^{4,5}	31.7	29.7	27.3	23.3	23.1	21.0	19.0	18.6	18.5	18.0
No high school diploma or GED	36.8	35.8	36.7	33.4	32.4	28.4	24.4	24.6	25.9	23.8
High school diploma or GED	31.9	29.9	29.4	26.5	26.8	27.8	24.7	25.9	24.6	25.2
Some college, no bachelor's degree	30.4	30.7	26.7	21.2	22.2	21.1	21.1	19.5	20.5	19.6
Bachelor's degree or higher	25.5	21.9	16.5	13.4	13.5	10.2	9.9	9.1	7.7	8.2
Black or African American females ^{4,5}	35.6	30.3	32.0	22.4	25.7	21.6	17.1	17.5	19.1	16.6
No high school diploma or GED	36.1	31.6	39.4	26.3	32.3	31.1	29.2	27.8	31.2	23.1
High school diploma or GED	40.9	32.6	32.1	24.1	27.8	25.4	21.0	18.2	18.6	19.8
Some college, no bachelor's degree	32.3	*28.9	23.9	22.7	20.8	20.4	13.9	17.5	18.9	17.2
Bachelor's degree or higher	*36.3	*43.3	26.6	17.0	17.3	10.8	*6.9	*6.6	*8.5	*6.0

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.
¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).
²Estimates are age-adjusted to the year 2000 standard population using four age groups: 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#). For age groups where smoking was 0% or 100%, the age-adjustment procedure was modified to substitute the percentage smoking from the next lower education group.
³Starting with 1993 data (shown in spreadsheet version), current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now every day or some days. For previous definition, see [Appendix II, Cigarette smoking](#).
⁴Includes unknown education level. Education categories shown are for 1997 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In 1974–1995 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13–15 years, 16 years or more. See [Appendix II, Education](#).
⁵The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The single-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to 1999, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#). For additional data on cigarette smoking by racial groups, see Table 62.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following questionnaire supplements: hypertension (1974), smoking (1979), alcohol and health practices (1983), health promotion and disease prevention (1985, 1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

Table 62 (page 1 of 2). Current cigarette smoking among adults, by sex, race, Hispanic origin, age, and education level: United States, average annual 1990–1992, 1995–1998, and 2005–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Male			Female		
	1990–1992 ¹	1995–1998 ¹	2005–2007	1990–1992 ¹	1995–1998 ¹	2005–2007
18 years and over, age-adjusted ²	Percent of persons who were current cigarette smokers ³					
All persons ⁴	27.9	26.5	23.0	23.7	22.1	18.0
Race ⁵						
White only	27.4	26.4	23.0	24.3	22.9	18.8
Black or African American only	33.9	30.7	25.1	23.1	21.8	17.1
American Indian or Alaska Native only	34.2	40.5	30.9	36.7	28.9	24.3
Asian only	24.8	18.1	17.2	6.3	11.0	4.8
Native Hawaiian or Other Pacific Islander only	---	---	*	---	---	*
2 or more races	---	---	24.0	---	---	26.0
American Indian or Alaska Native; White	---	---	29.7	---	---	30.4
Hispanic origin and race ⁵						
Hispanic or Latino	25.7	24.4	18.7	15.8	13.7	9.7
Mexican	26.2	24.5	19.3	14.8	12.0	8.8
Not Hispanic or Latino	28.1	26.9	23.9	24.4	23.1	19.3
White only	27.7	26.9	24.1	25.2	24.1	20.7
Black or African American only	33.9	30.7	25.5	23.2	21.9	17.1
18 years and over, crude						
All persons ⁴	28.4	27.0	23.4	23.6	22.0	17.8
Race ⁵						
White only	27.8	26.8	23.2	24.1	22.6	18.4
Black or African American only	33.2	30.6	26.0	23.3	21.8	17.3
American Indian or Alaska Native only	35.5	39.2	30.6	37.3	31.2	25.7
Asian only	24.9	20.0	18.3	6.3	11.2	5.0
Native Hawaiian or Other Pacific Islander only	---	---	*	---	---	*
2 or more races	---	---	25.8	---	---	26.2
American Indian or Alaska Native; White	---	---	29.9	---	---	31.1
Hispanic origin and race ⁵						
Hispanic or Latino	26.5	25.5	19.7	16.6	13.8	9.8
Mexican	27.1	25.2	20.1	15.0	11.6	8.5
Not Hispanic or Latino	28.5	27.2	24.0	24.2	22.9	18.9
White only	28.0	27.0	23.8	24.8	23.5	19.8
Black or African American only	33.3	30.6	26.4	23.3	21.9	17.4
Age and Hispanic origin and race ⁵						
18–24 years:						
Hispanic or Latino	19.3	26.5	18.8	12.8	12.0	8.5
Not Hispanic or Latino:						
White only	28.9	35.5	31.1	28.7	31.6	25.0
Black or African American only	17.7	21.3	24.8	10.8	9.8	12.5
25–34 years:						
Hispanic or Latino	29.9	25.9	19.6	19.2	12.6	8.7
Not Hispanic or Latino:						
White only	32.7	30.5	31.1	30.9	28.5	26.8
Black or African American only	34.6	28.5	30.0	29.2	22.0	15.7
35–44 years:						
Hispanic or Latino	32.1	26.2	21.6	19.9	17.6	11.2
Not Hispanic or Latino:						
White only	32.3	31.5	26.1	27.3	28.1	23.7
Black or African American only	44.1	34.7	21.6	31.3	30.3	19.4
45–64 years:						
Hispanic or Latino	26.6	26.8	21.6	17.1	14.7	12.4
Not Hispanic or Latino:						
White only	28.4	26.8	23.6	26.1	22.3	19.9
Black or African American only	38.0	38.8	31.3	26.1	26.9	23.2
65 years and over:						
Hispanic or Latino	16.1	14.7	9.2	6.6	9.4	5.0
Not Hispanic or Latino:						
White only	14.2	10.6	9.8	12.3	11.6	8.5
Black or African American only	25.2	20.9	16.1	10.7	11.2	8.6

See footnotes at end of table.

Table 62 (page 2 of 2). Current cigarette smoking among adults, by sex, race, Hispanic origin, age, and education level: United States, average annual 1990–1992, 1995–1998, and 2005–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Male			Female		
	1990–1992 ¹	1995–1998 ¹	2005–2007	1990–1992 ¹	1995–1998 ¹	2005–2007
Education, Hispanic origin, and race ^{5,6}	Percent of persons who were current cigarette smokers ³					
25 years and over, age-adjusted ⁷						
No high school diploma or GED:						
Hispanic or Latino	30.2	27.6	19.0	15.8	13.3	9.2
Not Hispanic or Latino:						
White only	46.1	43.9	42.6	40.4	40.7	41.4
Black or African American only	45.4	44.6	35.8	31.3	30.0	28.2
High school diploma or GED:						
Hispanic or Latino	29.6	26.7	21.0	18.4	16.4	10.4
Not Hispanic or Latino:						
White only	32.9	32.8	31.7	28.4	28.8	28.1
Black or African American only	38.2	35.7	30.5	25.4	26.6	19.2
Some college or more:						
Hispanic or Latino	20.4	16.6	17.3	14.3	13.5	10.1
Not Hispanic or Latino:						
White only	19.3	18.3	16.2	18.1	17.2	14.5
Black or African American only	25.6	23.3	18.8	22.8	18.9	13.8

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#). The column labeled 1995–1998 includes data for 1995, 1997, and 1998 because cigarette smoking data were not collected in 1996.

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#). For age groups where smoking is 0% or 100%, the age-adjustment procedure was modified to substitute the percentage smoking from the previous 3-year period.

³Starting with 1993 data (shown in spreadsheet version), current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now every day or some days. For previous definition, see [Appendix II, Cigarette smoking](#).

⁴Includes all other races not shown separately and unknown education level.

⁵The race groups, white, black, American Indian or Alaska Native (AI/AN), Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 2002–2004 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁶Education categories shown are for 1997 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1997, the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

⁷Estimates are age-adjusted to the year 2000 standard using four age groups: 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#).

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following questionnaire supplements: health promotion and disease prevention (1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

Table 63 (page 1 of 2). Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population 12 years of age and over]

Age, sex, race, and Hispanic origin	Any illicit drug ¹			Marijuana			Nonmedical use of any psychotherapeutic drug ²		
	2002	2006	2007	2002	2006	2007	2002	2006	2007
Percent of population									
12 years and over	8.3	8.3	8.0	6.2	6.0	5.8	2.7	2.9	2.8
Age									
12–13 years	4.2	3.9	3.3	1.4	0.9	0.9	1.7	2.1	1.4
14–15 years	11.2	9.1	8.9	7.6	5.8	5.7	4.0	3.1	3.4
16–17 years	19.8	16.0	16.0	15.7	13.0	13.1	6.3	4.7	4.9
18–25 years	20.2	19.8	19.7	17.3	16.3	16.4	5.5	6.5	6.0
26–34 years	10.5	11.9	10.9	7.7	8.5	7.9	3.7	4.3	3.5
35 years and over	4.6	4.7	4.6	3.1	3.2	3.0	1.6	1.7	1.9
Sex									
Male	10.3	10.5	10.4	8.1	8.1	8.0	2.8	3.3	3.2
Female	6.4	6.2	5.8	4.4	4.1	3.8	2.6	2.5	2.3
Age and sex									
12–17 years	11.6	9.8	9.5	8.2	6.7	6.7	4.0	3.3	3.3
Male	12.3	9.8	10.0	9.1	6.8	7.5	3.6	3.1	3.0
Female	10.9	9.7	9.1	7.2	6.4	5.8	4.4	3.6	3.5
Hispanic origin and race ³									
Not Hispanic or Latino:									
White only	8.5	8.5	8.2	6.5	6.4	6.0	2.8	3.0	3.0
Black or African American only	9.7	9.8	9.5	7.4	7.4	7.2	2.0	2.2	2.2
American Indian or Alaska Native only	10.1	13.7	12.6	6.7	9.8	7.9	3.2	5.6	4.5
Native Hawaiian or Other Pacific Islander only	7.9	7.5	*	4.4	6.2	2.8	3.8	1.2	*
Asian only	3.5	3.6	4.2	1.8	1.9	2.6	0.7	1.5	1.5
2 or more races	11.4	8.9	11.8	9.0	7.3	10.4	3.5	4.2	4.1
Hispanic or Latino	7.2	6.9	6.6	4.3	4.1	4.5	2.9	3.0	2.3

Age, sex, race, and Hispanic origin	Alcohol use			Binge alcohol use ⁴			Heavy alcohol use ⁵		
	2002	2006	2007	2002	2006	2007	2002	2006	2007
Percent of population									
12 years and over	51.0	50.9	51.1	22.9	23.0	23.3	6.7	6.9	6.9
Age									
12–13 years	4.3	3.9	3.5	1.8	1.5	1.5	0.3	0.2	0.1
14–15 years	16.6	15.6	14.7	9.2	8.9	7.8	1.9	1.2	1.4
16–17 years	32.6	29.7	29.0	21.4	20.0	19.4	5.6	5.6	5.4
18–25 years	60.5	61.9	61.2	40.9	42.2	41.8	14.9	15.6	14.7
26–34 years	61.4	61.8	62.6	33.1	34.2	35.1	9.0	10.0	9.7
35 years and over	52.1	51.8	52.2	18.6	18.4	18.9	5.2	5.1	5.3
Sex									
Male	57.4	57.0	56.6	31.2	31.2	31.7	10.8	10.7	10.6
Female	44.9	45.2	46.0	15.1	15.2	15.4	3.0	3.3	3.3
Age and sex									
12–17 years	17.6	16.6	15.9	10.7	10.3	9.7	2.5	2.4	2.3
Male	17.4	16.3	15.9	11.4	10.7	10.6	3.1	2.8	2.8
Female	17.9	17.0	16.0	9.9	9.9	8.8	1.9	1.9	1.8
Hispanic origin and race ³									
Not Hispanic or Latino:									
White only	55.0	55.8	56.1	23.4	24.1	24.6	7.5	7.8	7.8
Black or African American only	39.9	40.0	39.3	21.0	19.1	19.1	4.4	4.6	4.1
American Indian or Alaska Native only	44.7	37.2	44.7	27.9	31.0	28.2	8.7	9.0	11.6
Native Hawaiian or Other Pacific Islander only	*	36.7	*	25.2	24.1	*	8.3	11.0	*
Asian only	37.1	35.4	35.2	12.4	11.8	12.6	2.6	2.4	2.6
2 or more races	49.9	47.1	47.5	19.8	22.8	23.2	7.5	6.3	7.3
Hispanic or Latino	42.8	41.8	42.1	24.8	23.9	23.4	5.9	5.7	5.5

See footnotes at end of table.

Table 63 (page 2 of 2). Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population 12 years of age and over]

Age, sex, race, and Hispanic origin	Any tobacco ⁶			Cigarettes			Cigars		
	2002	2006	2007	2002	2006	2007	2002	2006	2007
Percent of population									
12 years and over	30.4	29.6	28.6	26.0	25.0	24.2	5.4	5.6	5.4
Age									
12–13 years	3.8	2.2	2.4	3.2	1.7	1.8	0.7	0.5	0.7
14–15 years	13.4	11.8	10.8	11.2	9.1	8.4	3.8	3.9	3.4
16–17 years	29.0	24.2	23.4	24.9	19.9	18.9	9.3	7.9	8.4
18–25 years	45.3	43.9	41.8	40.8	38.4	36.2	11.0	12.1	11.8
26–34 years	38.2	39.8	38.6	32.7	34.1	33.4	6.6	8.1	7.1
35 years and over	27.9	27.0	26.2	23.4	22.5	22.0	4.1	3.8	3.8
Sex									
Male	37.0	36.4	35.2	28.7	27.8	27.1	9.4	9.3	9.1
Female	24.3	23.3	22.4	23.4	22.4	21.5	1.7	2.1	1.8
Age and sex									
12–17 years	15.2	12.9	12.4	13.0	10.4	9.8	4.5	4.1	4.2
Male	16.0	14.0	14.1	12.3	10.0	10.0	6.2	5.5	6.0
Female	14.4	11.8	10.6	13.6	10.7	9.7	2.7	2.7	2.4
Hispanic origin and race ³									
Not Hispanic or Latino:									
White only	32.0	31.4	30.7	26.9	26.1	25.6	5.5	5.7	5.5
Black or African American only	28.8	29.1	26.8	25.3	24.4	23.2	6.8	7.2	6.7
American Indian or Alaska Native only	44.3	42.3	41.8	37.1	38.1	34.4	5.2	7.8	8.4
Native Hawaiian or Other Pacific Islander only	28.8	*	*	*	*	*	4.1	2.7	*
Asian only	18.6	16.0	15.4	17.7	14.6	14.2	1.1	1.2	1.5
2 or more races	38.1	34.2	35.2	35.0	30.5	29.9	5.5	6.9	7.9
Hispanic or Latino	25.2	24.4	22.7	23.0	22.4	20.5	5.0	4.8	4.2

* Estimates are considered unreliable. Data not shown if the relative standard error is greater than 17.5% of the log transformation of the proportion, the minimum effective sample size is less than 68, the minimum nominal sample size is less than 100, or the prevalence is close to 0% or 100%.

¹Any illicit drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens (including LSD and PCP), inhalants, or any prescription-type psychotherapeutic drug used nonmedically.

²Nonmedical use of prescription-type psychotherapeutic drugs includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs. Special questions on methamphetamine were added in 2005 and 2006. Data for years prior to 2007 have been adjusted for comparability.

³Persons of Hispanic origin may be of any race. Race and Hispanic origin were collected using the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Single-race categories shown include persons who reported only one racial group. The category 2 or more races includes persons who reported more than one racial group. See [Appendix II, Hispanic origin; Race](#).

⁴Binge alcohol use is defined as drinking five or more drinks on the same occasion on at least one day in the past 30 days. Occasion is defined as at the same time or within a couple of hours of each other. See [Appendix II, Binge drinking](#).

⁵Heavy alcohol use is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days. By definition, all heavy alcohol users are also binge alcohol users.

⁶Any tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.

NOTES: The National Survey on Drug Use & Health (NSDUH), formerly called the National Household Survey on Drug Abuse (NHSDA), began a new baseline in 2002 and cannot be compared with previous years. Because of methodological differences among the National Survey on Drug Use & Health, the Monitoring the Future Study (MTF), and the Youth Risk Behavior Survey (YRBS), rates of substance use measured by these surveys are not directly comparable. See [Appendix I, MTF, NSDUH, and YRBS](#). Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use & Health. Available from: <http://www.oas.samhsa.gov/nsduh.htm>.

Table 64 (page 1 of 3). Use of selected substances among high school seniors, 10th graders, and 8th graders, by sex and race: United States, selected years 1980–2008

[Data are based on a survey of high school seniors, 10th graders, and 8th graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2005	2006	2007	2008
Cigarettes										
Percent using substance in the past month										
All high school seniors	30.5	30.1	29.4	28.3	33.5	31.4	23.2	21.6	21.6	20.4
Male	26.8	28.2	29.1	29.0	34.5	32.8	24.8	22.4	23.1	21.5
Female.	33.4	31.4	29.2	27.5	32.0	29.7	20.7	20.1	19.6	19.1
White	31.0	31.7	32.5	31.8	37.3	36.6	27.0	24.7	25.2	24.1
Black or African American	25.2	18.7	12.0	9.4	15.0	13.6	10.0	11.0	10.6	10.1
All 10th graders	---	---	---	20.8	27.9	23.9	14.9	14.5	14.0	12.3
Male	---	---	---	20.8	27.7	23.8	14.5	13.4	14.6	12.7
Female.	---	---	---	20.7	27.9	23.6	15.1	15.5	13.3	11.9
White	---	---	---	23.9	31.2	27.3	17.0	16.3	16.1	14.1
Black or African American	---	---	---	6.4	12.2	11.3	7.7	8.5	5.8	7.1
All 8th graders	---	---	---	14.3	19.1	14.6	9.3	8.7	7.1	6.8
Male	---	---	---	15.5	18.8	14.3	8.7	8.1	7.5	6.7
Female.	---	---	---	13.1	19.0	14.7	9.7	8.9	6.4	6.7
White	---	---	---	15.0	21.7	16.4	9.5	9.1	7.1	7.3
Black or African American	---	---	---	5.3	8.2	8.4	6.7	5.4	4.8	4.4
Marijuana										
All high school seniors	33.7	25.7	14.0	13.8	21.2	21.6	19.8	18.3	18.8	19.4
Male	37.8	28.7	16.1	16.1	24.6	24.7	23.6	19.7	22.3	22.2
Female.	29.1	22.4	11.5	11.2	17.2	18.3	15.8	16.4	15.0	16.2
White	34.2	26.4	15.6	15.0	21.5	22.0	21.7	19.2	19.9	20.4
Black or African American	26.5	21.7	5.2	6.5	17.8	17.5	15.1	16.7	15.4	17.1
All 10th graders	---	---	---	8.7	17.2	19.7	15.2	14.2	14.2	13.8
Male	---	---	---	10.1	19.2	23.3	16.7	15.7	15.8	15.2
Female.	---	---	---	7.3	15.0	16.2	13.4	12.6	12.5	12.3
White	---	---	---	9.4	17.7	20.1	15.7	14.7	14.8	13.5
Black or African American	---	---	---	3.8	15.1	17.0	13.5	14.2	11.0	12.3
All 8th graders	---	---	---	3.2	9.1	9.1	6.6	6.5	5.7	5.8
Male	---	---	---	3.8	9.8	10.2	7.6	6.7	6.2	6.6
Female.	---	---	---	2.6	8.2	7.8	5.7	6.0	4.9	4.8
White	---	---	---	3.0	9.0	8.3	6.0	5.7	5.1	4.9
Black or African American	---	---	---	2.1	7.0	8.5	8.2	6.7	6.0	6.2
Cocaine										
All high school seniors	5.2	6.7	1.9	1.4	1.8	2.1	2.3	2.5	2.0	1.9
Male	6.0	7.7	2.3	1.7	2.2	2.7	2.6	3.0	2.4	2.3
Female.	4.3	5.6	1.3	0.9	1.3	1.6	1.8	2.1	1.5	1.3
White	5.4	7.0	1.8	1.3	1.7	2.2	2.3	2.6	2.3	2.0
Black or African American	2.0	2.7	0.5	0.8	0.4	1.0	0.5	1.0	0.5	0.5
All 10th graders	---	---	---	0.7	1.7	1.8	1.5	1.5	1.3	1.2
Male	---	---	---	0.7	1.8	2.1	1.9	1.6	1.4	1.4
Female.	---	---	---	0.6	1.5	1.4	1.2	1.3	1.1	1.0
White	---	---	---	0.6	1.7	1.7	1.5	1.5	1.2	1.0
Black or African American	---	---	---	0.2	0.4	0.4	0.8	0.7	0.4	0.7
All 8th graders	---	---	---	0.5	1.2	1.2	1.0	1.0	0.9	0.8
Male	---	---	---	0.7	1.1	1.3	0.9	1.0	0.7	0.9
Female.	---	---	---	0.4	1.2	1.1	1.0	0.9	1.0	0.7
White	---	---	---	0.4	1.0	1.1	0.9	0.8	0.6	0.6
Black or African American	---	---	---	0.4	0.4	0.5	0.3	0.4	0.6	0.4

See footnotes at end of table.

Table 64 (page 2 of 3). Use of selected substances among high school seniors, 10th graders, and 8th graders, by sex and race: United States, selected years 1980–2008

[Data are based on a survey of high school seniors, 10th graders, and 8th graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2005	2006	2007	2008
Inhalants										
Percent using substance in the past month										
All high school seniors	1.4	2.2	2.7	2.4	3.2	2.2	2.0	1.5	1.2	1.4
Male	1.8	2.8	3.5	3.3	3.9	2.9	2.4	1.5	1.5	1.6
Female.	1.0	1.7	2.0	1.6	2.5	1.7	1.6	1.4	0.9	1.2
White	1.4	2.4	3.0	2.4	3.7	2.1	2.1	1.5	1.2	1.5
Black or African American	1.0	0.8	1.5	1.5	1.1	2.1	1.4	1.2	0.9	1.0
All 10th graders	---	---	---	2.7	3.5	2.6	2.2	2.3	2.5	2.1
Male	---	---	---	2.9	3.8	3.0	1.9	2.2	2.7	1.9
Female.	---	---	---	2.6	3.2	2.2	2.5	2.4	2.4	2.3
White	---	---	---	2.9	3.9	2.8	2.2	2.4	2.6	1.6
Black or African American	---	---	---	2.0	1.2	1.5	1.4	1.8	1.5	1.9
All 8th graders	---	---	---	4.4	6.1	4.5	4.2	4.1	3.9	4.1
Male	---	---	---	4.1	5.6	4.1	3.1	3.6	3.4	2.9
Female.	---	---	---	4.7	6.6	4.8	5.3	4.7	4.3	5.3
White	---	---	---	4.5	7.0	4.8	4.0	4.2	3.6	3.8
Black or African American	---	---	---	2.3	2.3	2.3	2.9	2.7	2.8	2.8
MDMA (Ecstasy)										
All high school seniors	---	---	---	---	---	3.6	1.0	1.3	1.6	1.8
Male	---	---	---	---	---	4.1	1.0	1.5	1.5	2.3
Female.	---	---	---	---	---	3.1	1.0	1.1	1.6	1.2
White	---	---	---	---	---	3.9	1.0	1.4	1.7	1.7
Black or African American	---	---	---	---	---	1.9	0.9	0.6	0.8	1.1
All 10th graders	---	---	---	---	---	2.6	1.0	1.2	1.2	1.1
Male	---	---	---	---	---	2.5	1.0	1.5	1.3	1.6
Female.	---	---	---	---	---	2.5	0.9	0.8	1.1	0.7
White	---	---	---	---	---	2.5	1.0	1.3	1.4	1.0
Black or African American	---	---	---	---	---	1.8	0.3	1.0	0.4	0.1
All 8th graders	---	---	---	---	---	1.4	0.6	0.7	0.6	0.8
Male	---	---	---	---	---	1.6	0.8	0.5	0.7	0.7
Female.	---	---	---	---	---	1.2	0.4	0.8	0.6	0.9
White	---	---	---	---	---	1.4	0.6	0.5	0.5	0.7
Black or African American	---	---	---	---	---	0.8	0.9	0.7	0.8	0.3
Alcohol ¹										
All high school seniors	72.0	65.9	57.1	54.0	51.3	50.0	47.0	45.3	44.4	43.1
Male	77.4	69.8	61.3	58.4	55.7	54.0	50.7	47.3	47.1	45.8
Female.	66.8	62.1	52.3	49.0	47.0	46.1	43.3	43.0	41.4	40.9
White	75.8	70.2	62.2	57.7	54.8	55.3	52.2	49.1	49.4	47.8
Black or African American	47.7	43.6	32.9	34.4	37.4	29.3	28.8	29.5	27.9	29.3
All 10th graders	---	---	---	42.8	38.8	41.0	33.2	33.8	33.4	28.8
Male	---	---	---	45.5	39.7	43.3	32.8	33.8	33.4	28.6
Female.	---	---	---	40.3	37.8	38.6	33.6	33.8	33.3	29.0
White	---	---	---	45.7	41.3	44.3	36.7	36.0	35.7	30.5
Black or African American	---	---	---	30.2	24.9	24.7	20.8	22.4	21.0	20.4
All 8th graders	---	---	---	25.1	24.6	22.4	17.1	17.2	15.9	15.9
Male	---	---	---	26.3	25.0	22.5	16.2	16.3	15.6	15.4
Female.	---	---	---	23.8	24.0	22.0	17.9	17.6	16.0	16.4
White	---	---	---	26.0	25.4	23.9	17.3	16.5	14.7	15.8
Black or African American	---	---	---	17.8	17.3	15.1	13.9	12.4	12.3	13.5

See footnotes at end of table.

Table 64 (page 3 of 3). Use of selected substances among high school seniors, 10th graders, and 8th graders, by sex and race: United States, selected years 1980–2008

[Data are based on a survey of high school seniors, 10th graders, and 8th graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2005	2006	2007	2008
Binge drinking ²										
					Percent in last 2 weeks					
All high school seniors	41.2	36.7	32.2	29.8	29.8	30.0	27.1	25.4	25.9	24.6
Male	52.1	45.3	39.1	37.8	36.9	36.7	32.6	28.9	30.7	28.4
Female.	30.5	28.2	24.4	21.2	23.0	23.5	21.6	21.5	21.5	21.3
White	44.6	40.1	36.2	32.9	32.9	34.4	31.8	28.9	30.5	29.3
Black or African American	17.0	16.7	11.6	11.8	15.5	11.0	10.9	11.9	11.0	10.8
All 10th graders	---	---	---	21.0	22.0	24.1	19.0	19.9	19.6	16.0
Male	---	---	---	24.1	24.1	27.6	19.9	21.0	20.9	16.6
Female.	---	---	---	18.1	19.7	20.6	17.9	18.9	18.3	15.4
White	---	---	---	22.8	24.1	26.6	21.5	21.8	21.7	17.4
Black or African American	---	---	---	11.8	9.6	10.6	8.4	9.9	10.0	9.6
All 8th graders	---	---	---	10.9	12.3	11.7	8.4	8.7	8.3	8.1
Male	---	---	---	12.1	12.5	11.7	8.2	8.6	8.2	8.1
Female.	---	---	---	9.6	12.1	11.3	8.6	8.5	8.2	8.0
White	---	---	---	11.0	12.6	12.5	8.4	8.4	7.7	8.0
Black or African American	---	---	---	6.7	7.8	6.2	5.8	5.5	5.7	5.7

--- Data not available.

0.0 Quantity more than zero but less than 0.05.

¹In 1993, the alcohol question was changed to indicate that a drink meant more than a few sips. Data for 1993, available in the spreadsheet version of this table, are based on a half sample. See [Appendix II, Alcohol consumption](#).

²Five or more alcoholic drinks in a row at least once in the prior 2-week period. See [Appendix II, Binge drinking](#). For 8th- and 10th-graders only: The 1991–2007 data have been revised and differ from previous editions of *Health, United States*. As a result of the revisions, the 1991–2007 data are on average 2 percentage points lower than those previously reported.

NOTES: Estimates for Hispanic students are not shown due to small sample size. For 2-year estimates for Hispanic students, see Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. *Monitoring the Future: National Survey results on drug use: 1975–2007. Volume I: Secondary school students 2007*. NIH Pub No. 08–6418A, 2008. Bethesda, MD: National Institute on Drug Abuse, available from http://www.monitoringthefuture.org/pubs/monographs/vol1_2007.pdf. Because of methodological differences among the National Survey on Drug Use & Health (NSDUH), the Monitoring the Future Study (MTF), and the Youth Risk Behavior Survey (YRBS), rates of substance use measured by these surveys are not directly comparable. See [Appendix I, NSDUH, MTF, and YRBS](#). Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Institute on Drug Abuse (NIDA), Monitoring the Future Study, annual surveys.

Table 65 (page 1 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Lifetime alcohol drinking status ¹											
	Current drinker				Former drinker				Lifetime abstainer			
	1997	2000	2006	2007	1997	2000	2006	2007	1997	2000	2006	2007
	Percent of adults											
18 years and over, age-adjusted ²	63.1	61.4	60.8	61.5	15.7	14.4	14.1	14.6	21.2	24.2	25.0	23.9
18 years and over, crude	63.4	61.6	60.8	61.4	15.5	14.3	14.3	14.8	21.1	24.1	24.9	23.8
Both sexes												
Age												
All persons:												
18–44 years	69.4	67.3	65.8	67.2	10.6	9.7	9.3	8.7	19.9	23.1	24.9	24.0
18–24 years	62.2	59.1	59.3	62.5	5.9	5.2	4.6	4.6	31.8	35.7	36.1	32.9
25–44 years	71.6	69.9	68.1	68.9	12.0	11.1	10.9	10.2	16.4	19.1	21.0	20.9
45–64 years	63.3	62.0	61.5	62.3	18.5	16.8	17.2	18.1	18.3	21.1	21.3	19.7
45–54 years	67.1	65.1	64.9	65.5	16.8	15.0	14.6	15.7	16.1	20.0	20.4	18.8
55–64 years	57.3	57.3	56.8	58.0	21.1	19.7	20.8	21.2	21.6	22.9	22.4	20.8
65 years and over	43.4	42.1	43.7	41.8	26.7	25.0	23.6	26.6	29.9	33.0	32.7	31.6
65–74 years	48.6	47.0	48.2	46.5	24.8	23.8	22.2	25.9	26.6	29.3	29.5	27.5
75 years and over	36.6	36.2	38.5	36.4	29.1	26.4	25.1	27.4	34.3	37.4	36.4	36.2
Race ^{2,3}												
White only	66.0	64.5	63.8	64.5	15.2	14.2	14.0	14.5	18.7	21.3	22.2	21.0
Black or African American only	47.8	46.7	48.5	48.8	21.0	17.1	16.0	16.9	31.1	36.1	35.5	34.3
American Indian or Alaska Native only	53.9	54.2	52.8	51.3	22.9	21.7	19.9	21.7	23.2	*24.1	27.3	27.0
Asian only	45.8	43.0	43.0	43.4	8.8	9.2	9.3	8.9	45.3	47.8	47.7	47.7
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	61.4	55.0	53.1	---	19.5	26.6	22.5	---	19.1	18.4	24.4
Hispanic origin and race ^{2,3}												
Hispanic or Latino	53.4	52.4	50.5	51.1	14.7	12.4	13.6	13.6	32.0	35.2	35.9	35.3
Mexican	53.0	51.0	49.0	47.9	14.4	13.4	14.5	14.8	32.6	35.6	36.4	37.3
Not Hispanic or Latino	64.1	62.6	62.5	63.2	15.8	14.6	14.2	14.8	20.1	22.8	23.3	22.1
White only	67.5	65.9	66.4	67.2	15.4	14.4	14.0	14.7	17.1	19.7	19.6	18.2
Black or African American only	47.8	46.7	48.4	48.5	21.0	17.1	16.1	16.9	31.2	36.2	35.4	34.6
Percent of poverty level ^{2,4}												
Below 100%	46.1	45.3	46.0	44.6	20.2	18.8	19.1	20.4	33.6	35.9	34.9	35.1
100%–less than 200%	52.8	50.6	51.2	49.6	20.1	17.9	18.0	18.2	27.1	31.5	30.8	32.1
200% or more	68.7	66.3	65.9	66.8	13.9	12.9	12.4	12.9	17.4	20.8	21.7	20.3
Male												
18 years and over, age-adjusted ²	69.8	67.6	67.4	68.2	16.2	14.8	14.9	15.2	14.0	17.5	17.8	16.7
18 years and over, crude	70.5	68.2	67.6	68.4	15.6	14.3	14.8	15.1	14.0	17.5	17.7	16.6
Age												
18–44 years	74.8	73.0	71.4	73.7	9.8	8.5	9.1	7.7	15.4	18.5	19.6	18.5
18–24 years	66.7	63.6	64.2	65.8	5.3	3.5	4.2	*3.6	28.0	32.8	31.6	30.6
25–44 years	77.2	76.0	73.9	76.5	11.1	10.2	10.7	9.2	11.6	13.9	15.4	14.4
45–64 years	70.8	68.1	67.3	67.4	19.2	17.2	18.6	19.6	10.1	14.7	14.1	13.0
45–54 years	73.8	70.3	69.8	70.7	17.2	15.5	15.7	16.1	9.0	14.2	14.5	13.2
55–64 years	65.8	64.5	63.8	63.0	22.3	20.0	22.8	24.3	11.8	15.4	13.4	12.7
65 years and over	52.7	50.2	54.4	51.7	31.4	30.2	26.1	30.2	15.8	19.6	19.4	18.0
65–74 years	56.7	52.7	58.5	55.6	29.7	28.2	23.7	28.9	13.5	19.1	17.7	15.5
75 years and over	46.7	46.7	48.8	46.7	34.0	33.1	29.4	32.0	19.3	20.3	21.8	21.3
Race ^{2,3}												
White only	71.8	69.7	69.4	70.5	15.8	14.7	14.7	14.9	12.4	15.7	15.9	14.6
Black or African American only	56.9	56.2	58.7	57.7	22.6	17.2	15.8	17.4	20.5	26.6	25.6	24.9
American Indian or Alaska Native only	66.1	62.4	57.3	59.4	*17.8	*23.3	26.1	*24.3	*16.1	*	*	*
Asian only	60.2	55.9	55.9	55.9	10.1	10.3	11.9	11.5	29.8	33.8	32.3	32.6
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	70.5	59.5	52.8	---	*19.4	29.3	23.7	---	*10.1	*11.2	23.5

See footnotes at end of table.

Table 65 (page 2 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Lifetime alcohol drinking status ¹											
	Current drinker				Former drinker				Lifetime abstainer			
	1997	2000	2006	2007	1997	2000	2006	2007	1997	2000	2006	2007
Hispanic origin and race ^{2,3}												
Percent of adults												
Hispanic or Latino	64.6	63.8	62.6	65.1	17.5	14.2	15.1	14.5	17.9	22.0	22.3	20.5
Mexican	66.9	64.5	61.5	61.8	17.3	15.1	16.5	15.6	15.9	20.5	22.0	22.6
Not Hispanic or Latino	70.2	68.2	68.2	68.7	16.2	14.9	14.9	15.3	13.6	16.9	16.9	16.0
White only	72.7	70.4	70.8	71.5	15.7	14.7	14.7	15.1	11.6	14.9	14.5	13.4
Black or African American only	57.1	56.4	58.8	57.6	22.3	17.1	16.0	17.6	20.5	26.5	25.2	24.8
Percent of poverty level ^{2,4}												
Below 100%	57.2	55.3	56.4	54.1	21.8	18.7	20.7	22.9	21.1	26.0	22.9	23.0
100%–less than 200%	60.6	59.0	58.5	58.2	21.5	20.2	19.4	19.2	17.9	20.8	22.2	22.6
200% or more	73.7	71.0	70.9	71.8	14.3	13.1	13.2	13.4	11.9	15.9	15.9	14.8
Female												
18 years and over, age-adjusted ²	57.0	55.8	54.9	55.4	15.3	14.2	13.5	14.2	27.6	30.0	31.5	30.4
18 years and over, crude	57.0	55.5	54.5	55.0	15.4	14.4	13.8	14.6	27.7	30.1	31.7	30.4
Age												
18–44 years	64.2	61.7	60.4	60.9	11.5	10.7	9.5	9.7	24.3	27.5	30.1	29.4
18–24 years	57.7	54.6	54.5	59.4	6.6	6.8	5.0	5.5	35.7	38.5	40.5	35.1
25–44 years	66.1	64.0	62.4	61.4	12.9	12.0	11.0	11.2	21.0	24.1	26.6	27.4
45–64 years	56.2	56.4	56.1	57.5	17.9	16.5	15.9	16.6	25.9	27.2	28.0	26.0
45–54 years	60.7	60.1	60.3	60.6	16.4	14.5	13.6	15.3	22.9	25.4	26.1	24.1
55–64 years	49.4	50.7	50.4	53.3	20.0	19.5	19.0	18.3	30.5	29.8	30.6	28.4
65 years and over	36.6	36.2	35.6	34.3	23.2	21.2	21.7	23.9	40.2	42.5	42.7	41.8
65–74 years	42.0	42.3	39.4	38.9	20.9	20.2	21.0	23.4	37.1	37.5	39.6	37.7
75 years and over	30.2	29.8	31.8	29.7	25.9	22.3	22.4	24.3	43.8	47.9	45.8	45.9
Race ^{2,3}												
White only	60.7	59.8	58.6	59.0	15.0	14.0	13.4	14.2	24.3	26.2	28.0	26.8
Black or African American only	40.9	39.5	40.4	41.8	19.9	17.2	16.3	16.7	39.3	43.3	43.2	41.5
American Indian or Alaska Native only	45.2	47.0	48.1	41.3	26.1	*20.3	*14.4	20.3	28.7	32.7	37.5	38.4
Asian only	31.6	29.3	31.3	32.1	8.1	8.0	7.0	6.9	60.3	62.7	61.7	61.0
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	52.5	52.9	52.7	---	19.1	24.2	21.5	---	28.4	22.9	25.8
Hispanic origin and race ^{2,3}												
Hispanic or Latina	42.1	41.2	38.2	37.0	12.5	11.2	12.6	13.1	45.4	47.6	49.2	50.0
Mexican	38.9	36.9	35.2	32.7	11.6	12.2	12.6	14.4	49.4	50.8	52.3	52.8
Not Hispanic or Latina	58.7	57.6	57.5	58.2	15.6	14.5	13.6	14.4	25.7	27.9	28.9	27.4
White only	62.9	61.9	62.4	63.2	15.2	14.3	13.5	14.4	21.9	23.8	24.1	22.4
Black or African American only	40.7	39.3	40.3	41.3	20.0	17.2	16.3	16.6	39.3	43.5	43.4	42.1
Percent of poverty level ^{2,4}												
Below 100%	39.1	38.5	38.6	38.1	19.9	19.2	18.4	19.0	41.1	42.2	43.0	42.9
100%–less than 200%	46.0	43.4	45.0	42.7	19.5	16.4	17.0	17.7	34.5	40.1	38.0	39.6
200% or more	63.7	61.7	60.9	61.8	13.5	12.9	11.7	12.6	22.7	25.4	27.4	25.6

See footnotes at end of table.

Table 65 (page 3 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

-- Data not available.

¹Lifetime alcohol drinking status categories are based on self-reported responses to questions about alcohol consumption. Current drinkers had at least 12 drinks in their lifetime and at least one drink in the past year. Former drinkers had at least 12 drinks in their lifetime and none in the past year. Lifetime abstainers had fewer than 12 drinks in their lifetime. See [Appendix II, Alcohol consumption](#).

²Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁴Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of adults 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family income; Poverty](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

Table 66 (page 1 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Heavier drinker ¹				Five or more drinks in a day on at least 1 day in the past year ¹				Five or more drinks in a day on at least 12 days in the past year ¹			
	1997	2000	2006	2007	1997	2000	2006	2007	1997	2000	2006	2007
	Percent of adults											
18 years and over, age-adjusted ²	4.9	4.3	5.0	5.1	21.1	19.2	20.2	20.9	9.7	8.7	9.2	9.4
18 years and over, crude	5.0	4.3	5.0	5.1	21.5	19.3	20.0	20.6	9.8	8.7	9.1	9.2
Both sexes												
Age												
All persons:												
18–44 years	5.2	4.7	5.1	5.7	29.2	26.9	27.6	29.2	13.2	12.2	12.7	13.3
18–24 years	5.3	5.8	6.0	7.9	31.8	30.3	31.3	32.4	15.2	15.5	15.9	16.8
25–44 years	5.2	4.3	4.8	5.0	28.5	25.8	26.3	28.1	12.6	11.1	11.6	12.1
45–64 years	5.5	4.6	5.7	5.3	15.9	14.4	16.1	15.7	7.6	6.4	7.2	6.7
45–54 years	5.5	4.4	6.2	5.7	19.0	16.4	19.3	18.9	8.7	7.0	8.6	8.1
55–64 years	5.4	5.0	4.9	4.8	11.1	11.3	11.8	11.4	5.8	5.4	5.2	4.9
65 years and over	3.1	2.6	3.6	2.9	4.9	3.8	4.5	4.6	2.2	1.8	2.1	1.9
65–74 years	3.9	3.1	4.7	3.4	6.7	5.2	6.5	6.3	3.0	2.5	3.2	2.4
75 years and over	2.1	2.0	2.4	2.4	2.4	2.1	2.1	2.7	1.1	*0.9	*0.9	*1.3
Race ^{2,3}												
White only	5.2	4.5	5.4	5.6	22.9	20.8	22.3	23.0	10.3	9.2	10.0	10.2
Black or African American only	4.0	3.5	3.5	3.7	11.7	11.6	11.7	11.9	6.5	6.5	6.2	5.8
American Indian or Alaska Native only	*	*	*	*	29.2	23.7	22.7	26.4	17.4	*12.1	*12.2	*10.6
Asian only	*1.9	*2.3	*1.3	*1.2	11.4	8.8	8.7	9.1	*4.8	3.6	3.7	3.7
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	*7.5	*5.8	*6.9	---	28.0	21.4	22.9	---	15.9	*9.4	11.8
Hispanic origin and race ^{2,3}												
Hispanic or Latino	3.9	3.2	2.8	2.7	20.4	17.3	16.7	17.3	11.2	9.0	8.4	8.8
Mexican	4.4	3.8	2.6	3.1	21.2	19.9	18.5	19.4	12.6	10.8	9.6	10.2
Not Hispanic or Latino	5.1	4.5	5.3	5.5	21.3	19.7	20.8	21.6	9.5	8.8	9.4	9.5
White only	5.4	4.7	5.9	6.2	23.5	21.5	23.5	24.4	10.3	9.3	10.4	10.7
Black or African American only	3.9	3.4	3.5	3.6	11.6	11.5	11.7	11.8	6.5	6.5	6.2	5.7
Percent of poverty level ^{2,4}												
Below 100%	4.8	4.3	4.4	4.7	17.3	15.0	16.2	16.5	9.7	8.6	8.4	9.1
100%–less than 200%	4.9	4.2	4.2	5.2	18.4	15.7	17.4	17.8	9.8	8.0	8.8	9.1
200% or more	5.0	4.3	5.3	5.1	22.6	20.6	21.5	22.4	9.7	8.9	9.5	9.4
Male												
18 years and over, age-adjusted ²	6.1	5.1	5.5	6.1	30.7	28.3	28.0	29.2	15.8	14.4	14.4	14.7
18 years and over, crude	6.1	5.2	5.5	6.1	31.7	29.0	28.3	29.3	16.3	14.7	14.6	14.8
Age												
All persons:												
18–44 years	6.5	5.6	5.9	7.0	40.6	37.8	37.0	39.2	21.1	19.6	19.2	20.2
18–24 years	6.0	6.3	6.4	8.9	40.6	38.0	39.3	40.4	22.9	22.9	21.7	23.8
25–44 years	6.6	5.3	5.7	6.4	40.6	37.7	36.2	38.8	20.6	18.5	18.3	18.9
45–64 years	6.6	5.5	5.8	6.0	25.3	23.5	23.8	23.3	12.7	11.3	12.1	11.5
45–54 years	6.6	5.7	6.3	6.5	29.4	26.3	26.9	28.3	14.5	12.3	13.9	14.1
55–64 years	6.6	5.4	5.0	5.2	18.9	19.0	19.4	16.7	10.0	9.8	9.7	8.1
65 years and over	3.7	3.1	3.6	3.4	9.3	7.4	7.8	8.4	4.7	3.7	3.8	3.6
65–74 years	4.8	3.9	4.9	3.9	12.2	9.5	10.9	10.4	6.1	4.9	5.3	4.5
75 years and over	*2.1	*2.0	*1.9	*2.6	5.1	4.4	3.8	5.8	*2.5	*2.0	*1.9	*2.5
Race ^{2,3}												
White only	6.3	5.1	5.8	6.4	32.8	29.9	30.3	31.5	16.7	14.9	15.5	15.8
Black or African American only	5.3	5.4	4.4	5.5	18.4	19.8	19.2	18.3	11.0	12.4	11.6	10.1
American Indian or Alaska Native only	*	*	*	*	45.7	29.2	30.6	35.9	30.4	*14.0	*	*16.9
Asian only	*2.3	*3.5	*1.8	*	17.8	14.1	13.4	14.8	*7.5	*5.9	5.7	*6.8
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	*12.1	*	*	---	39.2	25.1	28.7	---	23.7	*12.1	*17.9

See footnotes at end of table.

Table 66 (page 2 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Heavier drinker ¹				Five or more drinks in a day on at least 1 day in the past year ¹				Five or more drinks in a day on at least 12 days in the past year ¹			
	1997	2000	2006	2007	1997	2000	2006	2007	1997	2000	2006	2007
Hispanic origin and race ^{2,3}												
Percent of adults												
Hispanic or Latino	5.7	5.2	4.0	3.6	30.9	27.9	25.5	27.7	18.8	15.9	13.5	14.7
Mexican	6.9	6.6	4.1	4.6	34.2	32.2	28.9	30.9	21.9	19.1	15.8	17.1
Not Hispanic or Latino	6.1	5.2	5.8	6.5	30.7	28.6	28.6	29.5	15.5	14.3	14.7	14.7
White only	6.4	5.2	6.3	7.1	33.3	30.6	31.4	32.5	16.6	15.0	16.0	16.2
Black or African American only	5.3	5.4	4.5	5.3	18.4	19.7	19.2	18.1	11.1	12.3	11.5	9.9
Percent of poverty level ^{2,4}												
Below 100%	6.8	6.4	5.9	6.6	26.9	24.8	24.4	25.7	16.5	15.7	14.7	15.8
100%–less than 200%	7.1	5.8	5.7	7.3	27.3	23.6	24.3	26.4	16.4	13.3	14.1	15.0
200% or more	5.7	4.8	5.4	5.7	32.1	29.6	29.2	30.2	15.6	14.5	14.4	14.5
Female												
18 years and over, age-adjusted ²	3.9	3.5	4.5	4.2	12.2	10.8	12.8	13.0	3.9	3.4	4.3	4.2
18 years and over, crude	3.9	3.5	4.6	4.2	12.1	10.6	12.3	12.5	3.9	3.3	4.1	4.0
Age												
All persons:												
18–44 years	4.0	3.8	4.2	4.5	18.3	16.5	18.4	19.4	5.5	5.2	6.4	6.6
18–24 years	4.5	5.2	5.6	6.9	23.0	22.8	23.5	24.6	7.6	8.3	10.3	9.9
25–44 years	3.9	3.4	3.8	3.6	16.9	14.5	16.7	17.5	4.9	4.2	5.1	5.4
45–64 years	4.4	3.8	5.5	4.7	7.2	6.0	9.0	8.4	2.9	1.9	2.6	2.2
45–54 years	4.5	3.2	6.1	5.0	9.2	7.1	12.1	9.9	3.3	2.1	3.6	2.5
55–64 years	4.4	4.6	4.8	4.4	4.1	4.4	4.9	6.5	2.1	1.5	*1.3	*1.8
65 years and over	2.6	2.2	3.6	2.6	1.6	1.2	1.9	1.8	*0.4	*0.4	*0.8	*
65–74 years	3.1	2.5	*4.5	2.9	2.3	1.7	2.8	2.8	*	*	*1.4	*
75 years and over	2.0	1.9	*2.7	*2.3	*0.7	*	*	*	*	*	*	*
Race ^{2,3}												
White only	4.2	4.0	5.0	4.8	13.5	12.1	14.5	14.7	4.2	3.7	4.8	4.8
Black or African American only	2.9	2.0	2.7	2.2	6.5	5.2	5.7	6.7	2.9	1.9	2.0	2.3
American Indian or Alaska Native only	*	*	*	*	18.1	*19.0	*14.1	*14.5	*	*	*	*
Asian only	*	*	*	*	*5.2	*3.7	*4.5	*3.7	*	*	*	*
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	*	*	*	---	17.0	17.1	16.8	---	*8.2	*	*
Hispanic origin and race ^{2,3}												
Hispanic or Latina	2.2	1.2	*1.7	1.7	9.7	6.8	7.7	6.1	3.5	2.1	3.1	2.4
Mexican	*1.9	*1.1	*	*1.5	8.2	7.1	6.9	6.3	3.2	*2.2	2.5	2.4
Not Hispanic or Latina	4.1	3.8	4.9	4.6	12.6	11.5	13.7	14.3	4.0	3.6	4.5	4.6
White only	4.4	4.3	5.5	5.3	14.2	13.0	16.0	16.7	4.3	4.0	5.1	5.4
Black or African American only	2.9	2.0	2.7	2.1	6.2	5.2	5.6	6.6	2.9	1.9	2.0	2.2
Percent of poverty level ^{2,4}												
Below 100%	3.6	2.8	3.5	3.5	10.8	8.2	10.2	10.1	5.1	3.6	3.8	4.4
100%–less than 200%	3.1	2.9	2.9	3.5	10.5	9.0	11.0	10.6	4.0	3.5	3.8	4.0
200% or more	4.2	3.8	5.2	4.5	13.1	11.7	13.8	14.3	3.7	3.4	4.6	4.2

See footnotes at end of table.

Table 66 (page 3 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

-- Data not available.

¹Heavier drinking is based on self-reported responses to questions about average alcohol consumption and is defined as more than 14 drinks per week for men and more than seven drinks per week for women on average. (Most drinking guidelines consider more than seven drinks per week to be a heavier level of consumption for women. U.S. Department of Agriculture: Dietary Guidelines for Americans, 2005.) Available from: <http://www.health.gov/Dietaryguidelines/>. Respondents were also asked, "In the past year, on how many days did you have five or more drinks of any alcoholic beverage?" See [Appendix II, Alcohol consumption](#).

²Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁴Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of adults 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family income; Poverty](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. For more data on alcohol consumption see the Early Release reports on the National Health Interview Survey home page: <http://www.cdc.gov/nchs/nhis.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

Table 67. Selected health conditions and risk factors: United States, 1988–1994 through 2005–2006

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

<i>Health conditions</i>	<i>1988–1994</i>	<i>1999–2000</i>	<i>2001–2002</i>	<i>2003–2004</i>	<i>2005–2006</i>
Diabetes ¹					
Percent of persons 20 years of age and over					
Total, age-adjusted ²	8.0	8.8	10.0	10.4	10.1
Total, crude.	7.8	8.3	9.6	10.3	10.2
High serum total cholesterol ³					
Total, age-adjusted ⁴	20.8	18.3	16.5	16.9	15.6
Total, crude.	19.6	17.8	16.4	17.0	15.9
Hypertension ⁵					
Total, age-adjusted ⁴	25.5	30.0	29.7	32.1	30.5
Total, crude.	24.1	28.9	28.9	32.5	31.7
Overweight (includes Obesity) ⁶					
Total, age-adjusted ⁴	56.0	64.0	65.3	66.0	66.6
Total, crude.	54.9	63.6	65.2	66.2	67.0
Obesity ⁷					
Total, age-adjusted ⁴	22.9	30.1	29.9	32.0	33.9
Total, crude.	22.3	29.9	30.0	32.0	34.2
Untreated dental caries ⁸					
Total, age-adjusted ⁴	27.7	24.3	21.3	30.0	---
Total, crude.	28.2	25.0	21.6	30.3	---
Overweight ⁹					
Percent of persons under 20 years of age					
2–5 years.	7.2	10.3	10.6	13.9	11.0
6–11 years	11.3	15.1	16.3	18.8	15.1
12–19 years	10.5	14.8	16.7	17.4	17.8
Untreated dental caries ⁸					
2–5 years.	19.1	23.2	15.8	23.4	---
6–19 years	23.6	22.7	20.6	25.2	---

--- Data not available.

¹Includes physician-diagnosed and undiagnosed diabetes. Physician-diagnosed diabetes was obtained by self-report and excludes women who reported having diabetes only during pregnancy. Undiagnosed diabetes is defined as a fasting blood glucose (FBG) of at least 126 mg/dL and no reported physician diagnosis. In 2005–2006, FBG testing was performed at a different laboratory and using a different instrument than testing in earlier years. NHANES conducted a crossover study to evaluate the impact of these changes on FBG measurements. As a result of that study, NHANES recommended that 2005–2006 data on FBG measurements be adjusted to be compatible with earlier years. Undiagnosed diabetes estimates in *Health, United States* were produced after adjusting the 2005–2006 FBG data as recommended. For more information, see http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/glu_d.pdf. See related Table 51.

²Estimates are age-adjusted to the year 2000 standard population using three age groups: 20–39 years, 40–59 years, and 60 years and over. Because of the smaller sample size for fasting tests, age adjustment is to three age groups only. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³High serum cholesterol is defined as greater than or equal to 240 mg/dL (6.20 mmol/L). Risk levels have been defined by the Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. National Heart, Lung, and Blood Institute, National Institutes of Health. September 2002. (Available from: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm> and summarized in JAMA 2001;285(19):2486–97.) Individuals who take medicine to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cut-offs for high cholesterol are not defined as having high cholesterol. See related Table 69.

⁴Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over. Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁵Hypertension is defined as having elevated blood pressure and/or taking antihypertensive medication. Elevated blood pressure is defined as having systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg. Those with elevated blood pressure may be taking prescribed medicine for high blood pressure. Respondents were asked, “Are you now taking prescribed medicine for your high blood pressure?” See [Appendix II, Blood pressure, elevated](#). See related Table 68.

⁶Excludes pregnant women. Overweight is defined as body mass index (BMI) greater than or equal to 25 kilograms/meter². See [Appendix II, Body mass index](#). See related Table 72.

⁷Excludes pregnant women. Obesity is defined as body mass index (BMI) greater than or equal to 30 kilograms/meter². See [Appendix II, Body mass index](#). See related Table 72.

⁸Untreated dental caries refers to untreated coronal caries, that is, caries on the crown or enamel surface of the tooth. Root tips are classified as coronal caries. Root caries are not included. For children 2–5 years of age, only dental caries in primary teeth was evaluated. Caries in both permanent and primary teeth was evaluated for children 6–11 years of age. For children 12 years and over and for adults, only dental caries in permanent teeth was evaluated. Persons without at least one primary or one permanent tooth or one root tip were classified as edentulous and were excluded from this analysis. The majority of edentulous persons are 65 years of age and over. Estimates of edentulism among persons 65 years of age and over are 33% in 1988–1994 and 27% in 1999–2004. Because of significant methodological changes in the collection of 2005–2006 data on dental caries, the 2005–2006 data are not comparable with earlier years. Therefore, 2005–2006 data are not presented in *Health, United States*. For more information, see http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/ohx_d.pdf. See [Appendix II, Dental caries](#). See related Table 74.

⁹Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points from the 2000 CDC Growth Charts: United States. Advance data from vital and health statistics; no 314. Hyattsville, MD: National Center for Health Statistics. 2000. Excludes pregnant girls. See related Table 73.

NOTES: See related Tables 51, 68, 69, 72, 73, and 74. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hsus.htm>.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 68 (page 1 of 2). Hypertension and elevated blood pressure among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

Sex, age, race and Hispanic origin ¹ , and percent of poverty level	Hypertension ^{2,3} (elevated blood pressure and/or taking antihypertensive medication)			Elevated blood pressure ²		
	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006
20 years and over, age-adjusted ⁴						
Percent of population						
Both sexes ⁵	25.5	30.0	31.3	18.5	19.9	17.9
Male	26.4	28.8	31.8	20.6	19.1	18.2
Female	24.4	30.6	30.3	16.4	20.2	17.3
Not Hispanic or Latino:						
White only, male	25.6	27.6	31.2	19.7	17.6	17.4
White only, female	23.0	28.5	28.3	15.1	18.5	15.9
Black or African American only, male	37.5	40.6	42.2	30.3	28.2	26.5
Black or African American only, female	38.3	43.5	44.1	26.4	28.8	23.9
Mexican male	26.9	26.8	24.8	22.2	21.5	15.3
Mexican female	25.0	27.9	28.6	20.4	21.2	19.2
Percent of poverty level: ⁶						
Below 100%	31.7	33.9	35.0	22.5	23.3	22.6
100%–less than 200%	26.6	33.5	34.1	19.3	23.0	21.1
200% or more	23.9	28.2	30.3	17.5	18.2	16.6
20 years and over, crude						
Both sexes ⁵	24.1	30.2	32.1	17.6	19.9	18.2
Male	23.8	27.6	31.3	18.7	18.2	17.9
Female	24.4	32.7	32.9	16.5	21.6	18.6
Not Hispanic or Latino:						
White only, male	24.3	28.3	32.4	18.7	17.8	17.9
White only, female	24.6	32.8	33.4	16.4	21.6	18.8
Black or African American only, male	31.1	35.9	38.8	25.5	25.2	24.8
Black or African American only, female	32.5	41.9	42.8	22.2	27.2	22.4
Mexican male	16.4	16.5	16.6	13.9	14.1	10.9
Mexican female	15.9	18.8	20.0	12.7	13.8	13.0
Percent of poverty level: ⁶						
Below 100%	25.7	30.3	28.8	18.7	21.1	18.3
100%–less than 200%	26.7	34.8	36.8	19.8	24.1	22.5
200% or more	22.2	28.2	31.1	16.2	17.8	16.8
Male						
20–34 years	7.1	*8.1	9.2	6.6	*7.3	7.6
35–44 years	17.1	17.1	21.1	15.2	12.1	13.2
45–54 years	29.2	31.0	36.2	21.9	20.4	21.0
55–64 years	40.6	45.0	50.2	28.4	24.8	26.4
65–74 years	54.4	59.6	64.1	39.9	34.9	29.2
75 years and over	60.4	69.0	65.0	49.7	50.6	38.2
Female						
20–34 years	2.9	*2.7	*2.2	*2.4	*1.4	*
35–44 years	11.2	15.1	12.6	6.4	8.5	5.8
45–54 years	23.9	31.8	36.2	13.7	19.1	20.0
55–64 years	42.6	53.9	54.4	27.0	31.9	28.6
65–74 years	56.2	72.7	70.8	38.2	53.0	40.8
75 years and over	73.6	83.1	80.2	59.9	64.4	55.4

See footnotes at end of table.

Table 68 (page 2 of 2). Hypertension and elevated blood pressure among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Hypertension is defined as having measured elevated blood pressure and/or taking antihypertensive medication. Elevated blood pressure is defined as having a measured systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg. Those with elevated blood pressure also may be taking prescribed medicine for high blood pressure. Those taking antihypertensive medication may not have measured elevated blood pressure but are still classified as having hypertension. See [Appendix II, Blood pressure, elevated](#).

³Respondents were asked, “Are you now taking prescribed medicine for your high blood pressure?”

⁴Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁵Includes persons of all races and Hispanic origins, not just those shown separately.

⁶Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (5% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: Percents are based on the average of blood pressure measurements taken. In 2003–2006, 81% of participants had three blood pressure readings. See *Health, United States, 2003*, Table 66 for a longer trend based on a single blood pressure measurement, which provides comparable data across five time periods (1960–1962 through 1999–2000). Excludes pregnant women. Estimates for persons 20 years and over are used for setting and tracking *Healthy People 2010* objectives. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 69 (page 1 of 3). Serum total cholesterol levels among persons 20 years of age and over, by selected characteristics: United States, selected years 1960–1962 through 2003–2006

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	1960–1962	1971–1974	1976–1980 ²	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted ³	Percent of population with high serum total cholesterol (greater than or equal to 240 mg/dL)					
Both sexes ⁴	33.3	28.6	27.8	19.7	17.0	16.3
Male	30.6	27.9	26.4	18.8	16.9	15.6
Female	35.6	29.1	28.8	20.5	17.0	16.9
Not Hispanic or Latino:						
White only, male	---	---	26.4	18.7	17.0	16.0
White only, female	---	---	29.6	20.7	17.4	17.9
Black or African American only, male	---	---	25.5	16.4	12.5	11.2
Black or African American only, female	---	---	26.3	19.9	16.6	13.0
Mexican male	---	---	20.3	18.7	17.6	17.7
Mexican female	---	---	20.5	17.7	12.7	13.8
Percent of poverty level: ⁵						
Below 100%	---	24.4	23.5	19.3	17.8	18.2
100%–less than 200%	---	28.9	26.5	19.4	18.8	16.5
200% or more	---	28.9	29.0	19.6	16.5	16.2
20 years and over, age-adjusted ³						
Both sexes ⁴	---	---	---	20.8	17.3	16.3
Male	---	---	---	19.0	16.4	15.1
Female	---	---	---	22.0	17.8	17.1
Not Hispanic or Latino:						
White only, male	---	---	---	18.8	16.5	15.5
White only, female	---	---	---	22.2	18.1	18.0
Black or African American only, male	---	---	---	16.9	12.4	10.9
Black or African American only, female	---	---	---	21.4	17.7	13.3
Mexican male	---	---	---	18.5	17.4	17.6
Mexican female	---	---	---	18.7	13.8	14.4
Percent of poverty level: ⁵						
Below 100%	---	---	---	20.6	18.3	18.1
100%–less than 200%	---	---	---	20.6	19.1	16.7
200% or more	---	---	---	20.4	16.5	16.0
20 years and over, crude						
Both sexes ⁴	---	---	---	19.6	17.3	16.4
Male	---	---	---	17.7	16.6	15.2
Female	---	---	---	21.3	18.0	17.5
Not Hispanic or Latino:						
White only, male	---	---	---	18.0	16.9	15.7
White only, female	---	---	---	22.5	19.1	18.9
Black or African American only, male	---	---	---	14.7	12.2	10.8
Black or African American only, female	---	---	---	18.2	16.1	12.5
Mexican male	---	---	---	15.4	15.0	15.7
Mexican female	---	---	---	14.3	10.7	12.6
Percent of poverty level: ⁵						
Below 100%	---	---	---	17.6	16.4	16.8
100%–less than 200%	---	---	---	19.8	18.2	16.0
200% or more	---	---	---	19.5	16.9	16.5
Male						
20–34 years	15.1	12.4	11.9	8.2	9.8	9.5
35–44 years	33.9	31.8	27.9	19.4	19.8	20.5
45–54 years	39.2	37.5	36.9	26.6	23.6	20.8
55–64 years	41.6	36.2	36.8	28.0	19.9	16.0
65–74 years	38.0	34.7	31.7	21.9	13.7	10.9
75 years and over	---	---	---	20.4	10.2	9.6
Female						
20–34 years	12.4	10.9	9.8	7.3	8.9	10.3
35–44 years	23.1	19.3	20.7	12.3	12.4	12.7
45–54 years	46.9	38.7	40.5	26.7	21.4	19.7
55–64 years	70.1	53.1	52.9	40.9	25.6	30.5
65–74 years	68.5	57.7	51.6	41.3	32.3	24.2
75 years and over	---	---	---	38.2	26.5	18.6

See footnotes at end of table.

Table 69 (page 2 of 3). Serum total cholesterol levels among persons 20 years of age and over, by selected characteristics: United States, selected years 1960–1962 through 2003–2006

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	1960–1962	1971–1974	1976–1980 ²	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted ³						
Mean serum cholesterol level, mg/dL						
Both sexes ⁴	222	216	215	205	203	200
Male	220	216	213	204	203	199
Female	224	217	216	205	202	201
Not Hispanic or Latino:						
White only, male	---	---	213	204	202	199
White only, female	---	---	216	206	204	203
Black or African American only, male	---	---	211	201	195	193
Black or African American only, female	---	---	216	204	200	194
Mexican male	---	---	209	206	205	203
Mexican female	---	---	209	204	198	199
Percent of poverty level: ⁵						
Below 100%	---	211	211	203	200	203
100%–less than 200%	---	217	213	203	203	201
200% or more	---	217	216	206	203	200
20 years and over, age-adjusted ³						
Both sexes ⁴	---	---	---	206	203	200
Male	---	---	---	204	202	198
Female	---	---	---	207	204	202
Not Hispanic or Latino:						
White only, male	---	---	---	205	202	198
White only, female	---	---	---	208	205	203
Black or African American only, male	---	---	---	202	195	193
Black or African American only, female	---	---	---	207	202	195
Mexican male	---	---	---	206	204	203
Mexican female	---	---	---	206	199	200
Percent of poverty level: ⁵						
Below 100%	---	---	---	205	201	203
100%–less than 200%	---	---	---	205	204	201
200% or more	---	---	---	207	203	200
20 years and over, crude						
Both sexes ⁴	---	---	---	204	203	200
Male	---	---	---	202	202	198
Female	---	---	---	206	204	202
Not Hispanic or Latino:						
White only, male	---	---	---	203	203	198
White only, female	---	---	---	208	206	205
Black or African American only, male	---	---	---	198	194	192
Black or African American only, female	---	---	---	201	199	194
Mexican male	---	---	---	199	200	200
Mexican female	---	---	---	198	194	196
Percent of poverty level: ⁵						
Below 100%	---	---	---	200	198	200
100%–less than 200%	---	---	---	202	202	199
200% or more	---	---	---	205	204	201
Male						
20–34 years	198	194	192	186	188	186
35–44 years	227	221	217	206	207	209
45–54 years	231	229	227	216	215	208
55–64 years	233	229	229	216	212	202
65–74 years	230	226	221	212	202	191
75 years and over	---	---	---	205	195	187
Female						
20–34 years	194	191	189	184	185	188
35–44 years	214	207	207	195	198	197
45–54 years	237	232	232	217	211	208
55–64 years	262	245	249	235	221	219
65–74 years	266	250	246	233	224	214
75 years and over	---	---	---	229	217	206

See footnotes at end of table.

Table 69 (page 3 of 3). Serum total cholesterol levels among persons 20 years of age and over, by selected characteristics: United States, selected years 1960–1962 through 2003–2006

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

-- Data not available.

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

³Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁴Includes persons of all races and Hispanic origins, not just those shown separately.

⁵Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (4% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: High serum cholesterol is defined as greater than or equal to 240 mg/dL (6.20 mmol/L). Borderline high serum cholesterol is defined as greater than or equal to 200 mg/dL and less than 240 mg/dL. Risk levels have been defined by the Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. National Heart, Lung, and Blood Institute, National Institutes of Health. September 2002. (Available from: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm> and summarized in JAMA 2001;285(19):2486–97). Individuals who take medicine to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cut-offs for high and borderline high cholesterol are not defined as having high or borderline high cholesterol, respectively. See [Appendix II, Cholesterol, serum](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hsus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1960–1962).

Table 70. Mean energy and macronutrient intake among persons 20–74 years of age, by sex and age: United States, 1971–1974 through 2003–2006

[Data are based on dietary recall interviews of a sample of the civilian noninstitutionalized population]

<i>Sex and age</i>	<i>1971–1974</i>	<i>1976–1980</i>	<i>1988–1994</i>	<i>1999–2002</i>	<i>2003–2006</i>
Mean energy intake in kcals					
Male, age-adjusted ¹	2,450	2,439	2,664	2,634	2,727
Male, crude	2,461	2,459	2,692	2,638	2,725
20–39 years	2,784	2,753	2,964	2,854	2,978
40–59 years	2,303	2,315	2,567	2,601	2,693
60–74 years	1,918	1,906	2,104	2,124	2,137
Female, age-adjusted ¹	1,542	1,522	1,796	1,874	1,870
Female, crude	1,540	1,525	1,804	1,869	1,861
20–39 years	1,652	1,643	1,956	2,031	2,001
40–59 years	1,510	1,473	1,734	1,823	1,823
60–74 years	1,325	1,322	1,520	1,582	1,633
Percent kcals from carbohydrate					
Male, age-adjusted ¹	42.4	42.6	48.3	48.9	47.4
Male, crude	42.4	42.7	48.3	48.9	47.4
20–39 years	42.2	43.1	48.1	50.1	48.5
40–59 years	41.6	41.5	47.8	47.7	46.4
60–74 years	44.8	44.1	49.7	48.9	47.0
Female, age-adjusted ¹	45.4	46.0	50.7	51.5	49.4
Female, crude	45.5	46.1	50.7	51.5	49.4
20–39 years	45.8	46.0	50.6	52.6	50.0
40–59 years	44.4	45.0	50.0	50.4	48.5
60–74 years	46.8	48.6	52.6	51.4	50.2
Percent kcals from protein					
Male, age-adjusted ¹	16.5	16.1	15.4	15.3	15.5
Male, crude	16.4	16.0	15.4	15.3	15.5
20–39 years	16.1	15.8	15.0	14.8	15.4
40–59 years	16.9	16.3	15.7	15.5	15.4
60–74 years	16.5	16.3	15.9	16.2	16.0
Female, age-adjusted ¹	16.9	16.0	15.4	15.1	15.6
Female, crude	16.8	16.0	15.4	15.1	15.6
20–39 years	16.4	15.8	14.8	14.6	15.3
40–59 years	17.3	16.3	15.6	15.3	15.7
60–74 years	17.0	16.1	16.4	16.0	15.9
Percent kcals from total fat					
Male, age-adjusted ¹	36.9	36.7	33.9	33.0	33.5
Male, crude	36.9	36.7	33.9	33.0	33.6
20–39 years	37.0	36.2	34.0	32.1	32.5
40–59 years	36.9	37.2	34.2	33.7	34.2
60–74 years	36.4	36.8	32.9	33.8	34.7
Female, age-adjusted ¹	36.1	36.0	33.4	33.2	34.0
Female, crude	36.0	35.9	33.3	33.2	34.0
20–39 years	36.3	36.0	33.6	32.5	33.6
40–59 years	36.3	36.4	34.0	33.9	34.4
60–74 years	34.9	34.7	31.6	33.4	34.2
Percent kcals from saturated fat					
Male, age-adjusted ¹	13.5	13.2	11.3	10.8	11.1
Male, crude	13.5	13.2	11.4	10.8	11.1
20–39 years	13.6	13.1	11.5	10.7	10.9
40–59 years	13.5	13.4	11.3	10.8	11.2
60–74 years	13.3	13.1	10.9	10.7	11.3
Female, age-adjusted ¹	13.0	12.5	11.2	10.8	11.3
Female, crude	12.9	12.5	11.2	10.8	11.3
20–39 years	13.0	12.6	11.4	10.8	11.1
40–59 years	13.1	12.6	11.3	10.9	11.5
60–74 years	12.4	11.8	10.4	10.5	11.1

¹Age-adjusted to the 2000 standard population using three age groups, 20–39 years, 40–59 years, and 60–74 years. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

NOTES: Estimates of energy intake include kilocalories (kcal) from all foods and beverages, including alcoholic beverages, consumed during the preceding 24 hours. Individuals who reported no energy intake were excluded. Starting in 2001, data collection method also included a second day recall that was conducted by telephone (Day 2 file). This table only includes data collected in Day 1 file in the Mobile Examination Center (MEC) to calculate dietary intake. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 71 (page 1 of 2). Leisure-time physical activity among adults 18 years of age and over, by selected characteristics: United States, 1998, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Inactive ¹			Some leisure-time activity ¹			Regular leisure-time activity ¹		
	1998	2006	2007	1998	2006	2007	1998	2006	2007
	Percent of adults								
18 years and over, age-adjusted ^{2,3}	40.5	39.5	39.1	30.0	29.5	30.1	29.5	31.0	30.8
18 years and over, crude ³	40.2	39.5	39.1	30.0	29.6	30.1	29.8	30.9	30.8
Age									
18–44 years	35.2	34.9	34.4	31.4	30.4	31.3	33.5	34.6	34.3
18–24 years	32.8	34.8	32.9	30.1	27.1	30.0	37.1	38.1	37.1
25–44 years	35.9	35.0	34.9	31.8	31.6	31.8	32.4	33.4	33.3
45–64 years	41.2	39.7	38.9	30.6	30.8	31.1	28.2	29.5	30.0
45–54 years	38.9	38.2	37.7	31.4	30.7	31.5	29.8	31.1	30.8
55–64 years	44.9	41.9	40.5	29.3	30.9	30.6	25.8	27.2	29.0
65 years and over	55.4	53.4	54.1	24.7	24.5	24.4	19.9	22.0	21.6
65–74 years	49.1	48.0	48.1	26.5	25.8	27.2	24.4	26.2	24.7
75 years and over	63.3	59.6	60.9	22.4	23.1	21.2	14.3	17.3	17.9
Sex ²									
Male	37.8	38.5	37.0	28.7	28.4	30.1	33.5	33.1	32.9
Female	42.9	40.3	40.9	31.1	30.7	30.1	26.0	29.0	29.0
Sex and age									
Male:									
18–44 years	32.0	34.2	31.9	30.7	28.8	31.8	37.2	36.9	36.3
45–54 years	37.7	39.0	38.5	29.6	28.4	30.9	32.6	32.7	30.6
55–64 years	44.5	41.1	40.2	26.9	30.6	29.3	28.6	28.2	30.4
65–74 years	45.3	46.9	45.0	23.6	25.0	26.4	31.1	28.2	28.7
75 years and over	57.4	52.1	53.1	21.6	26.6	22.6	20.9	21.4	24.3
Female:									
18–44 years	38.2	35.6	36.8	32.0	32.0	30.9	29.8	32.4	32.3
45–54 years	39.9	37.5	37.0	33.0	33.0	32.1	27.1	29.5	30.9
55–64 years	45.2	42.6	40.7	31.5	31.1	31.7	23.3	26.3	27.6
65–74 years	52.2	49.0	50.7	28.7	26.5	27.8	19.0	24.5	21.5
75 years and over	67.0	64.4	65.9	22.9	20.8	20.3	10.1	14.7	13.9
Race ^{2,4}									
White only	38.8	38.2	37.4	30.5	29.9	30.4	30.7	31.9	32.2
Black or African American only	52.2	48.9	51.0	25.2	26.2	26.0	22.6	24.9	23.0
American Indian or Alaska Native only	49.2	32.8	39.6	19.0	37.8	37.8	31.8	29.5	22.6
Asian only	39.4	39.8	38.9	35.2	29.7	31.0	25.4	30.5	30.1
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	34.2	37.4	---	35.8	32.2	---	30.0	30.4
Hispanic origin and race ^{2,4}									
Hispanic or Latino	55.5	53.4	51.3	23.4	23.8	25.0	21.1	22.8	23.7
Mexican	56.7	53.9	51.9	23.9	24.2	25.4	19.4	22.0	22.7
Not Hispanic or Latino	38.8	37.3	37.1	30.7	30.4	30.9	30.5	32.3	32.0
White only	36.7	35.3	34.7	31.3	31.0	31.5	32.0	33.8	33.9
Black or African American only	52.2	49.0	50.8	25.1	26.4	26.2	22.6	24.7	23.0
Education ^{5,6}									
No high school diploma or GED	64.8	62.3	63.6	19.4	21.2	21.4	15.8	16.5	14.9
High school diploma or GED	47.6	47.5	49.0	28.7	29.0	29.2	23.7	23.5	21.8
Some college or more	30.2	29.2	28.7	34.3	33.3	33.3	35.5	37.6	38.0

See footnotes at end of table.

Table 71 (page 2 of 2). Leisure-time physical activity among adults 18 years of age and over, by selected characteristics: United States, 1998, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Inactive ¹			Some leisure-time activity ¹			Regular leisure-time activity ¹		
	1998	2006	2007	1998	2006	2007	1998	2006	2007
Percent of poverty level ^{2,7}				Percent of adults					
Below 100%	59.4	56.0	58.2	20.5	23.4	22.1	20.1	20.6	19.7
100%–less than 200%	52.2	50.4	50.7	26.2	25.8	26.3	21.6	23.8	23.0
200% or more	34.7	33.6	33.0	32.4	31.6	32.4	33.0	34.8	34.6
Hispanic origin and race and percent of poverty level ^{2,4,7}									
Hispanic or Latino:									
Below 100%	68.6	65.3	61.7	18.0	19.2	23.8	13.4	15.5	14.6
100%–less than 200%	60.8	59.4	56.4	21.2	22.3	22.7	18.0	18.4	20.9
200% or more	45.6	44.3	44.1	27.6	26.7	26.8	26.8	29.0	29.0
Not Hispanic or Latino:									
White only:									
Below 100%	53.7	50.8	55.4	22.5	25.5	21.2	23.8	23.7	23.4
100%–less than 200%	49.0	46.1	45.6	27.6	26.3	28.0	23.4	27.5	26.4
200% or more	32.7	31.2	30.5	32.9	32.5	33.2	34.4	36.3	36.2
Black or African American only:									
Below 100%	64.3	58.7	62.6	17.4	21.8	20.5	18.3	19.4	16.9
100%–less than 200%	55.6	56.2	60.0	24.4	24.3	23.5	19.9	19.5	16.5
200% or more	46.0	41.2	42.2	28.7	29.4	29.5	25.3	29.5	28.3
Geographic region ²									
Northeast	39.4	36.1	37.5	31.3	31.1	31.4	29.4	32.8	31.1
Midwest	37.3	34.7	34.2	31.7	32.7	33.6	31.0	32.6	32.3
South	46.9	44.8	45.9	27.1	27.2	26.7	26.0	28.0	27.4
West	33.9	38.1	34.3	31.6	28.9	30.9	34.6	33.0	34.8
Location of residence ²									
Within MSA ⁸	39.3	38.0	37.9	30.6	30.2	30.4	30.0	31.8	31.8
Outside MSA ⁸	44.7	46.4	45.2	27.5	26.6	28.9	27.8	26.9	26.0

* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

¹All questions related to leisure-time physical activity were phrased in terms of current behavior and lack a specific reference period. Respondents were asked about the frequency and duration of vigorous and light/moderate physical activity during leisure time. Adults classified as inactive reported no sessions of light/moderate or vigorous leisure-time activity of at least 10 minutes duration; adults classified with some leisure-time activity reported at least one session of light/moderate or vigorous physical activity of at least 10 minutes duration but did not meet the definition for regular leisure-time activity; adults classified with regular leisure-time activity reported three or more sessions per week of vigorous activity lasting at least 20 minutes or five or more sessions per week of light/moderate activity lasting at least 30 minutes in duration. See [Appendix II, Physical activity, leisure-time](#).

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

³Includes all other races not shown separately and unknown education level.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁶GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 30%–35% of adults 18 years of age and over in 1998–2007. See [Appendix II, Family income; Poverty](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

Table 72 (page 1 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	<i>Overweight (includes obesity)²</i>					
	<i>1960–1962</i>	<i>1971–1974</i>	<i>1976–1980³</i>	<i>1988–1994</i>	<i>1999–2002</i>	<i>2003–2006</i>
20–74 years, age-adjusted ⁴						
Percent of population						
Both sexes ⁵	44.8	47.7	47.4	56.0	65.2	66.9
Male	49.5	54.7	52.9	61.0	68.8	72.6
Female	40.2	41.1	42.0	51.2	61.7	61.2
Not Hispanic or Latino:						
White only, male	---	---	53.8	61.6	69.5	72.1
White only, female	---	---	38.7	47.2	57.0	57.4
Black or African American only, male	---	---	51.3	58.2	62.0	72.0
Black or African American only, female	---	---	62.6	68.5	77.6	80.5
Mexican male	---	---	61.6	69.4	74.1	77.3
Mexican female	---	---	61.7	69.6	71.4	74.4
Percent of poverty level: ⁶						
Below 100%	---	49.3	50.0	59.8	65.2	66.0
100%–less than 200%	---	50.9	49.0	58.2	68.0	66.6
200% or more	---	46.7	46.6	54.5	64.9	67.0
20 years and over, age-adjusted ⁴						
Both sexes ⁵	---	---	---	56.0	65.1	66.7
Male	---	---	---	60.9	68.8	72.1
Female	---	---	---	51.4	61.6	61.3
Not Hispanic or Latino:						
White only, male	---	---	---	61.6	69.4	71.8
White only, female	---	---	---	47.5	57.2	57.9
Black or African American only, male	---	---	---	57.8	62.6	71.6
Black or African American only, female	---	---	---	68.2	77.2	79.8
Mexican male	---	---	---	68.9	73.2	75.8
Mexican female	---	---	---	68.9	71.2	73.9
Percent of poverty level: ⁶						
Below 100%	---	---	---	59.6	64.7	65.7
100%–less than 200%	---	---	---	58.0	67.3	66.5
200% or more	---	---	---	54.8	65.1	66.8
20 years and over, crude						
Both sexes ⁵	---	---	---	54.9	65.2	66.9
Male	---	---	---	59.4	68.6	72.1
Female	---	---	---	50.7	62.0	61.9
Not Hispanic or Latino:						
White only, male	---	---	---	60.6	69.9	72.5
White only, female	---	---	---	47.4	58.2	59.4
Black or African American only, male	---	---	---	56.7	61.7	71.6
Black or African American only, female	---	---	---	66.0	76.9	79.7
Mexican male	---	---	---	63.9	70.1	74.6
Mexican female	---	---	---	65.9	69.3	73.0
Percent of poverty level: ⁶						
Below 100%	---	---	---	56.8	62.5	64.4
100%–less than 200%	---	---	---	55.7	66.2	66.0
200% or more	---	---	---	54.2	65.8	67.7
Male						
20–34 years	42.7	42.8	41.2	47.5	57.4	61.6
35–44 years	53.5	63.2	57.2	65.5	70.5	75.2
45–54 years	53.9	59.7	60.2	66.1	75.7	78.5
55–64 years	52.2	58.5	60.2	70.5	75.4	79.7
65–74 years	47.8	54.6	54.2	68.5	76.2	78.0
75 years and over	---	---	---	56.5	67.4	65.8
Female						
20–34 years	21.2	25.8	27.9	37.0	52.9	50.9
35–44 years	37.2	40.5	40.7	49.6	60.6	60.7
45–54 years	49.3	49.0	48.7	60.3	65.1	67.3
55–64 years	59.9	54.5	53.7	66.3	72.2	69.6
65–74 years	60.9	55.9	59.5	60.3	70.9	70.5
75 years and over	---	---	---	52.3	59.9	62.6

See footnotes at end of table.

Table 72 (page 2 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	<i>Obesity⁷</i>					
	<i>1960–1962</i>	<i>1971–1974</i>	<i>1976–1980³</i>	<i>1988–1994</i>	<i>1999–2002</i>	<i>2003–2006</i>
20–74 years, age-adjusted ⁴			Percent of population			
Both sexes ⁵	13.3	14.6	15.1	23.3	31.1	34.1
Male	10.7	12.2	12.8	20.6	28.1	33.1
Female	15.7	16.8	17.1	26.0	34.0	35.2
Not Hispanic or Latino:						
White only, male	---	---	12.4	20.7	28.7	33.0
White only, female	---	---	15.4	23.3	31.3	32.5
Black or African American only, male	---	---	16.5	21.3	27.9	36.3
Black or African American only, female	---	---	31.0	39.1	49.4	54.3
Mexican male	---	---	15.7	24.4	29.0	30.4
Mexican female	---	---	26.6	36.1	38.9	42.6
Percent of poverty level: ⁶						
Below 100%	---	20.7	21.9	29.2	36.0	35.9
100%–less than 200%	---	18.4	18.7	26.6	35.4	36.7
200% or more	---	12.4	12.9	21.4	29.2	33.1
20 years and over, age-adjusted ⁴						
Both sexes ⁵	---	---	---	22.9	30.4	33.4
Male	---	---	---	20.2	27.5	32.4
Female	---	---	---	25.5	33.2	34.3
Not Hispanic or Latino:						
White only, male	---	---	---	20.3	28.0	32.4
White only, female	---	---	---	22.9	30.7	31.6
Black or African American only, male	---	---	---	20.9	27.8	35.7
Black or African American only, female	---	---	---	38.3	48.6	53.4
Mexican male	---	---	---	23.8	27.8	29.5
Mexican female	---	---	---	35.2	38.0	41.8
Percent of poverty level: ⁶						
Below 100%	---	---	---	28.1	34.7	35.0
100%–less than 200%	---	---	---	26.1	34.1	35.9
200% or more	---	---	---	21.1	28.7	32.3
20 years and over, crude						
Both sexes ⁵	---	---	---	22.3	30.5	33.5
Male	---	---	---	19.5	27.5	32.4
Female	---	---	---	25.0	33.4	34.6
Not Hispanic or Latino:						
White only, male	---	---	---	19.9	28.4	32.6
White only, female	---	---	---	22.7	31.3	32.2
Black or African American only, male	---	---	---	20.7	27.5	35.8
Black or African American only, female	---	---	---	36.7	48.7	53.2
Mexican male	---	---	---	20.6	26.0	29.0
Mexican female	---	---	---	33.3	37.0	41.2
Percent of poverty level: ⁶						
Below 100%	---	---	---	25.9	33.0	34.6
100%–less than 200%	---	---	---	24.3	32.8	35.0
200% or more	---	---	---	20.9	29.3	33.0
Male						
20–34 years	9.2	9.7	8.9	14.1	21.7	26.2
35–44 years	12.1	13.5	13.5	21.5	28.5	37.0
45–54 years	12.5	13.7	16.7	23.2	30.6	34.6
55–64 years	9.2	14.1	14.1	27.2	35.5	39.3
65–74 years	10.4	10.9	13.2	24.1	31.9	33.0
75 years and over	---	---	---	13.2	18.0	24.0
Female						
20–34 years	7.2	9.7	11.0	18.5	28.3	28.4
35–44 years	14.7	17.7	17.8	25.5	32.1	36.1
45–54 years	20.3	18.9	19.6	32.4	36.9	40.0
55–64 years	24.4	24.1	22.9	33.7	42.1	41.0
65–74 years	23.2	22.0	21.5	26.9	39.3	36.4
75 years and over	---	---	---	19.2	23.6	24.2

See footnotes at end of table.

Table 72 (page 3 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	<i>Healthy weight⁸</i>					
	<i>1960–1962</i>	<i>1971–1974</i>	<i>1976–1980³</i>	<i>1988–1994</i>	<i>1999–2002</i>	<i>2003–2006</i>
20–74 years, age-adjusted ⁴			Percent of population			
Both sexes ⁵	51.2	48.8	49.6	41.7	32.9	31.4
Male	48.3	43.0	45.4	37.9	30.2	26.1
Female	54.1	54.3	53.7	45.3	35.6	36.6
Not Hispanic or Latino:						
White only, male	---	---	45.3	37.4	29.5	26.5
White only, female	---	---	56.7	49.2	39.7	40.0
Black or African American only, male	---	---	46.6	40.0	35.5	26.8
Black or African American only, female	---	---	35.0	28.9	21.2	18.4
Mexican male	---	---	37.1	29.8	25.6	22.4
Mexican female	---	---	36.4	29.0	27.6	24.5
Percent of poverty level: ⁶						
Below 100%	---	45.8	45.1	37.3	32.4	31.7
100%–less than 200%	---	45.1	47.6	39.2	29.7	31.1
200% or more	---	50.2	51.0	43.4	33.5	31.6
20 years and over, age-adjusted ⁴						
Both sexes ⁵	---	---	---	41.6	33.0	31.6
Male	---	---	---	37.9	30.2	26.6
Female	---	---	---	45.0	35.7	36.5
Not Hispanic or Latino:						
White only, male	---	---	---	37.3	29.6	26.8
White only, female	---	---	---	48.7	39.5	39.6
Black or African American only, male	---	---	---	40.1	34.7	27.0
Black or African American only, female	---	---	---	29.2	21.6	19.2
Mexican male	---	---	---	30.2	26.5	23.8
Mexican female	---	---	---	29.7	27.5	25.1
Percent of poverty level: ⁶						
Below 100%	---	---	---	37.5	32.7	32.1
100%–less than 200%	---	---	---	39.3	30.5	31.3
200% or more	---	---	---	43.1	33.4	31.8
20 years and over, crude						
Both sexes ⁵	---	---	---	42.6	32.9	31.4
Male	---	---	---	39.4	30.4	26.6
Female	---	---	---	45.7	35.4	35.9
Not Hispanic or Latino:						
White only, male	---	---	---	38.2	29.2	26.2
White only, female	---	---	---	48.8	38.7	38.2
Black or African American only, male	---	---	---	41.5	35.9	27.1
Black or African American only, female	---	---	---	31.2	21.8	19.2
Mexican male	---	---	---	35.2	29.4	25.2
Mexican female	---	---	---	32.4	29.5	25.8
Percent of poverty level: ⁶						
Below 100%	---	---	---	39.8	34.5	33.2
100%–less than 200%	---	---	---	41.5	31.5	31.7
200% or more	---	---	---	43.6	32.8	30.9
Male						
20–34 years	55.3	54.7	57.1	51.1	40.3	35.9
35–44 years	45.2	35.2	41.3	33.4	29.0	24.1
45–54 years	44.8	38.5	38.7	33.6	24.0	20.8
55–64 years	44.9	38.3	38.7	28.6	23.8	19.3
65–74 years	46.2	42.1	42.3	30.1	22.8	21.2
75 years and over	---	---	---	40.9	32.0	33.1
Female						
20–34 years	67.6	65.8	65.0	57.9	42.5	45.1
35–44 years	58.4	56.7	55.6	47.1	37.1	37.6
45–54 years	47.6	49.3	48.7	37.2	33.1	31.1
55–64 years	38.1	41.1	43.5	31.5	27.6	29.5
65–74 years	36.4	40.6	37.8	37.0	26.4	28.5
75 years and over	---	---	---	43.0	36.9	35.4

See footnotes at end of table.

Table 72 (page 4 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

-- Data not available.

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Body mass index (BMI) greater than or equal to 25 kilograms/meter². See [Appendix II, Body mass index](#).

³Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

⁴Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁵Includes persons of all races and Hispanic origins, not just those shown separately.

⁶Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (5% in 2003–2006). See [Appendix II, Family income; Poverty](#).

⁷Body mass index (BMI) greater than or equal to 30 kilograms/meter².

⁸BMI of 18.5 to less than 25 kilograms/meter².

NOTES: Percents do not sum to 100 because the percentage of persons with BMI less than 18.5 kilograms/meter² is not shown and the percentage of persons with obesity is a subset of the percent with overweight. Height was measured without shoes; two pounds were deducted from data for 1960–1962 to allow for weight of clothing. Excludes pregnant women. Standard errors for selected years are available in the spreadsheet version of this table. Available from:

<http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1960–1962).

Table 73. Overweight among children and adolescents 6–19 years of age, by selected characteristics: United States, 1963–1965 through 2003–2006

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin¹, and percent of poverty level</i>	<i>1963–1965 1966–1970²</i>	<i>1971–1974</i>	<i>1976–1980³</i>	<i>1988–1994</i>	<i>1999–2002</i>	<i>2003–2006</i>
6–11 years of age			Percent of population			
Both sexes ⁴	4.2	4.0	6.5	11.3	15.8	17.0
Boys	4.0	*4.3	6.6	11.6	16.9	18.0
Not Hispanic or Latino:						
White only	---	---	6.1	10.7	14.0	15.5
Black or African American only	---	---	6.8	12.3	17.0	18.6
Mexican	---	---	13.3	17.5	26.5	27.5
Girls	4.5	*3.6	6.4	11.0	14.7	15.8
Not Hispanic or Latino:						
White only	---	---	5.2	*9.8	13.1	14.4
Black or African American only	---	---	11.2	17.0	22.8	24.0
Mexican	---	---	9.8	15.3	17.1	19.7
Percent of poverty level: ⁵						
Below 100%	---	---	---	11.4	19.1	22.0
100%–less than 200%	---	---	---	11.1	16.4	19.2
200% or more	---	---	---	11.1	14.3	13.5
12–19 years of age						
Both sexes ⁴	4.6	6.1	5.0	10.5	16.0	17.6
Boys	4.5	6.1	4.8	11.3	16.7	18.2
Not Hispanic or Latino:						
White only	---	---	3.8	11.6	14.6	17.3
Black or African American only	---	---	6.1	10.7	18.7	18.5
Mexican	---	---	7.7	14.1	24.7	22.1
Girls	4.7	6.2	5.3	9.7	15.3	16.8
Not Hispanic or Latino:						
White only	---	---	4.6	8.9	12.6	14.5
Black or African American only	---	---	10.7	16.3	23.5	27.7
Mexican	---	---	8.8	*13.4	19.6	19.9
Percent of poverty level: ⁵						
Below 100%	---	---	---	15.8	19.8	19.3
100%–less than 200%	---	---	---	11.2	15.1	18.4
200% or more	---	---	---	7.9	14.9	16.3

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

--- Data not available.

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Data for 1963–1965 are for children 6–11 years of age; data for 1966–1970 are for adolescents 12–17 years of age, not 12–19 years.

³Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

⁴Includes persons of all races and Hispanic origins, not just those shown separately.

⁵Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (3% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points from the 2000 CDC Growth Charts: United States. Advance data from vital and health statistics; no 314. Hyattsville, MD: National Center for Health Statistics. 2000. Age is at time of examination at the mobile examination center. Crude rates, not age-adjusted rates, are shown. Excludes pregnant girls starting with 1971–1974. Pregnancy status not available for 1963–1965 and 1966–1970. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1963–1965 and 1966–1970).

Table 74 (page 1 of 2). Untreated dental caries, by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004

[Data are based on dental examinations of a sample of the civilian noninstitutionalized population]

<i>Sex, race and Hispanic origin¹, and percent of poverty level</i>	<i>Age 2–5 years</i>			<i>Age 6–19 years</i>		
	<i>1971–1974</i>	<i>1988–1994</i>	<i>2001–2004</i>	<i>1971–1974</i>	<i>1988–1994</i>	<i>2001–2004</i>
Percent of persons with untreated dental caries						
Total ²	25.0	19.1	19.5	54.7	23.6	22.9
Sex						
Male	26.4	19.3	20.0	54.9	22.8	23.9
Female	23.6	18.9	19.1	54.5	24.5	22.0
Race and Hispanic origin						
Not Hispanic or Latino:						
White only	23.7	13.8	14.5	51.6	18.8	19.4
Black or African American only	29.0	24.7	24.2	71.0	33.7	28.1
Mexican	---	34.9	29.2	---	36.5	30.6
Percent of poverty level: ³						
Below 100%	32.0	30.2	26.1	68.0	38.3	31.5
100%–less than 200%	29.9	24.3	25.4	60.3	28.2	32.7
200% or more	17.8	9.4	12.1	46.2	15.1	14.7
Race, Hispanic origin, and percent of poverty level ³						
Not Hispanic or Latino:						
White only:						
Below 100% of poverty level	32.1	25.7	19.6	65.9	33.5	29.3
100% or more of poverty level	22.0	11.7	13.8	49.9	16.7	17.6
Black or African American only:						
Below 100% of poverty level	29.1	27.2	26.2	73.9	37.0	33.7
100% or more of poverty level	27.9	22.5	21.8	67.3	31.0	24.1
Mexican:						
Below 100% of poverty level	---	38.8	35.0	---	46.4	35.9
100% or more of poverty level	---	30.3	25.1	---	26.4	27.2

<i>Sex, race and Hispanic origin¹, and percent of poverty level</i>	<i>Age 20–64 years</i>			<i>Age 65–74 years</i>		
	<i>1971–1974</i>	<i>1988–1994</i>	<i>2001–2004</i>	<i>1971–1974</i>	<i>1988–1994</i>	<i>2001–2004</i>
Percent of persons with untreated dental caries						
Total ²	48.0	28.3	26.8	29.7	25.4	18.6
Sex						
Male	50.5	31.5	29.7	32.6	29.8	19.0
Female	45.6	25.3	23.9	27.4	21.5	18.2
Race and Hispanic origin						
Not Hispanic or Latino:						
White only	45.3	23.9	21.5	28.3	22.7	15.3
Black or African American only	67.3	48.5	42.9	41.5	46.7	44.6
Mexican	---	40.2	40.1	---	43.8	45.2
Percent of poverty level: ³						
Below 100%	63.5	48.1	46.7	34.3	46.6	47.3
100%–less than 200%	56.2	43.5	40.4	35.6	40.1	28.7
200% or more	42.7	19.6	18.8	26.2	19.2	13.6
Race, Hispanic origin, and percent of poverty level ³						
Not Hispanic or Latino:						
White only:						
Below 100% of poverty level	60.2	43.7	42.3	33.3	*39.0	*40.5
100% or more of poverty level	44.2	21.8	19.0	28.3	22.7	15.2
Black or African American only:						
Below 100% of poverty level	71.9	60.4	57.4	39.8	49.7	52.8
100% or more of poverty level	65.3	43.9	38.1	41.1	43.8	44.7
Mexican:						
Below 100% of poverty level	---	52.7	50.0	---	55.5	67.1
100% or more of poverty level	---	31.8	36.1	---	35.6	37.6

See footnotes at end of table.

Table 74 (page 2 of 2). Untreated dental caries, by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004

[Data are based on dental examinations of a sample of the civilian noninstitutionalized population]

Sex, race and Hispanic origin ¹ , and percent of poverty level	Age 75 years and over		
	1971–1974	1988–1994	2001–2004
Percent of persons with untreated dental caries			
Total ²	---	30.3	23.5
Sex			
Male	---	34.4	26.4
Female	---	28.1	21.5
Race and Hispanic origin			
Not Hispanic or Latino:			
White only	---	27.8	21.8
Black or African American only	---	62.6	43.9
Mexican	---	55.6	46.8
Percent of poverty level: ³			
Below 100%	---	47.1	36.5
100%–less than 200%	---	34.5	25.4
200% or more	---	23.2	20.9
Race, Hispanic origin, and percent of poverty level ³			
Not Hispanic or Latino:			
White only:			
Below 100% of poverty level	---	38.0	*36.4
100% or more of poverty level	---	26.1	20.8
Black or African American only:			
Below 100% of poverty level	---	68.6	65.8
100% or more of poverty level	---	60.2	38.6
Mexican:			
Below 100% of poverty level	---	79.4	52.9
100% or more of poverty level	---	*	46.5

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30% or fewer than 30 cases.

--- Data not available.

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Includes persons of all races and Hispanic origins, not just those shown separately, and those with unknown percent of poverty level.

³Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (4% in 1971–1974, 6% in 1988–1994, and 5% in 2001–2004). See [Appendix II, Family income; Poverty](#).

NOTES: Untreated dental caries refers to untreated coronal caries, that is, caries on the crown or enamel surface of the tooth. Root tips are classified as coronal caries. Root caries are not included. For children 2–5 years of age, only dental caries in primary teeth was evaluated. Caries in both permanent and primary teeth was evaluated for children 6–11 years of age. For children 12–19 years of age and adults, only dental caries in permanent teeth was evaluated. Persons without at least one primary or one permanent tooth or one root tip were classified as edentulous and were excluded from this analysis. The majority of edentulous persons are 65 years of age and over. Estimates of edentulism among persons 65 years of age and over are 46% in 1971–1974, 33% in 1988–1994, and 26% in 2001–2004. Because of significant methodological changes in the collection of 2005–2006 data on dental caries, the 2005–2006 data are not comparable with earlier years. Therefore, 2005–2006 data are not presented in *Health, United States*. For more information, see http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/ohx_d.pdf. See [Appendix II, Dental caries](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hsus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 75 (page 1 of 2). No usual source of health care among children under 18 years of age, by selected characteristics: United States, average annual 1993–1994, 2003–2004, and 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1993–1994 ¹	2003–2004	2006–2007	1993–1994 ¹	2003–2004	2006–2007	1993–1994 ¹	2003–2004	2006–2007
Percent of children without a usual source of health care ²									
All children ³	7.7	5.4	5.8	5.2	3.4	3.7	9.0	6.4	6.8
Race ⁴									
White only	7.0	5.1	5.8	4.7	3.2	4.0	8.3	6.1	6.8
Black or African American only	10.3	6.2	5.3	7.6	*4.1	*2.7	11.9	7.2	6.6
American Indian or Alaska Native only	*9.3	*7.6	*5.1	*	*	*	*8.7	*9.6	*
Asian only	9.7	7.7	7.1	*3.4	*	*2.8	13.5	9.3	9.5
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	*4.3	*4.9	---	*	*	---	*	*5.4
Hispanic origin and race ⁴									
Hispanic or Latino	14.3	11.4	11.3	9.3	7.4	6.3	17.7	13.7	14.2
Not Hispanic or Latino	6.7	4.0	4.4	4.4	2.3	2.9	7.8	4.8	5.1
White only	5.7	3.2	4.0	3.7	1.8	3.1	6.7	3.9	4.5
Black or African American only	10.2	6.2	4.9	7.7	*4.0	*2.2	11.6	7.1	6.3
Percent of poverty level ⁵									
Below 100%	13.9	10.6	9.1	9.4	6.3	5.6	16.8	13.1	11.3
100%–less than 200%	9.8	7.7	8.7	6.7	4.9	5.5	11.6	9.3	10.3
200% or more	3.7	3.0	3.5	1.8	1.7	2.0	4.6	3.5	4.1
Hispanic origin and race and percent of poverty level ^{4,5}									
Hispanic or Latino:									
Below 100%	19.6	14.7	15.5	12.7	8.7	8.8	24.8	18.5	20.2
100%–less than 200%	15.3	13.3	11.1	9.9	8.8	6.0	18.9	16.0	14.4
200% or more	5.0	6.5	7.4	*2.7	*4.6	*3.7	6.5	7.5	9.1
Not Hispanic or Latino:									
White only:									
Below 100%	10.2	8.0	*5.3	6.5	*4.5	*	12.7	10.0	*6.0
100%–less than 200%	8.7	4.7	7.8	6.3	*3.0	*6.3	10.1	5.7	8.6
200% or more	3.4	2.2	2.8	1.6	*1.0	1.8	4.2	2.7	3.2
Black or African American only:									
Below 100%	13.7	8.8	5.8	10.9	*	*	15.5	10.3	7.8
100%–less than 200%	9.1	5.6	5.9	*6.0	*	*	10.8	6.4	6.9
200% or more	4.6	4.5	3.3	*	*	*	5.8	5.3	4.4
Health insurance status at the time of interview ⁶									
Insured	5.0	2.9	3.2	3.3	2.0	2.2	5.9	3.4	3.7
Private	3.8	2.3	2.6	1.9	1.4	1.6	4.6	2.7	3.0
Medicaid	8.9	4.6	4.3	6.4	3.3	3.0	11.3	5.4	5.2
Uninsured	23.5	28.8	30.9	18.0	19.8	22.9	26.0	32.1	33.6
Health insurance status prior to interview ⁶									
Insured continuously all 12 months	4.6	2.7	3.0	3.1	1.9	2.2	5.5	3.2	3.4
Uninsured for any period up to 12 months	15.3	14.5	14.9	10.9	9.7	10.2	18.1	17.1	17.1
Uninsured more than 12 months	27.6	36.1	38.0	21.4	26.5	32.0	30.0	38.8	39.6

See footnotes at end of table.

Table 75 (page 2 of 2). No usual source of health care among children under 18 years of age, by selected characteristics: United States, average annual 1993–1994, 2003–2004, and 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1993–1994 ¹	2003–2004	2006–2007	1993–1994 ¹	2003–2004	2006–2007	1993–1994 ¹	2003–2004	2006–2007
Percent of poverty level and health insurance status prior to interview ^{5,6}									
Percent of children without a usual source of health care ²									
Below 100%:									
Insured continuously all 12 months	8.6	5.0	4.5	5.8	*3.7	3.1	10.7	5.8	5.5
Uninsured for any period up to 12 months . .	21.7	20.6	16.8	18.0	*15.4	*12.9	23.7	23.2	19.5
Uninsured more than 12 months	31.2	44.1	45.6	25.5	27.3	*41.6	33.4	48.7	46.6
100%–less than 200%:									
Insured continuously all 12 months	5.6	3.5	4.0	3.7	*2.2	3.8	6.7	4.2	4.1
Uninsured for any period up to 12 months . .	14.5	15.2	17.4	*9.7	*11.9	*8.5	18.0	16.9	21.1
Uninsured more than 12 months	27.6	35.4	37.1	21.4	28.5	*27.5	30.2	37.5	39.9
200% or more:									
Insured continuously all 12 months	2.8	1.9	2.2	1.4	1.2	*1.1	3.5	2.2	2.7
Uninsured for any period up to 12 months . .	9.1	10.2	10.9	*5.7	*	*	11.4	13.2	11.4
Uninsured more than 12 months	18.3	27.2	31.2	*10.6	*22.0	*28.4	20.9	28.5	31.9
Geographic region									
Northeast	4.1	1.8	2.5	2.9	*0.9	*2.1	4.8	2.2	2.7
Midwest	5.2	3.4	4.1	4.1	2.6	*2.7	5.9	3.8	4.8
South	10.9	6.7	7.3	7.3	4.3	4.5	12.7	7.9	8.7
West	8.6	8.2	7.6	5.3	4.6	4.5	10.6	10.0	9.2
Location of residence									
Within MSA ⁷	7.7	5.4	5.6	5.0	3.4	3.5	9.2	6.3	6.7
Outside MSA ⁷	7.8	5.6	6.8	6.0	*3.1	*5.0	8.7	6.8	7.6

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

²Persons who report the emergency department as the place of their usual source of care are defined as having no usual source of care. See [Appendix II, Usual source of care](#).

³Includes all other races not shown separately and unknown health insurance status.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 14% of children in 1993–1996, 21%–25% in 1997–1998, and 27%–29% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Medicaid includes other public assistance through 1996. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, CHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. Health insurance status was unknown for 8%–9% of children in 1993–1996 and about 1% in 1997–2007. See [Appendix II, Health insurance coverage](#).

⁷MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, access to care and health insurance supplements (1993–1996). Starting in 1997, data are from the family core and sample child questionnaires.

Table 76 (page 1 of 2). No usual source of health care among adults 18–64 years of age, by selected characteristics: United States, average annual, selected years 1993–1994 through 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1993–1994 ¹	1995–1996 ¹	1997–1998	1999–2000	2001–2002	2003–2004	2006–2007
Percent of adults without a usual source of health care ²							
18–64 years ³	18.9	16.9	17.7	17.8	16.4	17.3	18.5
Age							
18–44 years	21.7	19.6	21.1	21.6	20.6	21.7	23.5
18–24 years	26.6	22.6	27.0	27.2	27.2	28.0	28.7
25–44 years	20.3	18.8	19.3	19.9	18.5	19.5	21.8
45–64 years	12.8	11.3	11.2	10.9	9.2	10.4	11.2
45–54 years	14.1	12.2	12.6	12.0	10.3	11.7	13.3
55–64 years	11.1	9.8	9.0	9.2	7.6	8.7	8.3
Sex							
Male	23.9	21.4	23.6	24.1	21.6	22.5	23.9
Female	14.1	12.6	12.0	11.8	11.4	12.4	13.3
Race ⁴							
White only	18.4	16.5	17.0	16.7	15.4	17.0	18.3
Black or African American only	20.0	18.3	19.4	19.2	16.9	18.4	19.8
American Indian or Alaska Native only	19.7	16.5	21.3	19.2	16.3	21.5	24.4
Asian only	24.8	21.5	21.7	22.1	20.1	19.3	17.3
Native Hawaiian or Other Pacific Islander only	---	---	---	*	*	*	*
2 or more races	---	---	---	21.0	20.1	18.4	20.4
American Indian or Alaska Native; White	---	---	---	25.8	18.1	17.8	19.3
Hispanic origin and race ⁴							
Hispanic or Latino	30.3	27.4	30.4	32.6	32.5	32.9	34.3
Mexican	32.4	29.8	35.9	36.5	36.5	36.4	39.0
Not Hispanic or Latino	17.7	15.7	16.2	15.8	14.0	14.9	15.9
White only	17.1	15.0	15.4	14.9	13.1	14.0	15.2
Black or African American only	19.7	18.1	19.3	19.2	16.8	18.1	18.9
Percent of poverty level ⁵							
Below 100%	29.5	26.1	29.1	29.6	29.3	28.9	30.6
100%–less than 200%	25.4	22.9	25.6	27.1	25.6	26.6	28.6
200% or more	14.8	13.5	13.9	14.0	12.3	13.1	13.9
Hispanic origin and race and percent of poverty level ^{4,5}							
Hispanic or Latino:							
Below 100%	40.0	34.3	42.8	44.4	46.3	42.8	46.7
100%–less than 200%	36.9	32.9	35.4	40.6	40.0	39.7	42.1
200% or more	19.0	18.9	20.1	22.7	22.4	23.7	24.2
Not Hispanic or Latino:							
White only:							
Below 100%	28.2	23.6	25.0	24.2	23.4	23.0	25.0
100%–less than 200%	23.3	20.7	22.4	23.0	20.7	22.0	24.5
200% or more	14.3	12.8	13.1	12.8	10.8	11.7	12.4
Black or African American only:							
Below 100%	24.7	21.9	23.9	23.7	22.8	24.3	26.5
100%–less than 200%	22.3	22.1	25.3	24.4	20.4	22.8	23.4
200% or more	15.1	14.0	14.9	15.4	13.2	14.0	14.0
Health insurance status at the time of interview ⁶							
Insured	13.3	11.4	11.4	10.9	9.1	9.4	9.9
Private	13.1	11.3	11.5	11.1	9.0	9.5	9.8
Medicaid	16.3	13.0	10.3	9.9	11.1	9.9	11.5
Uninsured	43.1	41.8	46.7	49.2	49.1	50.2	52.8
Health insurance status prior to interview ⁶							
Insured continuously all 12 months	12.7	10.8	10.6	10.3	8.3	8.7	9.0
Uninsured for any period up to 12 months	30.9	29.6	30.7	31.2	33.3	32.1	33.6
Uninsured more than 12 months	46.9	44.8	51.4	54.8	54.6	55.0	57.9

See footnotes at end of table.

Table 76 (page 2 of 2). No usual source of health care among adults 18–64 years of age, by selected characteristics: United States, average annual, selected years 1993–1994 through 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1993–1994 ¹	1995–1996 ¹	1997–1998	1999–2000	2001–2002	2003–2004	2006–2007
Percent of poverty level and health insurance status prior to interview ^{5,6}							
Percent of adults without a usual source of health care ²							
Below 100%:							
Insured continuously all 12 months	16.7	13.3	13.1	11.6	11.5	11.2	11.6
Uninsured for any period up to 12 months . .	33.6	28.5	33.0	31.9	36.5	36.2	34.5
Uninsured more than 12 months	50.1	46.1	54.3	57.1	58.8	57.2	62.6
100%–less than 200%:							
Insured continuously all 12 months	14.7	12.2	13.0	12.3	11.0	10.5	10.5
Uninsured for any period up to 12 months . .	30.9	31.1	31.1	34.6	35.1	34.2	36.6
Uninsured more than 12 months	47.6	43.8	51.1	54.9	54.5	55.1	58.4
200% or more:							
Insured continuously all 12 months	11.7	10.2	10.0	9.8	7.6	8.2	8.4
Uninsured for any period up to 12 months . .	29.7	29.2	29.6	29.5	31.5	29.5	31.8
Uninsured more than 12 months	42.9	44.8	49.2	53.1	51.7	53.4	54.3
Geographic region							
Northeast	14.7	13.4	13.3	12.8	11.9	12.1	13.1
Midwest	16.2	14.7	15.1	17.0	14.1	14.7	16.2
South	21.8	18.7	20.7	19.7	18.3	19.7	21.4
West	21.1	19.9	20.2	20.1	19.9	21.0	20.5
Location of residence							
Within MSA ⁷	19.3	17.3	17.9	18.1	16.6	17.6	18.9
Outside MSA ⁷	17.5	15.4	17.0	16.8	15.4	16.2	16.5

* Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

²Persons who report the emergency department as the place of their usual source of care are defined as having no usual source of care. See [Appendix II, Usual source of care](#).

³Includes all other races not shown separately and unknown health insurance status.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 16% of persons 18–64 years of age in 1993–1996, 24%–28% in 1997–1998, and 30%–32% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Medicaid includes other public assistance through 1996. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, CHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. In 1993–1996, health insurance status was unknown for 8%–9% of adults in the sample. In 1997–2007, health insurance status was unknown for 1% of adults. See [Appendix II, Health insurance coverage](#).

⁷MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Between 1997 and 2007, about 5% of persons 65–74 years of age and 3%–4% of persons 75 years of age and over did not have a usual source of care. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, access to care and health insurance supplements (1993–1996). Starting in 1997, data are from the family core and sample adult questionnaires.

Table 77 (page 1 of 2). Reduced access to medical care during the past 12 months due to cost, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Did not get medical care due to cost ¹			Delayed medical care due to cost ²			Did not get prescription drugs due to cost ³		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
	Percent								
Total ⁴	4.5	5.8	5.8	7.3	7.8	7.8	4.8	7.0	7.2
Age									
Under 18 years	2.2	2.4	2.3	3.7	4.0	3.3	2.2	3.0	2.6
Under 6 years	1.6	2.1	1.9	3.0	3.5	2.4	1.6	2.7	2.2
6–17 years	2.5	2.6	2.6	4.1	4.2	3.8	2.4	3.2	2.8
18–64 years	6.0	7.8	7.8	9.5	10.2	10.3	6.3	9.3	9.6
18–44 years	6.1	7.8	7.9	9.7	10.0	10.4	6.9	9.6	10.0
18–24 years	5.8	7.4	7.1	8.8	9.4	9.3	6.7	9.9	9.0
25–34 years	6.2	8.6	8.6	10.2	11.3	11.0	6.9	9.6	10.9
35–44 years	6.0	7.4	7.9	9.8	9.2	10.5	7.1	9.4	9.8
45–64 years	5.8	7.7	7.7	9.0	10.4	10.3	5.1	8.7	9.1
45–54 years	6.0	8.5	8.3	9.6	10.9	10.8	5.6	9.5	10.0
55–64 years	5.4	6.5	6.9	8.2	9.7	9.6	4.2	7.6	7.9
65 years and over	2.3	2.3	2.5	3.9	3.7	3.8	2.8	3.6	3.8
65–74 years	2.6	3.0	3.2	4.3	4.6	4.7	3.4	3.8	4.5
75 years and over	1.8	1.5	1.6	3.4	2.7	2.7	2.0	3.5	3.0
Sex									
Male	3.8	5.5	5.2	6.4	7.3	6.9	3.9	5.6	5.9
Female	5.2	6.1	6.4	8.1	8.4	8.7	5.6	8.4	8.3
Race ⁵									
White only	4.4	5.8	5.8	7.5	8.0	7.9	4.5	6.7	7.1
Black or African American only	5.5	6.7	6.4	6.6	7.7	7.6	7.1	9.8	8.4
American Indian or Alaska Native only	6.7	*6.3	*9.1	10.0	*7.8	9.0	*7.5	*13.6	*8.2
Asian only	2.6	2.7	3.1	4.0	3.9	4.3	*2.3	3.4	3.9
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	6.9	7.7	---	9.6	11.5	---	8.1	10.4
Hispanic origin and race ⁵									
Hispanic or Latino	5.7	6.5	6.4	6.9	8.1	7.5	5.5	8.7	9.0
Mexican	5.5	6.2	6.4	6.6	7.8	7.7	5.5	9.0	9.1
Not Hispanic or Latino	4.4	5.7	5.7	7.3	7.8	7.8	4.7	6.7	6.8
White only	4.2	5.6	5.7	7.6	8.1	8.1	4.3	6.2	6.7
Black or African American only	5.6	6.8	6.5	6.6	7.6	7.6	7.1	10.0	8.3
Education ⁶									
No high school diploma or GED	8.5	10.1	9.9	10.9	11.4	11.5	8.9	13.1	13.1
High school diploma or GED	5.2	7.1	7.5	8.5	9.4	9.6	5.9	8.4	10.0
Some college or more	4.2	5.9	6.1	7.9	8.6	8.8	4.1	6.4	6.7
Percent of poverty level ⁷									
Below 100%	9.8	10.6	10.9	11.6	12.2	12.5	10.3	13.7	13.1
100%–less than 200%	7.4	9.6	9.6	11.2	11.8	11.7	7.9	11.1	11.3
200% or more	2.5	3.6	3.8	5.1	5.7	5.7	2.6	4.2	4.7
Age and percent of poverty level ⁷									
Under 18 years of age:									
Below 100%	4.5	3.5	3.6	5.5	4.8	5.0	4.6	5.5	4.6
100%–less than 200%	3.0	4.2	3.8	5.9	6.6	5.0	3.4	3.9	3.5
200% or more	1.1	1.4	1.4	2.2	2.7	2.2	0.8	1.8	1.6
18–44 years:									
Below 100%	12.7	14.2	14.3	14.8	16.0	15.8	13.8	17.2	16.3
100%–less than 200%	10.1	12.6	12.9	14.9	14.7	15.2	11.6	15.4	16.4
200% or more	3.5	4.9	5.2	7.1	7.2	7.8	4.0	6.0	6.6
45–64 years:									
Below 100%	18.3	21.1	20.8	21.9	22.7	23.2	17.7	26.2	25.1
100%–less than 200%	13.8	16.9	17.3	18.5	19.4	20.9	11.7	18.5	19.0
200% or more	2.8	4.4	4.8	5.8	7.3	7.2	2.4	4.8	5.7
65 years and over:									
Below 100%	7.2	4.1	6.0	8.5	6.1	7.9	7.3	8.1	8.9
100%–less than 200%	3.3	4.2	4.4	5.8	5.8	6.3	4.3	6.0	6.0
200% or more	0.9	1.2	1.2	2.2	2.4	2.2	1.2	1.8	2.2

See footnotes at end of table.

Table 77 (page 2 of 2). Reduced access to medical care during the past 12 months due to cost, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Did not get medical care due to cost ¹			Delayed medical care due to cost ²			Did not get prescription drugs due to cost ³		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent of poverty level and health insurance status prior to interview for persons under 65 years of age ^{7,8}									
	Percent								
Insured continuously all 12 months	1.8	2.5	2.5	3.9	4.1	4.0	2.2	3.7	3.7
Below 100%	3.6	3.5	3.5	4.8	4.8	4.9	5.2	6.3	6.2
100%–less than 200%	3.4	4.7	4.3	6.4	6.1	5.7	4.3	7.0	6.6
200% or more	1.2	1.9	2.0	3.3	3.6	3.5	1.3	2.6	2.7
Uninsured for any period									
up to 12 months	14.3	19.4	20.2	22.5	26.4	24.7	14.9	21.8	21.7
Below 100%	18.6	24.6	24.9	23.5	28.1	27.1	20.2	28.4	23.2
100%–less than 200%	15.1	21.1	22.0	24.2	27.4	24.2	15.9	21.2	23.1
200% or more	11.4	16.0	17.1	20.9	25.0	24.0	11.2	19.0	20.3
Uninsured more than 12 months	18.9	23.0	23.7	23.9	26.1	27.8	16.7	21.6	24.3
Below 100%	22.2	27.1	29.0	24.1	28.8	31.2	19.0	28.6	31.4
100%–less than 200%	18.4	23.0	24.1	23.1	25.6	28.3	16.8	21.1	23.1
200% or more	16.4	19.9	20.2	24.7	24.4	25.4	14.5	16.6	21.0
Geographic region									
Northeast	3.5	4.1	3.7	5.7	5.4	5.4	3.4	5.1	5.1
Midwest	4.0	5.3	5.4	7.3	8.4	8.2	4.4	6.7	6.7
South	5.3	7.1	7.2	8.1	8.7	8.6	5.7	8.4	8.6
West	4.7	5.5	5.7	7.2	7.8	7.9	4.8	6.5	6.9
Location of residence									
Within MSA ⁹	4.3	5.5	5.6	6.9	7.6	7.5	4.4	6.8	7.0
Outside MSA ⁹	5.3	7.1	6.9	8.6	9.1	9.2	6.0	7.9	8.2

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹Based on persons responding yes to the question, “During the past 12 months was there any time when person needed medical care but did not get it because person couldn’t afford it?”

²Based on persons responding yes to the question, “During the past 12 months has medical care been delayed because of worry about the cost?”

³Based on persons responding yes to the question, “During the past 12 months was there any time when you needed prescription medicine but didn’t get it because you couldn’t afford it?”

⁴Includes all other races not shown separately, unknown health insurance status, and unknown education level.

⁵The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁶Estimates are for persons 25 years of age and over. GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 24% of persons in 1997 and 33%–34% in 2006–2007. See [Appendix II, Family Income; Poverty](#).

⁸For information on the health insurance categories see [Appendix II, Health Insurance Coverage](#).

⁹MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors and additional data years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core, sample child, and sample adult questionnaires.

Table 78. Reduced access to medical care during the past 12 months due to cost, by state: 25 largest states and United States, average annual 1997–1998, 2001–2002, and 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

State	<i>Did not get medical care due to cost¹</i>			<i>Delayed medical care due to cost²</i>			<i>Did not get prescription drugs due to cost³</i>		
	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007
	Percent								
Total, United States	4.4	4.7	5.8	6.9	6.6	7.8	4.5	5.8	7.1
Alabama	4.4	5.5	6.9	6.3	6.6	8.0	6.8	9.0	10.0
Arizona	5.0	4.0	7.0	7.1	6.4	9.5	4.1	5.4	10.2
California	4.2	4.2	4.1	5.8	5.5	5.5	3.9	5.0	5.2
Colorado	3.7	5.3	6.9	5.8	7.2	11.4	3.1	4.8	6.0
Florida	5.8	5.9	6.9	8.7	8.4	9.3	4.8	6.4	7.5
Georgia	4.6	4.9	6.1	7.4	6.7	6.3	4.2	3.8	6.3
Illinois	3.0	3.6	4.1	5.3	5.4	6.5	3.0	4.4	4.5
Indiana	5.2	5.6	6.6	7.8	7.6	9.0	5.1	7.2	6.8
Kentucky	6.5	7.0	11.5	10.1	9.1	13.1	6.3	9.6	15.3
Louisiana	5.8	6.9	6.2	8.6	9.0	7.6	8.7	9.6	7.9
Maryland	5.5	5.3	3.3	6.8	6.5	4.7	5.8	6.6	*5.5
Massachusetts	2.4	3.5	3.1	4.3	4.6	4.6	1.7	4.8	4.5
Michigan	3.8	4.1	6.0	6.3	5.8	9.6	3.8	5.8	8.4
Minnesota	3.4	3.0	4.7	7.2	5.8	7.9	3.6	3.7	4.5
Missouri	4.0	4.4	*7.0	6.5	5.4	10.0	4.3	5.4	11.8
New Jersey	3.3	3.1	3.2	6.3	4.8	4.2	3.8	4.5	4.0
New York	3.6	3.8	3.4	5.4	5.4	5.0	2.8	4.0	4.9
North Carolina	4.1	4.4	5.8	6.6	6.6	7.1	4.0	6.0	5.9
Ohio	4.6	4.2	6.4	8.2	7.3	9.3	5.0	6.3	7.1
Pennsylvania	3.4	3.7	5.5	5.1	5.3	6.6	4.3	3.8	7.2
Tennessee	4.6	5.2	8.0	9.1	7.0	8.0	8.0	6.1	8.9
Texas	4.8	6.0	8.5	6.9	7.4	10.8	4.7	8.5	10.7
Virginia	3.6	4.3	4.9	5.2	5.9	6.5	4.1	4.8	6.1
Washington	4.8	5.6	7.5	7.6	7.8	10.5	4.8	6.2	7.0
Wisconsin	2.8	3.8	4.0	5.9	5.1	7.1	*3.0	3.9	5.8

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%.

¹Based on persons responding yes to the question, “During the past 12 months was there any time when person needed medical care but did not get it because person couldn’t afford it?”

²Based on persons responding yes to the question, “During the past 12 months has medical care been delayed because of worry about the cost?”

³Based on persons responding yes to the question, “During the past 12 months was there any time when you needed prescription medicine but didn’t get it because you couldn’t afford it?”

NOTES: Data are for the 25 states with the largest populations in 2006–2007. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. See related Table 79. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core, sample child, and sample adult questionnaires.

Table 79 (page 1 of 2). No health care visits to an office or clinic within the past 12 months among children under 18 years of age, by selected characteristics: United States, average annual 1997–1998, 2001–2002, and 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007
	Percent of children without a health care visit ¹								
All children ²	12.8	12.1	11.7	5.7	6.3	6.6	16.3	14.9	14.2
Race ³									
White only	12.2	11.5	11.6	5.5	6.4	6.9	15.5	13.9	13.9
Black or African American only	14.3	13.3	11.4	6.5	5.9	5.1	18.1	16.8	14.4
American Indian or Alaska Native only	13.8	*18.6	*	*	*	*	*17.6	*23.0	*
Asian only	16.3	15.6	14.5	*5.6	*6.8	*6.9	22.1	20.5	18.8
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	8.3	10.2	---	*3.3	*5.5	---	12.4	13.2
Hispanic origin and race ³									
Hispanic or Latino	19.3	18.8	17.2	9.7	9.6	9.1	25.3	24.0	22.0
Not Hispanic or Latino	11.6	10.6	10.2	4.8	5.4	5.9	14.9	13.0	12.3
White only	10.7	9.7	9.7	4.3	5.3	6.1	13.7	11.7	11.3
Black or African American only	14.5	13.4	11.1	6.5	6.0	*4.7	18.3	16.8	14.2
Percent of poverty level ⁴									
Below 100%	17.6	17.3	14.3	8.1	9.1	8.0	23.6	21.8	18.4
100%–less than 200%	16.2	14.8	14.2	7.2	7.4	8.3	20.8	18.7	17.4
200% or more	9.9	9.6	9.7	4.1	4.8	5.3	12.6	11.7	11.7
Hispanic origin and race and percent of poverty level ^{3,4}									
Hispanic or Latino:									
Below 100%	23.2	22.1	20.7	11.7	10.4	10.9	31.1	29.4	27.4
100%–less than 200%	20.9	21.3	18.0	9.7	12.3	9.1	28.1	26.2	23.6
200% or more	13.4	13.7	13.3	7.2	6.4	6.8	16.8	17.6	16.3
Not Hispanic or Latino:									
White only:									
Below 100%	14.0	13.2	11.4	*5.6	*8.6	*8.3	19.7	15.6	13.4
100%–less than 200%	14.1	11.8	12.1	6.0	*6.0	*8.9	18.0	14.8	13.7
200% or more	9.2	8.8	8.8	3.6	4.5	4.7	11.7	10.5	10.5
Black or African American only:									
Below 100%	15.8	16.1	10.5	7.6	*7.8	*	20.5	20.3	14.6
100%–less than 200%	16.4	13.3	12.7	*7.7	*4.4	*	20.4	17.5	16.0
200% or more	11.8	11.2	10.4	*4.1	*5.4	*5.1	14.8	13.6	12.5
Health insurance status at the time of interview ⁵									
Insured	10.4	9.8	9.6	4.5	4.7	5.6	13.4	12.3	11.6
Private	10.4	9.5	9.4	4.3	4.3	5.4	13.1	11.8	11.1
Medicaid	10.1	10.3	9.7	5.0	5.5	6.0	14.4	13.3	12.3
Uninsured	28.8	31.9	31.9	14.6	21.0	19.8	34.9	36.3	36.0
Health insurance status prior to interview ⁵									
Insured continuously all 12 months	10.3	9.5	9.5	4.4	4.6	5.6	13.2	12.0	11.5
Uninsured for any period up to 12 months	15.9	17.7	15.7	7.7	10.3	*8.5	20.9	21.9	18.9
Uninsured more than 12 months	34.9	41.4	40.5	19.9	30.2	29.1	40.2	45.3	43.5

See footnotes at end of table.

Table 79 (page 2 of 2). No health care visits to an office or clinic within the past 12 months among children under 18 years of age, by selected characteristics: United States, average annual 1997–1998, 2001–2002, and 2006–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007	1997–1998	2001–2002	2006–2007
Percent of poverty level and health insurance status prior to interview ^{4,5}	Percent of children without a health care visit ¹								
Below 100%:									
Insured continuously all									
12 months	12.6	11.7	10.3	5.7	6.1	6.0	17.6	14.9	13.3
Uninsured for any period up to									
12 months	19.9	21.8	19.3	*9.9	*14.4	*	26.1	26.6	23.2
Uninsured more than 12 months . .	39.9	48.2	48.8	24.9	*28.0	*35.9	45.2	55.7	51.9
100%–less than 200%:									
Insured continuously all									
12 months	12.6	10.9	11.1	4.8	4.2	7.6	16.7	14.5	13.3
Uninsured for any period up to									
12 months	15.6	18.9	15.5	*8.7	*10.7	*	20.2	23.2	19.5
Uninsured more than 12 months . .	33.7	41.3	37.8	21.3	35.4	*22.9	37.9	43.6	41.9
200% or more:									
Insured continuously all									
12 months	8.9	8.6	8.6	3.8	4.2	4.5	11.3	10.6	10.4
Uninsured for any period up to									
12 months	12.4	13.8	13.3	*	*6.9	*	16.7	17.7	15.8
Uninsured more than 12 months . .	29.7	32.3	35.4	*10.5	*24.8	*31.1	36.7	34.4	36.4
Geographic region									
Northeast	7.0	6.0	6.6	3.1	3.9	*5.5	8.9	6.9	7.2
Midwest	12.2	10.3	10.0	5.9	5.1	5.8	15.3	12.8	12.1
South	14.3	14.0	12.6	5.6	7.0	6.7	18.5	17.4	15.6
West	16.3	16.0	15.9	7.9	8.1	8.2	20.7	20.0	19.9
Location of residence									
Within MSA ⁶	12.3	11.7	11.2	5.4	6.1	5.9	15.9	14.5	13.9
Outside MSA ⁶	14.6	13.5	13.9	6.9	6.9	10.8	17.9	16.3	15.4

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹ Respondents were asked how many times a doctor or other health care professional was seen in the past 12 months at a doctor's office, clinic, or some other place. Excluded are visits to emergency rooms, hospitalizations, home visits, and telephone calls. Starting with 2000 data, dental visits were also excluded. See [Appendix II, Health care contact](#).

² Includes all other races not shown separately and unknown health insurance status.

³ The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁴ Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 21%–25% of children under 18 years of age in 1997–1998 and 27%–31% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁵ Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, CHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁶ MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997 the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample child questionnaires.

Table 80 (page 1 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits ¹											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2006	2007	1997	2006	2007	1997	2006	2007	1997	2006	2007
	Percent distribution											
Total, age-adjusted ^{2,3}	16.5	17.2	16.4	46.2	46.9	47.2	23.6	23.1	23.6	13.7	12.8	12.8
Total, crude ²	16.5	17.2	16.3	46.5	46.8	47.1	23.5	23.1	23.7	13.5	12.9	12.9
Age												
Under 18 years	11.8	10.9	10.3	54.1	57.2	57.0	25.2	24.6	25.5	8.9	7.3	7.2
Under 6 years	5.0	4.9	6.2	44.9	50.6	48.3	37.0	34.8	35.8	13.0	9.7	9.7
6–17 years	15.3	13.8	12.4	58.7	60.5	61.4	19.3	19.6	20.3	6.8	6.1	6.0
18–44 years	21.7	25.3	24.1	46.7	45.8	46.3	19.0	17.8	18.4	12.6	11.0	11.2
18–24 years	22.0	25.3	24.9	46.8	47.2	46.9	20.0	17.4	18.1	11.2	10.2	10.1
25–44 years	21.6	25.4	23.9	46.7	45.3	46.1	18.7	17.9	18.5	13.0	11.4	11.6
45–64 years	16.9	16.4	14.9	42.9	44.3	45.3	24.7	23.6	23.9	15.5	15.7	15.9
45–54 years	17.9	18.5	16.8	43.9	46.1	47.1	23.4	21.8	21.2	14.8	13.6	14.9
55–64 years	15.3	13.5	12.3	41.3	41.9	43.0	26.7	26.1	27.6	16.7	18.5	17.2
65 years and over	8.9	6.0	7.0	34.7	33.2	33.1	32.5	36.2	36.2	23.8	24.6	23.6
65–74 years	9.8	6.7	8.4	36.9	34.6	35.4	31.6	36.6	36.0	21.6	22.1	20.3
75 years and over	7.7	5.3	5.5	31.8	31.5	30.6	33.8	35.7	36.4	26.6	27.6	27.5
Sex ³												
Male	21.3	22.8	21.3	47.1	46.8	47.3	20.6	20.0	20.9	11.0	10.4	10.5
Female	11.8	11.8	11.5	45.4	46.8	47.1	26.5	26.2	26.3	16.3	15.2	15.1
Race ^{3,4}												
White only	16.0	17.2	16.2	46.1	46.2	46.8	23.9	23.4	24.0	14.0	13.2	13.0
Black or African American only	16.8	16.0	15.5	46.1	49.2	48.4	23.2	23.3	23.4	13.9	11.5	12.7
American Indian or Alaska Native only	17.1	13.5	21.5	38.0	44.2	43.1	24.2	27.6	21.5	20.7	14.7	13.9
Asian only	22.8	21.9	22.0	49.1	51.3	48.9	19.7	18.1	19.9	8.3	8.7	9.2
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*	---	*	*
2 or more races	---	16.3	13.0	---	44.8	45.4	---	21.3	24.1	---	17.6	17.5
Hispanic origin and race ^{3,4}												
Hispanic or Latino	24.9	27.1	25.2	42.3	43.0	44.6	20.3	19.6	20.3	12.5	10.3	9.9
Mexican	28.9	31.1	28.0	40.8	40.8	42.9	18.5	18.3	19.5	11.8	9.8	9.6
Not Hispanic or Latino	15.4	15.4	14.7	46.7	47.6	47.7	24.0	23.7	24.2	13.9	13.2	13.4
White only	14.7	15.0	14.1	46.6	46.9	47.4	24.4	24.2	24.8	14.3	13.9	13.7
Black or African American only	16.9	15.7	15.1	46.1	49.5	48.6	23.1	23.4	23.5	13.8	11.4	12.8
Respondent-assessed health status ³												
Fair or poor	7.8	12.2	9.4	23.3	21.2	25.4	29.0	28.1	29.5	39.9	38.6	35.7
Good to excellent	17.2	17.8	17.1	48.4	49.3	49.6	23.3	22.8	23.2	11.1	10.1	10.1
Percent of poverty level ^{3,5}												
Below 100%	20.6	21.0	19.3	37.8	39.5	39.5	22.7	22.3	23.3	18.9	17.2	18.0
100%–less than 200%	20.1	21.6	20.5	43.3	43.5	42.1	21.7	21.5	23.3	14.9	13.3	14.0
200% or more	14.5	15.2	14.6	48.7	49.3	50.0	24.2	23.7	23.7	12.6	11.9	11.7

See footnotes at end of table.

Table 80 (page 2 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits ¹											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2006	2007	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent distribution												
Hispanic origin and race and percent of poverty level ^{3,4,5}												
Hispanic or Latino:												
Below 100%	30.2	32.8	30.5	34.8	35.3	36.9	19.9	19.2	19.3	15.0	12.7	13.3
100%–less than 200%	28.7	29.9	30.0	39.7	42.0	39.6	20.4	19.3	21.2	11.2	8.8	9.1
200% or more	18.9	22.2	19.7	48.8	47.4	51.6	20.4	20.4	19.6	11.9	10.1	9.1
Not Hispanic or Latino:												
White only:												
Below 100%	17.0	16.3	15.4	38.3	38.7	38.1	23.9	24.2	25.5	20.9	20.8	21.0
100%–less than 200%	17.3	18.8	16.2	44.1	43.7	42.0	22.2	22.2	25.5	16.3	15.4	16.3
200% or more	13.8	14.0	13.5	48.2	48.6	49.5	24.9	24.6	24.5	13.1	12.7	12.5
Black or African American only:												
Below 100%	17.4	18.1	15.2	38.5	45.0	43.2	23.4	21.9	24.9	20.7	15.0	16.7
100%–less than 200%	18.8	17.9	17.6	43.7	45.5	46.3	22.9	24.2	21.7	14.5	12.5	14.5
200% or more	15.6	13.5	14.4	51.7	53.6	52.0	22.7	23.5	23.5	10.0	9.3	10.2
Health insurance status at the time of interview ^{6,7}												
Under 65 years:												
Insured	14.3	14.3	13.5	49.0	50.4	50.7	23.6	23.1	23.5	13.1	12.3	12.3
Private	14.7	14.7	13.9	50.6	52.6	52.8	23.1	22.4	22.6	11.6	10.3	10.7
Medicaid	9.8	11.3	11.4	35.5	37.4	38.2	26.5	25.5	26.2	28.2	25.8	24.3
Uninsured	33.7	39.2	37.4	42.8	42.2	42.8	15.3	12.5	13.6	8.2	6.1	6.2
Health insurance status prior to interview ^{6,7}												
Under 65 years:												
Insured continuously all 12 months	14.1	14.3	13.4	49.2	50.8	51.0	23.6	23.1	23.5	13.0	11.9	12.1
Uninsured for any period up to 12 months	18.9	19.1	19.8	46.0	46.3	46.0	20.8	20.9	21.4	14.4	13.7	12.8
Uninsured more than 12 months	39.0	45.6	42.9	41.4	40.2	40.7	13.2	9.6	11.5	6.4	4.5	4.9
Percent of poverty level and health insurance status prior to interview ^{5,6,7}												
Under 65 years:												
Below 100%:												
Insured continuously all 12 months	13.8	12.6	12.4	39.7	43.1	41.8	25.2	24.2	26.0	21.4	20.1	19.8
Uninsured for any period up to 12 months	19.7	17.8	20.7	37.6	39.3	38.1	21.9	23.4	22.1	20.9	19.5	19.1
Uninsured more than 12 months	41.2	50.1	44.3	39.9	35.3	39.4	12.2	9.9	11.0	6.6	4.8	5.3
100%–less than 200%:												
Insured continuously all 12 months	16.0	16.3	15.1	46.4	45.9	44.5	21.9	23.0	24.6	15.8	14.8	15.8
Uninsured for any period up to 12 months	18.8	20.6	17.4	45.1	49.8	45.8	21.0	18.7	22.2	15.0	10.9	14.6
Uninsured more than 12 months	38.7	44.3	42.3	41.0	42.1	39.5	14.0	10.2	13.7	6.3	3.4	4.4
200% or more:												
Insured continuously all 12 months	13.7	14.1	13.2	51.0	52.6	53.3	23.6	22.9	22.8	11.7	10.4	10.7
Uninsured for any period up to 12 months	17.8	18.6	20.2	50.3	48.0	49.9	20.4	20.7	20.3	11.5	12.7	9.5
Uninsured more than 12 months	36.6	42.8	41.8	43.8	42.4	43.3	13.2	9.3	9.6	6.4	*5.5	5.3
Geographic region ³												
Northeast	13.2	12.1	13.0	45.9	47.6	47.7	26.0	25.1	26.2	14.9	15.2	13.2
Midwest	15.9	15.2	15.5	47.7	48.4	48.8	22.8	23.6	22.4	13.6	12.7	13.3
South	17.2	18.3	16.9	46.1	45.6	45.3	23.3	23.5	24.8	13.5	12.6	13.0
West	19.1	21.7	19.1	44.8	46.7	48.2	22.8	20.2	21.1	13.3	11.3	11.7

See footnotes at end of table.

Table 80 (page 3 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits ¹											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2006	2007	1997	2006	2007	1997	2006	2007	1997	2006	2007
Location of residence ³	Percent distribution											
Within MSA ⁸	16.2	16.8	16.5	46.4	47.5	47.7	23.7	23.1	23.5	13.7	12.6	12.4
Outside MSA ⁸	17.3	19.2	15.9	45.4	43.7	44.7	23.3	23.3	24.4	13.9	13.8	15.0

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

-- Data not available.

¹This table presents a summary measure of health care visits to doctor offices, emergency departments, and home visits during a 12-month period. See [Appendix II, Emergency department visit; Health care contact; Home visit](#).

²Includes all other races not shown separately and unknown health insurance status.

³Estimates are age-adjusted to the year 2000 standard population using six age groups: Under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 24%–29% of persons in 1997–1998 and 31%–34% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶Estimates for persons under 65 years of age are age-adjusted to the year 2000 standard population using four age groups: Under 18 years, 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

⁷Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children’s Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, CHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997, the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors are available in the spreadsheet version of this table. See <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

Table 81. Influenza vaccination among adults 65 years of age and over: Selected countries, 1998–2006

[Data are based on reporting by countries]

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006
Percent receiving influenza vaccination during past 12 months									
Australia	---	69.0	74.0	78.0	76.9	76.9	79.1	---	---
Belgium	---	---	---	58.0	---	---	65.0	60.0	---
Canada	---	---	63.0	---	---	62.4	---	66.5	---
Finland	---	---	---	25.0	43.0	45.0	46.0	52.0	46.0
France	61.0	58.0	65.0	65.0	67.0	65.0	68.0	68.0	---
Germany ¹	---	44.6	---	55.8	---	48.0	---	63.0	---
Hungary	---	---	---	---	36.8	38.9	37.9	37.1	34.0
Ireland	---	---	---	---	---	62.2	61.4	63.0	60.6
Italy	---	40.7	50.7	55.2	60.3	63.4	66.6	68.3	69.8
Japan	---	---	---	28.0	35.0	43.0	48.0	49.0	---
South Korea	---	---	---	---	---	---	75.7	77.2	---
Luxembourg	---	---	---	42.8	46.0	49.1	51.0	55.4	52.0
Netherlands	72.0	72.0	76.0	76.0	78.0	77.0	73.0	77.0	75.0
Portugal	31.3	39.0	---	41.9	36.9	47.0	39.0	41.6	---
Spain	63.5	59.8	61.5	61.9	67.2	68.0	68.6	70.1	67.6
Switzerland	41.0	46.0	51.0	54.0	55.0	58.0	57.0	59.0	61.0
United Kingdom	---	---	65.0	68.0	69.0	71.0	71.0	75.0	75.1
United States	63.3	65.7	64.4	63.1	65.7	65.5	64.6	59.7	64.3

--- Data not available.

¹1998 data for Germany are for adults 69 years and over. Starting with 1999 data, data are for adults 60 years and over.

NOTES: Data are for adults 65 years of age and over. Countries estimate influenza vaccination coverage using different methods. Therefore, estimates may not be directly comparable across countries and comparisons among them should be made with caution. See the OECD Health Statistics portal, available at <http://www.ecosante.fr/index2.php?base=OCDE&langs=ENG&langh=ENG&valeur=&source=1>, for more information on the sources and methods for collecting influenza immunization data.

SOURCES: Organisation for Economic Co-operation and Development (OECD): OECD Health Data 2008, <http://www.oecd.org/els/health/>; Australia: Australian Institute of Health and Welfare 2005. 2004 Influenza vaccine survey: summary results, <http://www.aihw.gov.au>; Belgium: Health Interview Survey (1997, 2001, and 2004 data) and Agence Intercommunale, <http://www.cin-aim.be> (2005 data); Canada: Statistics Canada. National Population Health Survey (1996–1997 data) and Canadian Community Health Survey (2000–2001, 2003, and 2005 data); Finland: National Public Health Institute, Department of Vaccines; France: Groupe d'Expertise et d'Informations sur la Grippe (GEIG), <http://www.grippe-geig.com>; Germany: Robert Koch-Institut, Epidemiological Bulletin, <http://www.rki.de>; Hungary: Johan Béla National Center of Epidemiology (OEK), Epidemic Department, <http://www.oek.hu/oek.web?lang=eng>; Ireland: Health Protection Surveillance Centre; Italy: Ministry of Health - Health Information System; Japan: Report on Regional Health Services and Health Services for the Aged; South Korea: Institute for Health and Social Affairs; Luxembourg: Union des caisses de maladie (UCM); Netherlands: Health Interview Survey (2005 data and onwards) and the Integrated System of Social Surveys (1998–2004); Portugal: Instituto Nacional de Saúde, Dr Ricardo Jorge, Observatório Nacional de Saúde (ONSA); Spain: Ministry of Health and Consumer Affairs; Switzerland: Federal Office of Public Health, Bern; United Kingdom: Health Protection Agency Centre for Infections (England data), National Public Health Service Wales (Wales data), <http://www.nphs.wales.nhs.uk/>, and Practitioner Services Division, NHS National Services (Scotland data); United States: CDC/NCHS, National Health Interview Survey.

Table 82 (page 1 of 2). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2007

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of immunization providers for interview participants]

Vaccination and year	Race and Hispanic origin ¹							Poverty level		Location of residence			
	Not Hispanic or Latino							Below poverty level	At or above poverty level	Inside MSA ²			
	All	White	Black or African American	American Indian or Alaska Native	Asian ³	Native Hawaiian or Other Pacific Islander ³	2 or more races			Hispanic or Latino	Central city	Remaining area	Outside MSA ²
Percent of children 19–35 months of age													
Combined series (4:3:1:3:3:1:4): ⁴													
2007.....	67	67	62	75	69	*	66	67	65	67	67	68	63
Combined series (4:3:1:3:3:1): ⁵													
2002.....	66	66	62	---	74	---	61	66	62	66	64	68	61
2004.....	76	77	71	67	80	---	77	76	73	77	75	78	74
2005.....	76	76	76	*	77	---	80	76	74	77	75	78	74
2006.....	77	78	74	75	76	---	75	77	73	78	77	78	75
2007.....	77	78	75	83	79	*	76	78	75	78	77	78	76
DTP/DT/DTaP (4 doses or more): ⁶													
1995.....	78	80	74	71	84	---	---	75	71	81	77	79	78
2000.....	82	84	76	75	85	---	---	79	76	84	80	83	83
2003.....	85	88	80	80	89	*	84	82	80	87	84	86	83
2004.....	86	88	80	77	90	*	86	84	81	87	84	87	85
2005.....	86	87	84	*	89	*	86	84	82	87	85	87	85
2006.....	85	87	81	83	86	*	84	85	81	87	84	86	85
2007.....	85	85	82	86	88	*	84	84	81	86	85	85	83
Polio (3 doses or more):													
1995.....	88	89	84	86	90	---	---	87	85	89	87	88	89
2000.....	90	91	87	90	93	---	---	88	87	90	88	90	91
2003.....	92	93	89	91	91	90	91	90	89	93	91	92	92
2004.....	92	92	90	87	93	*	92	91	90	92	91	92	92
2005.....	92	91	91	*	93	*	94	92	90	92	91	93	92
2006.....	93	93	90	91	92	96	92	93	92	93	93	93	93
2007.....	93	93	91	95	95	87	92	93	92	93	92	93	94
Measles, Mumps, Rubella:													
1995.....	90	91	87	88	95	---	---	88	86	91	90	90	89
2000.....	91	92	88	87	90	---	---	90	89	91	90	91	91
2003.....	93	93	92	92	96	*	94	93	92	93	93	93	92
2004.....	93	94	91	89	94	*	94	93	91	94	93	94	92
2005.....	92	91	92	90	92	90	94	91	89	92	92	92	90
2006.....	92	93	91	89	95	94	91	92	91	93	93	93	92
2007.....	92	92	92	96	94	88	95	93	91	93	92	93	92
Hib (3 doses or more): ⁷													
1995.....	91	93	88	93	90	---	---	89	88	93	91	92	92
2000.....	93	95	93	90	92	---	---	91	90	95	92	94	95
2003.....	94	95	92	89	91	*	93	93	91	95	94	94	94
2004.....	94	95	91	90	92	*	96	93	92	94	93	94	94
2005.....	94	94	93	88	89	91	95	94	92	95	93	94	94
2006.....	93	94	91	94	90	96	91	94	91	94	93	94	92
2007.....	93	93	91	95	91	*	90	94	91	93	92	94	92
Hepatitis B (3 doses or more):													
1995.....	68	68	66	52	80	---	---	70	65	69	69	71	59
2000.....	90	91	89	91	91	---	---	88	87	91	89	90	92
2003.....	92	93	92	90	94	*	93	91	91	93	92	93	93
2004.....	92	93	91	91	93	*	94	92	91	93	92	93	93
2005.....	93	93	93	90	93	*	94	93	91	94	92	94	93
2006.....	93	94	92	95	92	97	92	94	93	94	93	94	93
2007.....	93	93	91	97	94	*	92	94	92	93	92	93	94
Varicella: ⁸													
1998.....	43	42	42	28	53	---	---	47	41	44	45	45	34
2000.....	68	66	67	62	77	---	---	70	64	69	69	70	60
2003.....	85	84	85	81	91	*	86	86	84	85	86	86	80
2004.....	88	87	86	84	91	*	89	89	86	88	88	89	85
2005.....	88	86	91	82	92	*	90	89	87	88	88	88	86
2006.....	89	89	89	85	93	90	91	90	88	90	90	90	86
2007.....	90	89	90	95	94	89	92	91	89	90	90	90	89

See footnotes at end of table.

Table 82 (page 2 of 2). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2007

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of immunization providers for interview participants]

Vaccination and year	Race and Hispanic origin ¹						Poverty level		Location of residence						
	Not Hispanic or Latino								Inside MSA ²						
	All	White	Black or African American	American Indian or Alaska Native	Asian ³	Native Hawaiian or Other Pacific Islander ³	2 or more races or Latino	Below poverty level	At or above poverty level	Central city	Remaining area	Outside MSA ²			
Percent of children 19–35 months of age															
PCV (4 doses or more): ⁹															
2005	54	57	46	*	56	*	54	51	45	57	52	58	48		
2006	68	71	61	63	65	*	71	67	62	71	69	71	62		
2007	75	77	70	80	75	*	74	75	73	76	75	77	71		
Not Hispanic or Latino															
Vaccination and year	White		Black or African American		Hispanic or Latino										
							Below poverty level		At or above poverty level		Below poverty level		At or above poverty level		
Percent of children 19–35 months of age															
Combined series (4:3:1:3:3:1:4): ⁴															
2007				60		68			60		64		69		66
Combined series (4:3:1:3:3:1): ⁵															
2003				69		75			64		72		73		70
2004				72		78			68		75		75		78
2005				70		77			74		80		76		75
2006				69		79			72		77		76		78
2007				70		79			74		77		78		79

--- Data not available.

* Estimates are considered unreliable. For data prior to 2007, percents not shown if the unweighted sample size for the numerator was less than 30 or the confidence interval half-width divided by the estimate was greater than 50% or the confidence interval half-width was greater than 10. Starting with 2007 data, percents not shown if the unweighted sample size for the denominator was less than 30 or the confidence interval half-width divided by the estimate was greater than 60% or the confidence interval half-width was greater than 10.

¹Persons of Hispanic origin may be of any race. Starting with 2002 data, estimates were tabulated using the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Estimates for earlier years were tabulated using the 1977 Standards on Race and Ethnicity. See [Appendix II, Hispanic origin; Race](#).

²Metropolitan statistical area. See [Appendix II, Metropolitan statistical area](#).

³Prior to data year 2002, the category Asian included Native Hawaiian and Other Pacific Islander.

⁴The 4:3:1:3:3:1:4 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; 1 or more doses of varicella vaccine; and 4 or more doses of pneumococcal conjugate vaccine (PCV). The vaccine shortage that ended in September 2004 might have reduced coverage with the fourth dose of PCV among children in the 2007 NIS cohort.

⁵The 4:3:1:3:3:1 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; and 1 or more doses of varicella vaccine.

⁶Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis vaccine.

⁷*Haemophilus influenzae* type b vaccine (Hib).

⁸Recommended in 1996. Data collection for varicella began in July 1996.

⁹PCV is Pneumococcal conjugate vaccine. Recommended in 2000. Data collection for PCV began in July 2001. Data for 4 doses of PCV are not available prior to 2005.

NOTES: Final estimates from the National Immunization Survey include an adjustment for children with missing immunization provider data. Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. In 2007, 4% of all children with provider-reported vaccination history data, 7% of Hispanic, 3% of non-Hispanic white, and 6% of non-Hispanic black children were missing information about poverty level and were omitted from the estimates of vaccination coverage by poverty level. See [Appendix II, Poverty](#). See [Appendix I, National Immunization Survey](#). Additional information on childhood immunizations is available from: <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS and National Center for Immunization and Respiratory Diseases, National Immunization Survey. Available from: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis> and <http://www.cdc.gov/nis/>.

Table 83 (page 1 of 2). Vaccination coverage among children 19–35 months of age, by state and selected urban area: United States, 2002–2007

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of immunization providers for interview participants]

State and selected urban area	2002	2003	2004	2005	2006	2007
	Percent of children 19–35 months of age with 4:3:1:3:3:1 series ¹					
United States	66	73	76	76	77	77
Alabama	73	79	80	82	79	78
Jefferson County (Birmingham)	74	79	81	85	---	---
Alaska	56	73	66	68	67	70
Arizona	59	68	73	75	71	75
Maricopa County (Phoenix)	62	69	72	76	68	---
Arkansas	68	75	81	64	73	72
California	67	76	79	74	79	77
Los Angeles County (Los Angeles)	72	79	77	78	79	78
Santa Clara County (Santa Clara)	75	77	80	---	78	---
San Diego County (San Diego)	71	75	74	---	80	---
Colorado	56	63	73	79	76	78
Connecticut	73	89	85	82	82	87
Delaware	70	66	80	82	80	80
District of Columbia	68	72	80	72	79	82
Florida	66	74	85	78	79	80
Dade County (Miami)	60	73	73	---	80	76
Duval County (Jacksonville)	70	75	69	77	76	---
Georgia	77	75	82	82	81	80
Fulton/DeKalb Counties (Atlanta)	75	71	81	72	75	---
Hawaii	69	79	80	78	79	88
Idaho	53	61	70	68	68	66
Illinois	58	69	74	77	74	74
Chicago	58	71	71	70	77	71
Indiana	59	62	68	70	76	74
Marion County (Indianapolis)	62	66	74	---	77	71
Iowa	58	63	76	76	79	76
Kansas	55	63	66	72	70	76
Kentucky	64	79	77	71	80	78
Louisiana	62	65	70	74	70	77
Orleans Parish (New Orleans)	53	68	68	---	---	---
Maine	62	69	74	76	76	73
Maryland	71	77	76	79	78	91
Baltimore	69	74	80	77	72	---
Massachusetts	78	83	84	91	84	78
Boston	71	86	79	---	82	---
Michigan	72	79	79	81	78	79
Detroit	60	64	66	71	65	---
Minnesota	62	71	78	78	78	81
Mississippi	64	78	80	79	73	77
Missouri	60	74	75	73	81	76
Montana	49	65	65	65	66	65
Nebraska	64	68	73	84	75	83
Nevada	65	66	65	63	60	63
New Hampshire	66	76	78	77	76	91
New Jersey	66	64	74	72	76	81
Newark	50	64	64	67	68	---
New Mexico	59	71	79	75	72	76
New York	67	73	78	74	77	78
New York City	71	69	77	71	72	76
North Carolina	70	77	78	82	82	77

See footnotes at end of table.

Table 83 (page 2 of 2). Vaccination coverage among children 19–35 months of age, by state and selected urban area: United States, 2002–2007

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of immunization providers for interview participants]

State and selected urban area	2002	2003	2004	2005	2006	2007
Percent of children 19–35 months of age with 4:3:1:3:3:1 series ¹						
North Dakota	56	63	71	79	80	77
Ohio	64	71	71	78	75	78
Cuyahoga County (Cleveland)	65	66	78	77	77	---
Franklin County (Columbus)	69	71	79	81	---	---
Oklahoma	60	67	71	72	78	79
Oregon	60	70	74	65	74	71
Pennsylvania	68	79	82	77	79	79
Philadelphia	68	75	75	77	80	82
Rhode Island	81	80	82	80	81	76
South Carolina	74	80	77	76	81	80
South Dakota	62	60	73	80	74	77
Tennessee	67	74	79	80	77	79
Davidson County (Nashville)	67	76	88	81	---	---
Shelby County (Memphis)	61	69	71	74	73	---
Texas	65	70	69	77	75	77
Bexar County (San Antonio)	72	75	73	71	75	80
Dallas County (Dallas)	68	67	67	73	73	72
El Paso County (El Paso)	61	72	64	69	69	77
Houston	56	63	62	77	70	73
Utah	61	70	68	68	78	74
Vermont	58	65	67	63	75	67
Virginia	65	80	74	82	77	76
Washington	52	56	67	66	71	69
King County (Seattle)	56	61	74	69	71	---
West Virginia	66	63	76	68	68	76
Wisconsin	68	73	78	77	81	77
Milwaukee County (Milwaukee)	60	71	73	74	78	---
Wyoming	54	57	64	67	63	70

--- Data not available.

* Estimates are considered unreliable. For data prior to 2007, percents not shown if the unweighted sample size for the numerator was less than 30 or the confidence interval half-width divided by the estimate was greater than 50% or the confidence interval half-width was greater than 10. Starting with 2007 data, percents not shown if the unweighted sample size for the denominator was less than 30 or the confidence interval half-width divided by the estimate was greater than 60% or the confidence interval half-width was greater than 10.

¹The 4:3:1:3:3:1 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; and 1 or more doses of varicella vaccine. The 4:3:1:3:3:1 combined series is the most complete series for which state trend data currently are available. See Table 82 for additional data on childhood vaccinations.

NOTES: Urban areas were originally selected because they were at risk for undervaccination. Final estimates from the National Immunization Survey include an adjustment for children with missing immunization provider data. Additional information on childhood immunizations is available from:

<http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>.

SOURCES: CDC/NCHS and National Center for Immunization and Respiratory Diseases, National Immunization Survey. Available from:

<http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis> and <http://www.cdc.gov/nis/>.

Table 84 (page 1 of 2). Influenza vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1989</i>	<i>1995</i>	<i>2000</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
	Percent receiving influenza vaccination during past 12 months ¹							
18 years and over, age-adjusted ^{2,3}	9.6	23.7	28.7	29.2	29.5	21.6	27.4	29.9
18 years and over, crude ³	9.1	23.0	28.4	29.0	29.4	21.4	27.6	30.1
Age								
18–49 years	3.4	13.1	17.1	16.8	17.9	10.7	15.6	17.8
50 years and over	19.9	41.9	47.9	48.9	47.9	38.1	45.9	48.5
50–64 years	10.6	27.0	34.6	36.8	35.9	23.0	33.2	36.2
65 years and over	30.4	58.2	64.4	65.5	64.6	59.7	64.3	66.7
65–74 years	28.0	54.9	61.1	60.5	60.1	53.7	60.1	61.6
75 years and over	34.2	63.0	68.4	71.0	69.7	66.3	69.2	72.6
50 years and over								
Sex								
Male	19.2	40.2	45.9	46.8	45.1	34.7	43.2	45.6
Female	20.6	43.4	49.5	50.7	50.2	40.9	48.3	51.0
Race ⁴								
White only	20.9	43.6	49.8	50.4	49.8	39.7	47.2	49.9
Black or African American only	12.5	28.2	33.2	35.3	32.8	26.9	34.9	38.2
American Indian or Alaska Native only	26.2	*	43.6	44.7	51.3	*22.9	56.3	45.8
Asian only	*9.2	35.6	43.3	45.9	41.7	30.6	44.8	45.3
Native Hawaiian or Other Pacific Islander only	---	---	*	*	*	*	*	*
2 or more races	---	---	50.7	53.7	44.5	30.4	40.2	44.8
Hispanic origin and race ⁴								
Hispanic or Latino	13.2	33.8	34.4	33.6	36.9	24.7	31.7	35.5
Mexican	13.0	35.4	33.0	32.8	39.2	26.1	33.5	36.1
Not Hispanic or Latino	20.3	42.4	48.8	50.1	48.8	39.1	47.1	49.6
White only	21.3	44.3	50.6	51.8	50.9	41.0	48.6	51.3
Black or African American only	12.4	28.5	33.2	35.4	32.9	26.9	35.1	38.1
Percent of poverty level ⁵								
Below 100%	19.6	39.7	44.1	41.8	42.5	35.8	42.1	44.8
100%–less than 200%	24.0	43.2	50.7	50.9	49.9	41.2	47.5	47.9
200% or more	19.0	41.9	47.6	49.4	48.1	37.5	46.0	49.1
Hispanic origin and race and percent of poverty level ^{4,5}								
Hispanic or Latino:								
Below 100%	12.7	29.7	35.8	31.9	36.3	22.3	30.9	41.1
100%–less than 200%	20.4	34.7	35.6	29.9	33.1	27.5	32.0	42.7
200% or more	11.9	35.5	33.1	36.6	39.2	24.0	31.9	30.1
Not Hispanic or Latino:								
White only:								
Below 100%	22.5	44.4	48.6	45.9	48.1	42.2	47.8	47.4
100%–less than 200%	26.1	46.7	54.8	55.9	55.0	46.1	51.7	50.8
200% or more	19.9	43.5	49.8	51.5	50.2	39.8	48.0	51.7
Black or African American only:								
Below 100%	14.6	31.8	35.5	37.4	32.0	28.9	34.8	38.9
100%–less than 200%	12.0	28.3	37.9	40.9	36.8	27.4	35.0	35.6
200% or more	12.0	26.3	29.9	32.1	31.6	25.9	35.4	38.8
Geographic region								
Northeast	17.9	39.7	45.9	50.5	47.9	38.4	44.1	49.0
Midwest	20.0	43.2	49.3	50.2	49.9	39.9	49.4	51.4
South	20.2	41.4	46.8	48.4	47.3	37.3	43.9	47.2
West	21.8	43.8	50.1	46.4	46.5	36.8	47.3	46.9
Location of residence								
Within MSA ⁶	18.9	41.6	47.1	48.8	47.6	37.2	44.9	47.1
Outside MSA ⁶	23.3	42.9	50.2	49.3	48.9	41.0	49.7	53.7

See footnotes at end of table.

Table 84 (page 2 of 2). Influenza vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

-- Data not available.

¹ Respondents were asked, "During the past 12 months, have you had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season." Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) during the past 12 months, in addition to the question regarding the flu shot. Starting with 2005 data, receipt of nasal spray or flu shot was included in the calculation of influenza vaccination estimates.

² Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–49 years, 50–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

³ Includes all other races not shown separately and unknown poverty level in 1989.

⁴ The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵ Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of persons 18 years and over in 1989. Missing family income data were imputed for 16% of persons 18 years and over in 1995, 26%–30% in 1997–1998, and 32%–35% in 1999–2007. See [Appendix II, Family Income; Poverty](#).

⁶ MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 2000, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommended universal influenza vaccination for persons 50 years and over. Medicare reimbursement for the costs of the vaccine and its administration began in 1993. Currently, ACIP recommends vaccination of all children age 6 months to 18 years, adults age 50 and over, and persons at high risk. See <http://www.cdc.gov/flu/professionals/acip/index.htm> for more information. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey. Data are from the Immunization Supplement (1981), the Health Promotion and Disease Prevention Supplement (1991), and the Year 2000 Supplement (1993–1995). Starting in 1997, data are from the sample adult questionnaire.

Table 85 (page 1 of 2). Pneumococcal vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1989</i>	<i>1995</i>	<i>2000</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
	Percent ever receiving pneumococcal vaccination ¹							
18 years and over, age-adjusted ^{2,3}	4.6	12.0	15.4	16.4	16.8	16.7	17.0	16.7
18 years and over, crude ³	4.4	11.7	15.1	16.0	16.5	16.5	17.0	16.7
Age								
18–49 years	2.1	6.5	5.4	5.6	5.7	5.8	5.7	5.3
50–64 years	4.4	10.0	14.7	16.7	17.2	17.1	18.2	17.3
65 years and over	14.1	34.0	53.1	55.6	56.8	56.2	57.1	57.7
65–74 years	13.1	31.4	48.2	49.8	50.4	49.4	52.0	51.8
75 years and over	15.7	37.8	59.1	62.1	64.2	63.9	63.0	64.4
65 years and over								
Sex								
Male	13.9	34.6	52.1	53.7	54.3	53.4	54.3	55.1
Female	14.3	33.6	53.9	57.0	58.7	58.4	59.2	59.6
Race ⁴								
White only	14.8	35.3	55.6	57.9	59.1	58.4	60.0	60.1
Black or African American only	6.4	21.9	30.6	36.9	38.6	40.2	35.5	43.7
American Indian or Alaska Native only	31.2	*	70.1	*	*42.0	*	*57.5	*
Asian only	*	*23.4	40.9	35.3	35.1	35.0	35.6	33.4
Native Hawaiian or Other Pacific Islander only	---	---	*	*	*	*	*	*
2 or more races	---	---	55.6	*39.3	*48.8	64.8	63.6	55.8
Hispanic origin and race ⁴								
Hispanic or Latino	9.8	23.2	30.4	31.0	33.7	27.5	33.3	31.8
Mexican	12.9	*18.8	32.0	33.6	33.3	31.3	29.3	34.3
Not Hispanic or Latino	14.3	34.5	54.4	57.1	58.3	58.1	58.7	59.6
White only	15.0	35.9	56.8	59.6	60.9	60.6	62.0	62.2
Black or African American only	6.2	21.8	30.6	36.9	38.6	40.4	35.6	44.0
Percent of poverty level ⁵								
Below 100%	11.2	28.7	40.6	47.7	42.5	46.7	45.4	48.7
100%–less than 200%	15.1	30.7	51.4	56.7	56.1	54.5	55.8	55.6
200% or more	15.0	37.2	56.2	56.5	59.7	58.5	59.6	59.8
Hispanic origin and race and percent of poverty level ^{4,5}								
Hispanic or Latino:								
Below 100%	*	*14.1	23.8	23.8	31.8	20.9	24.5	*22.4
100%–less than 200%	*11.0	*15.6	32.3	26.8	29.0	26.9	30.9	37.9
200% or more	*10.4	39.4	32.9	39.5	39.1	31.7	40.7	30.9
Not Hispanic or Latino:								
White only:								
Below 100%	13.3	32.5	47.9	57.5	50.6	55.6	56.0	59.7
100%–less than 200%	16.0	33.5	56.1	62.1	61.9	60.5	61.6	60.8
200% or more	15.5	37.8	58.3	58.9	61.9	61.3	62.8	62.9
Black or African American only:								
Below 100%	*5.0	*22.6	28.8	35.1	27.0	42.3	38.4	40.7
100%–less than 200%	7.8	*20.9	28.1	39.6	36.4	36.6	36.2	41.9
200% or more	*5.2	*21.8	34.4	35.7	49.1	42.7	33.3	46.7
Geographic region								
Northeast	10.4	28.2	51.2	54.8	56.0	55.8	53.7	54.6
Midwest	13.7	31.0	52.6	57.1	59.5	58.5	61.5	60.6
South	14.9	35.9	51.3	55.1	57.2	57.4	55.7	58.5
West	17.9	41.1	59.7	55.7	53.7	51.4	57.2	55.6
Location of residence								
Within MSA ⁶	13.1	33.8	52.4	56.0	56.7	55.1	56.6	56.5
Outside MSA ⁶	17.1	34.8	55.4	54.3	57.3	59.8	58.9	61.7

See footnotes at end of table.

Table 85 (page 2 of 2). Pneumococcal vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

- - - Data not available.

¹ Respondents were asked, “Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot. It is also called the pneumococcal vaccine.”

² Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–49 years, 50–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

³ Includes all other races not shown separately and unknown poverty level in 1989.

⁴ The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵ Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of persons 18 years and over in 1989. Missing family income data were imputed for 16% of persons 18 years of age and over in 1995, 26%–30% in 1997–1998, and 32%–35% in 1999–2007. See [Appendix II, Family Income; Poverty](#).

⁶ MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommended universal pneumonia vaccination for persons 65 years and over. A pneumococcal polysaccharide vaccine was first licensed in 1977. Medicare reimbursement for the costs of the vaccine and its administration began in 1981. CDC. Prevention of pneumococcal disease: Recommendations of the advisory committee on immunization practices (ACIP). *MMWR* 1997;46(RR-08);1–24. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00047135.htm>. Pneumococcal vaccination among adults 19–64 years is recommended for those with other risk factors (medical, occupational, lifestyle, or other indications). Recommended adult immunization schedule United States, October 2007–September 2008. Available from: <http://www.cdc.gov/mmwr/pdf/wk/mm5641-Immunization.pdf>. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey. Data are from the Immunization Supplement (1981), the Health Promotion and Disease Prevention Supplement (1991), and the Year 2000 Supplement (1993–1995). Starting in 1997, data are from the sample adult questionnaire.

Table 86 (page 1 of 2). Use of mammography among women 40 years of age and over, by selected characteristics: United States, selected years 1987–2008

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1990	1993	1994	1999	2000	2003	2005	2008
Percent of women having a mammogram within the past 2 years ¹									
40 years and over, age-adjusted ^{2,3}	29.0	51.7	59.7	61.0	70.3	70.4	69.5	66.6	67.1
40 years and over, crude ²	28.7	51.4	59.7	60.9	70.3	70.4	69.7	66.8	67.6
50 years and over, age-adjusted ^{2,3}	27.3	49.8	59.7	60.9	72.1	73.7	72.4	68.2	70.3
50 years and over, crude ²	27.4	49.7	59.7	60.6	71.9	73.6	72.4	68.4	70.5
Age									
40–49 years	31.9	55.1	59.9	61.3	67.2	64.3	64.4	63.5	61.5
50–64 years	31.7	56.0	65.1	66.5	76.5	78.7	76.2	71.8	74.2
65 years and over	22.8	43.4	54.2	55.0	66.8	67.9	67.7	63.8	65.4
65–74 years	26.6	48.7	64.2	63.0	73.9	74.0	74.6	72.5	72.6
75 years and over	17.3	35.8	41.0	44.6	58.9	61.3	60.6	54.7	57.9
Race ⁴									
40 years and over, crude:									
White only	29.6	52.2	60.0	60.6	70.6	71.4	70.1	67.4	67.9
Black or African American only	24.0	46.4	59.1	64.3	71.0	67.8	70.4	64.9	68.0
American Indian or Alaska Native only	*	43.2	49.8	65.8	63.0	47.4	63.1	72.8	62.7
Asian only	*	46.0	55.1	55.8	58.3	53.5	57.6	54.6	66.1
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*
2 or more races	---	---	---	---	70.2	69.2	65.3	63.7	55.1
Hispanic origin and race ⁴									
40 years and over, crude:									
Hispanic or Latina	18.3	45.2	50.9	51.9	65.7	61.2	65.0	58.8	61.2
Not Hispanic or Latina	29.4	51.8	60.3	61.5	70.7	71.1	70.1	67.5	68.3
White only	30.3	52.7	60.6	61.3	71.1	72.2	70.5	68.3	68.7
Black or African American only	23.8	46.0	59.2	64.4	71.0	67.9	70.5	65.2	68.3
Age, Hispanic origin, and race ⁴									
40–49 years:									
Hispanic or Latina	*15.3	45.1	52.6	47.5	61.6	54.1	59.4	54.2	54.1
Not Hispanic or Latina:									
White only	34.3	57.0	61.6	62.0	68.3	67.2	65.2	65.5	64.1
Black or African American only	27.8	48.4	55.6	67.2	69.2	60.9	68.2	62.1	59.5
50–64 years:									
Hispanic or Latina	23.0	47.5	59.2	60.1	69.7	66.5	69.4	61.5	71.3
Not Hispanic or Latina:									
White only	33.6	58.1	66.2	67.5	77.9	80.6	77.2	73.5	74.1
Black or African American only	26.4	48.4	65.5	63.6	75.0	77.7	76.2	71.6	76.7
65 years and over:									
Hispanic or Latina	*	41.1	35.7	48.0	67.2	68.3	69.5	63.8	58.9
Not Hispanic or Latina:									
White only	24.0	43.8	54.7	54.9	66.8	68.3	68.1	64.7	66.1
Black or African American only	14.1	39.7	56.3	61.0	68.1	65.5	65.4	60.5	66.4
Age and percent of poverty level ⁵									
40 years and over, crude:									
Below 100%	14.6	30.8	41.1	44.2	57.4	54.8	55.4	48.5	51.4
100%–less than 200%	20.9	39.1	47.5	48.6	59.5	58.1	60.8	55.3	55.8
200% or more	34.9	59.2	67.3	68.5	75.0	75.9	74.3	72.5	72.8
40–49 years:									
Below 100%	18.6	32.2	36.1	43.0	51.3	47.4	50.6	42.5	46.6
100%–less than 200%	18.4	39.0	47.8	47.6	52.8	43.6	54.0	49.8	46.5
200% or more	36.4	60.1	65.3	66.5	71.6	69.9	68.3	69.0	66.6
50–64 years:									
Below 100%	14.6	29.9	47.3	46.2	63.3	61.7	58.3	50.4	57.5
100%–less than 200%	24.2	39.8	47.0	49.0	64.9	68.3	64.0	58.8	58.9
200% or more	36.9	63.3	71.9	73.7	80.2	82.6	80.9	76.8	78.9
65 years and over:									
Below 100%	13.1	30.8	40.4	43.9	57.6	54.8	57.0	52.3	49.1
100%–less than 200%	19.9	38.6	47.6	48.8	60.2	60.3	62.8	56.1	59.4
200% or more	29.5	51.5	63.5	64.0	72.5	75.0	72.6	70.1	70.5

See footnotes at end of table.

Table 86 (page 2 of 2). Use of mammography among women 40 years of age and over, by selected characteristics: United States, selected years 1987–2008

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1990	1993	1994	1999	2000	2003	2005	2008
Health insurance status at the time of interview ⁵									
Percent of women having a mammogram within the past 2 years ¹									
40–64 years:									
Insured	---	---	66.2	68.3	75.5	76.0	75.1	72.5	73.4
Private	---	---	67.1	69.4	76.3	77.1	76.3	74.5	74.2
Medicaid	---	---	51.9	54.5	62.5	61.7	63.5	55.6	64.2
Uninsured	---	---	36.0	34.0	44.8	40.7	41.5	38.1	39.7
Health insurance status prior to interview ⁶									
40–64 years:									
Insured continuously all 12 months	---	---	66.6	68.6	76.1	76.8	75.6	73.1	74.1
Uninsured for any period up to 12 months	---	---	49.4	49.9	57.1	53.0	56.0	51.3	55.3
Uninsured more than 12 months	---	---	28.4	26.6	38.9	34.0	37.0	32.9	34.6
Age and education ⁷									
40 years and over, crude:									
No high school diploma or GED	17.8	36.4	46.4	48.2	56.7	57.7	58.1	52.8	53.8
High school diploma or GED	31.3	52.7	59.0	61.0	69.2	69.7	67.8	64.9	65.2
Some college or more	37.7	62.8	69.5	69.7	77.3	76.2	75.1	72.7	73.4
40–49 years:									
No high school diploma or GED	15.1	38.5	43.6	50.4	48.8	46.8	53.3	51.2	46.9
High school diploma or GED	32.6	53.1	56.6	55.8	60.8	59.0	60.8	58.8	57.2
Some college or more	39.2	62.3	66.1	68.7	74.4	70.6	68.1	68.3	66.3
50–64 years:									
No high school diploma or GED	21.2	41.0	51.4	51.6	62.3	66.5	63.4	56.9	64.9
High school diploma or GED	33.8	56.5	62.4	67.8	77.2	76.6	71.8	70.1	70.4
Some college or more	40.5	68.0	78.5	74.7	81.2	84.2	82.7	77.0	78.5
65 years and over:									
No high school diploma or GED	16.5	33.0	44.2	45.6	56.6	57.4	56.9	50.7	49.2
High school diploma or GED	25.9	47.5	57.4	59.1	68.4	71.8	69.7	64.3	65.7
Some college or more	32.3	56.7	64.8	64.3	77.1	74.1	75.1	73.0	75.6

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

¹Questions concerning use of mammography differed slightly on the National Health Interview Survey across the years for which data are shown. See [Appendix II, Mammography](#).

²Includes all other races not shown separately, unknown poverty level in 1987, unknown health insurance status, and unknown education level.

³Estimates for women 40 years and over are age-adjusted to the year 2000 standard population using four age groups: 40–49 years, 50–64 years, 65–74 years, and 75 years and over. Estimates for women 50 years and over are age-adjusted using three age groups. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of women 40 years of age and over in 1987. Missing family income data were imputed for 19%–23% of women 40 years of age and over in 1990–1994 and 34%–38% in 1998–2008. Data by poverty level for 2008 will be available at: <http://www.cdc.gov/nchs/hus.htm>. See [Appendix II, Family income; Poverty](#).

⁶Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, CHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁷Education categories shown are for 1998 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1998 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data starting in 1997 are not strictly comparable with data for earlier years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following supplements: cancer control (1987), health promotion and disease prevention (1990–1991), and year 2000 objectives (1993–1994). Starting in 1998, data are from the family core and sample adult questionnaires.

Table 87 (page 1 of 2). Use of Pap smears among women 18 years of age and over, by selected characteristics: United States, selected years 1987–2008

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1987</i>	<i>1993</i>	<i>1994</i>	<i>1999</i>	<i>2000</i>	<i>2003</i>	<i>2005</i>	<i>2008</i>
Percent of women having a Pap smear within the past 3 years ¹								
18 years and over, age-adjusted ^{2,3}	74.1	77.7	76.8	80.8	81.3	79.2	77.9	75.6
18 years and over, crude ²	74.4	77.7	76.8	80.8	81.2	79.0	77.7	75.1
Age								
18–44 years	83.3	84.6	82.8	86.8	84.9	83.9	83.6	81.8
18–24 years	74.8	78.8	76.6	76.8	73.5	75.1	74.5	70.7
25–44 years	86.3	86.3	84.6	89.9	88.5	86.8	86.8	85.7
45–64 years	70.5	77.2	77.4	81.7	84.6	81.3	80.6	78.8
45–54 years	75.7	82.1	81.9	83.8	86.3	83.6	83.4	81.0
55–64 years	65.2	70.6	71.0	78.4	82.0	77.8	76.8	76.0
65 years and over	50.8	57.6	57.3	61.0	64.5	60.8	54.9	50.0
65–74 years	57.9	64.7	64.9	70.0	71.6	70.1	66.3	61.6
75 years and over	40.4	48.0	47.3	50.8	56.7	51.1	42.7	37.5
Race ⁴								
18 years and over, crude:								
White only	74.1	77.3	76.2	80.6	81.3	78.7	77.7	74.9
Black or African American only	80.7	82.7	83.5	85.7	85.1	84.0	81.1	80.1
American Indian or Alaska Native only	85.4	78.1	73.5	92.2	76.8	84.8	75.2	69.4
Asian only	51.9	68.8	66.4	64.4	66.4	68.3	64.1	65.6
Native Hawaiian or Other Pacific Islander only	---	---	---	*	*	*	*	*
2 or more races	---	---	---	86.9	80.0	81.6	86.2	77.1
Hispanic origin and race ⁴								
18 years and over, crude:								
Hispanic or Latina	67.6	77.2	74.4	76.3	77.0	75.4	75.5	75.4
Not Hispanic or Latina	74.9	77.8	77.0	81.3	81.7	79.5	78.0	75.1
White only	74.7	77.3	76.5	81.0	81.8	79.3	78.1	74.9
Black or African American only	80.9	82.7	83.8	86.0	85.1	83.8	81.2	80.0
Age, Hispanic origin, and race ⁴								
18–44 years:								
Hispanic or Latina	73.9	80.9	80.6	77.0	78.1	75.9	76.5	77.9
Not Hispanic or Latina:								
White only	84.5	85.3	82.9	88.7	86.6	85.8	85.8	83.8
Black or African American only	89.1	88.0	89.1	90.8	88.5	88.6	86.4	83.5
45–64 years:								
Hispanic or Latina	57.7	75.8	70.1	79.5	77.8	77.9	78.4	78.2
Not Hispanic or Latina:								
White only	71.2	77.2	77.5	81.9	85.9	81.4	81.4	79.0
Black or African American only	76.2	80.3	82.2	84.6	85.7	84.7	80.5	82.1
65 years and over:								
Hispanic or Latina	41.7	57.1	43.8	63.7	66.8	64.6	60.0	52.6
Not Hispanic or Latina:								
White only	51.8	57.1	58.2	60.5	64.2	60.7	54.1	49.0
Black or African American only	44.8	61.2	59.5	64.5	67.2	59.6	60.1	58.7
Age and percent of poverty level ⁵								
18 years and over, crude:								
Below 100%	64.3	70.3	68.8	73.6	72.0	70.5	68.7	68.9
100%–less than 200%	68.2	71.2	68.8	72.5	73.4	71.4	69.0	65.0
200% or more	79.9	82.1	81.9	84.3	85.0	83.0	82.1	79.1
18–44 years:								
Below 100%	77.1	77.0	78.9	79.7	77.1	77.1	76.2	76.5
100%–less than 200%	80.4	81.9	78.2	84.0	79.4	79.5	78.1	75.6
200% or more	86.3	87.9	85.7	89.0	88.0	86.9	87.2	85.0
45–64 years:								
Below 100%	53.6	66.5	62.0	73.1	73.6	66.0	65.9	66.2
100%–less than 200%	60.4	64.8	66.2	70.4	76.1	71.4	69.6	65.7
200% or more	75.5	81.4	82.0	84.6	87.4	85.1	84.4	82.7
65 years and over:								
Below 100%	33.2	47.4	44.0	51.9	53.7	52.6	44.4	41.6
100%–less than 200%	50.4	55.7	51.5	54.7	61.0	55.4	49.5	43.4
200% or more	59.6	62.0	66.8	66.4	68.8	65.4	59.7	54.1

See footnotes at end of table.

Table 87 (page 2 of 2). Use of Pap smears among women 18 years of age and over, by selected characteristics: United States, selected years 1987–2008

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1993	1994	1999	2000	2003	2005	2008
Health insurance status at the time of interview ⁵								
Percent of women having a Pap smear within the past 3 years ¹								
18–64 years, crude:								
Insured	---	84.7	83.8	87.2	87.8	86.4	85.6	83.4
Private	---	84.8	83.6	87.5	88.0	87.0	86.5	84.3
Medicaid	---	82.7	86.2	84.2	85.8	82.8	80.9	80.3
Uninsured	---	69.4	68.6	73.3	70.4	66.6	67.7	67.1
Health insurance status prior to interview ⁶								
18–64 years, crude:								
Insured continuously all 12 months	---	84.8	83.7	87.3	88.0	86.6	85.8	83.7
Uninsured for any period up to 12 months	---	81.8	83.4	83.5	83.7	81.8	81.3	78.8
Uninsured more than 12 months	---	65.1	63.6	68.8	65.1	60.2	62.0	62.1
Age and education ⁷								
25 years and over, crude:								
No high school diploma or GED	57.1	61.9	60.9	66.1	69.9	64.9	64.1	60.6
High school diploma or GED	76.4	78.2	76.0	79.3	79.8	75.9	73.8	69.5
Some college or more	84.0	84.4	85.2	87.8	88.0	86.2	84.6	82.6
25–44 years:								
No high school diploma or GED	75.1	73.6	73.6	79.0	79.6	71.7	75.5	76.2
High school diploma or GED	85.6	85.4	82.4	87.6	86.2	84.3	83.1	80.0
Some college or more	90.1	89.8	89.1	93.0	91.4	90.8	90.5	89.3
45–64 years:								
No high school diploma or GED	58.0	65.6	66.1	71.6	75.7	71.4	69.7	70.4
High school diploma or GED	72.3	77.6	75.9	79.8	81.8	77.6	79.0	73.9
Some college or more	80.1	83.0	84.7	85.7	89.1	86.2	84.1	83.0
65 years and over:								
No high school diploma or GED	44.0	50.7	47.7	51.8	56.6	52.5	46.0	36.7
High school diploma or GED	55.4	61.6	61.2	63.7	66.9	61.2	52.5	49.3
Some college or more	59.4	62.3	66.5	68.8	69.8	67.8	63.8	58.9

* Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

--- Data not available.

¹Questions concerning use of Pap smears differed slightly on the National Health Interview Survey across the years for which data are shown. See [Appendix II, Pap smear](#).

²Includes all other races not shown separately, unknown poverty level in 1987, unknown health insurance status, and unknown education level.

³Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 9% of women 18 years of age and over in 1987. Missing family income data were imputed for 17%–20% of women 18 years of age and over in 1990–1994 and 30%–35% in 1998–2008. Data by poverty level for 2008 will be available at: <http://www.cdc.gov/nchs/hus.htm>. See [Appendix II, Family income; Poverty](#).

⁶Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, CHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁷Education categories shown are for 1998 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1998 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data starting in 1997 are not strictly comparable with data for earlier years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey. Data are from the following supplements: cancer control (1987), year 2000 objectives (1993–1994). Starting in 1998, data are from the family core and sample adult questionnaires.

Table 88 (page 1 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
	Percent of children with one or more emergency department visits ¹								
All children ²	19.9	21.3	20.2	24.3	28.2	23.9	17.7	17.9	18.3
Race ³									
White only	19.4	21.2	20.0	22.6	28.0	22.9	17.8	17.9	18.5
Black or African American only	24.0	25.0	23.1	33.1	33.6	30.7	19.4	21.0	19.2
American Indian or Alaska Native only	*24.1	*19.7	22.0	*24.3	*	*30.6	*24.0	*	*17.1
Asian only	12.6	13.4	11.4	20.8	19.6	*16.8	8.6	10.2	*8.1
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	17.1	22.3	---	19.8	23.3	---	15.2	21.6
Hispanic origin and race ³									
Hispanic or Latino	21.1	19.7	18.0	25.7	28.5	23.9	18.1	14.5	14.6
Not Hispanic or Latino	19.7	21.7	20.8	24.0	28.2	23.9	17.6	18.7	19.2
White only	19.2	21.5	20.5	22.2	27.6	22.4	17.7	18.7	19.6
Black or African American only	23.6	25.3	23.4	32.7	34.0	31.0	19.2	21.3	19.5
Percent of poverty level ⁴									
Below 100%	25.1	25.8	28.1	29.5	32.6	34.3	22.2	21.6	24.0
100%–less than 200%	22.0	22.1	22.5	28.0	30.3	25.9	19.0	17.8	20.5
200% or more	17.3	19.3	16.7	20.5	25.3	18.6	15.8	16.7	15.9
Hispanic origin and race and percent of poverty level ^{3,4}									
Hispanic or Latino:									
Percent of poverty level:									
Below 100%	21.9	21.0	22.6	25.0	31.1	29.9	19.6	14.3	17.5
100%–less than 200%	20.8	20.5	16.2	28.8	27.3	21.6	15.6	16.3	12.8
200% or more	20.4	17.7	15.8	23.4	26.5	19.7	18.7	13.3	14.1
Not Hispanic or Latino:									
White only:									
Percent of poverty level:									
Below 100%	25.5	27.5	33.3	27.2	32.3	35.4	24.4	24.6	31.8
100%–less than 200%	22.3	22.9	26.7	25.8	33.3	28.0	20.7	18.2	26.0
200% or more	17.2	20.0	17.2	20.1	24.9	18.4	15.9	17.9	16.7
Black or African American only:									
Percent of poverty level:									
Below 100%	29.3	31.1	29.3	39.5	37.7	41.2	23.0	27.3	22.7
100%–less than 200%	22.5	24.8	23.3	31.7	32.9	26.8	18.5	21.1	21.2
200% or more	17.7	19.4	17.6	22.6	29.6	22.7	15.9	15.7	15.5
Health insurance status at the time of interview ⁵									
Insured	19.8	21.9	20.5	24.4	28.5	24.2	17.5	18.5	18.5
Private	17.5	19.2	17.1	20.9	24.5	18.6	15.9	17.0	16.4
Medicaid	28.2	27.2	27.3	33.0	34.2	32.0	24.1	22.3	23.9
Uninsured	20.2	16.8	17.7	23.0	25.4	20.4	18.9	13.7	16.9
Health insurance status prior to interview ⁵									
Insured continuously all 12 months	19.6	21.5	20.3	24.1	27.9	23.9	17.3	18.2	18.4
Uninsured for any period up to 12 months	24.0	26.0	23.8	27.1	36.2	28.5	21.9	21.1	21.8
Uninsured more than 12 months	18.4	12.8	15.1	19.3	*17.6	*	18.1	11.5	13.6
Percent of poverty level and health insurance status prior to interview ^{4,5}									
Below 100%:									
Insured continuously all 12 months	26.3	26.5	28.6	30.9	31.7	34.8	22.8	23.1	24.1
Uninsured for any period up to 12 months	26.5	32.2	31.3	29.7	41.8	*39.6	24.4	*25.7	*26.0
Uninsured more than 12 months	17.5	*12.5	*19.0	*16.0	*	*	18.0	*9.8	*19.8
100%–less than 200%:									
Insured continuously all 12 months	21.8	22.4	23.0	28.0	30.8	25.2	18.6	17.6	21.5
Uninsured for any period up to 12 months	24.5	27.1	26.0	29.7	*32.9	*32.2	21.0	24.8	23.2
Uninsured more than 12 months	19.5	*12.9	*16.6	*22.5	*	*	18.6	*11.0	*13.1
200% or more:									
Insured continuously all 12 months	17.1	19.5	17.0	20.3	25.2	19.2	15.6	17.0	16.1
Uninsured for any period up to 12 months	20.7	20.0	16.9	21.3	34.4	*	20.4	*13.6	*18.4
Uninsured more than 12 months	17.9	*13.3	*9.3	*19.2	*	*	17.3	*14.5	*

See footnotes at end of table.

Table 88 (page 2 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
Geographic region									
Percent of children with one or more emergency department visits ¹									
Northeast	18.5	24.1	22.3	20.7	30.8	25.8	17.4	21.1	20.7
Midwest	19.5	22.4	21.2	26.0	28.3	24.2	16.4	19.5	19.7
South	21.8	22.8	21.4	25.6	32.5	25.4	19.9	18.0	19.2
West	18.5	15.4	15.7	23.5	19.3	19.9	15.9	13.4	13.5
Location of residence									
Within MSA ⁶	19.7	20.8	19.6	23.9	27.3	23.6	17.4	17.6	17.5
Outside MSA ⁶	20.8	23.9	23.4	26.2	32.6	26.0	18.6	19.6	22.3
Percent of children with two or more emergency department visits ¹									
All children ²	7.1	7.7	7.3	9.6	10.6	9.3	5.8	6.3	6.2
Race ³									
White only	6.6	7.5	6.9	8.4	10.1	8.3	5.7	6.2	6.2
Black or African American only	9.6	9.9	9.8	14.9	14.8	15.3	6.9	7.6	6.9
American Indian and Alaska Native only	*	*	*	*	*	*	*	*	*
Asian only	*5.7	5.8	*4.1	*12.9	*6.7	*	*	*5.3	*
Native Hawaiian and Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	*6.2	10.1	---	*	*11.8	---	*	*9.2
Hispanic origin and race ³									
Hispanic or Latino	8.9	7.7	6.2	11.8	11.2	9.6	7.0	5.6	4.2
Not Hispanic or Latino	6.8	7.7	7.5	9.2	10.4	9.2	5.7	6.4	6.7
White only	6.2	7.3	7.0	7.8	9.6	7.9	5.5	6.2	6.6
Black or African American only	9.3	9.9	10.0	14.6	14.5	15.2	6.8	7.7	7.3
Percent of poverty level ⁴									
Below 100%	11.1	10.3	11.4	14.5	12.7	15.6	8.9	8.8	8.6
100%–less than 200%	8.3	8.8	8.9	12.2	12.4	11.1	6.3	7.0	7.6
200% or more	5.3	6.3	5.3	6.5	8.9	5.8	4.7	5.2	5.1
Hispanic origin and race and percent of poverty level ^{3,4}									
Hispanic or Latino:									
Percent of poverty level:									
Below 100%	10.4	8.3	7.9	13.9	10.8	13.3	8.0	*6.6	*4.1
100%–less than 200%	8.2	9.1	6.6	12.0	12.5	10.0	5.7	*7.1	*4.5
200% or more	7.6	5.9	4.3	8.4	*10.3	*4.9	7.1	*3.6	*4.0
Not Hispanic or Latino:									
White only:									
Percent of poverty level:									
Below 100%	10.7	10.2	13.8	12.2	*10.9	*15.1	9.8	*9.7	*12.9
100%–less than 200%	8.0	8.5	9.5	11.2	*11.0	*10.7	6.4	7.3	*8.8
200% or more	5.0	6.4	5.5	5.8	8.8	5.7	4.6	5.4	5.4
Black or African American only:									
Percent of poverty level:									
Below 100%	12.7	12.4	13.0	19.1	*16.8	21.3	8.8	10.0	*8.4
100%–less than 200%	9.2	10.3	11.5	*13.5	*17.2	*13.9	*7.2	*7.1	*10.1
200% or more	5.5	6.9	5.8	*8.2	*9.1	*9.3	*4.5	*6.1	*4.2
Health insurance status at the time of interview ⁵									
Insured	7.0	7.8	7.3	9.6	10.6	9.5	5.7	6.4	6.1
Private	5.2	6.3	5.3	6.8	8.5	6.0	4.5	5.3	4.9
Medicaid	13.1	10.8	11.4	16.2	13.7	14.5	10.4	8.8	9.1
Uninsured	7.7	7.0	7.4	9.8	*11.4	*	6.8	5.5	7.2
Health insurance status prior to interview ⁵									
Insured continuously all 12 months	6.9	7.7	7.2	9.4	10.4	9.1	5.7	6.3	6.1
Uninsured for any period up to 12 months	8.5	9.6	10.4	11.5	*13.3	*13.6	6.6	7.8	*9.0
Uninsured more than 12 months	6.8	*5.5	*6.2	*8.6	*	*	6.2	*4.4	*5.2

See footnotes at end of table.

Table 88 (page 3 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2006	2007	1997	2006	2007	1997	2006	2007
Geographic region									
Percent of children with two or more emergency department visits ¹									
Northeast	6.2	9.6	9.3	7.6	10.8	10.9	5.4	9.1	8.5
Midwest	6.6	7.4	8.1	10.4	10.4	9.3	4.8	6.0	7.5
South	8.0	8.4	7.6	10.1	12.6	10.3	6.9	6.4	6.2
West	7.1	5.1	4.4	10.0	7.3	6.7	5.6	3.9	3.2
Location of residence									
Within MSA ⁶	7.2	7.4	6.9	9.6	10.2	9.2	5.9	6.1	5.6
Outside MSA ⁶	6.8	9.0	9.3	9.7	12.8	9.7	5.6	7.2	9.1

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹See [Appendix II, Emergency department visit](#).

²Includes all other races not shown separately and unknown health insurance status.

³The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁴Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 21%–25% of children in 1997–1998 and 27%–31% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁵Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children's Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, CHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁶MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample child questionnaires.

Table 89 (page 1 of 2). Emergency department visits within the past 12 months among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more emergency department visits				Two or more emergency department visits			
	1997	2000	2006	2007	1997	2000	2006	2007
Percent of adults with emergency department visits ¹								
18 years and over, age-adjusted ^{2,3}	19.6	20.2	20.5	20.2	6.7	6.9	7.5	7.4
18 years and over, crude ²	19.6	20.1	20.4	20.1	6.7	6.8	7.4	7.3
Age								
18–44 years	20.7	20.5	20.5	20.3	6.8	7.0	7.3	7.4
18–24 years	26.3	25.7	24.9	23.3	9.1	8.8	9.6	8.7
25–44 years	19.0	18.8	18.9	19.3	6.2	6.4	6.5	6.9
45–64 years	16.2	17.6	18.4	18.3	5.6	5.6	6.8	6.5
45–54 years	15.7	17.9	17.9	18.0	5.5	5.8	6.3	6.6
55–64 years	16.9	17.0	18.9	18.7	5.7	5.3	7.5	6.4
65 years and over	22.0	23.7	24.5	23.1	8.1	8.6	9.0	9.0
65–74 years	20.3	21.6	20.6	20.2	7.1	7.4	6.8	7.6
75 years and over	24.3	26.2	28.9	26.5	9.3	10.0	11.6	10.6
Sex ³								
Male	19.1	18.7	19.0	18.4	5.9	5.7	6.0	6.2
Female	20.2	21.6	22.1	21.9	7.5	7.9	8.9	8.6
Race ^{3,4}								
White only	19.0	19.4	20.1	19.6	6.2	6.4	7.0	6.9
Black or African American only	25.9	26.5	25.6	26.3	11.1	10.8	11.3	11.3
American Indian or Alaska Native only	24.8	30.3	21.1	26.7	13.1	*12.6	*10.5	*11.3
Asian only	11.6	13.6	13.6	11.9	*2.9	*3.8	3.8	4.5
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*
2 or more races	---	32.5	24.5	28.3	---	11.3	*9.4	14.2
American Indian or Alaska Native; White	---	33.9	21.9	29.9	---	*9.4	*	*17.2
Hispanic origin and race ^{3,4}								
Hispanic or Latino	19.2	18.3	17.3	18.2	7.4	7.0	5.7	6.7
Mexican	17.8	17.4	15.4	16.1	6.4	7.1	4.8	5.6
Not Hispanic or Latino	19.7	20.6	21.1	20.6	6.7	6.9	7.7	7.5
White only	19.1	19.8	20.8	20.1	6.2	6.4	7.3	7.0
Black or African American only	25.9	26.5	25.8	26.2	11.0	10.8	11.3	11.4
Percent of poverty level ^{3,5}								
Below 100%	28.1	29.0	28.2	29.9	12.8	13.3	13.0	14.1
100%–less than 200%	23.8	23.9	24.0	23.6	9.3	9.6	10.6	10.2
200% or more	17.0	18.0	18.2	17.8	4.9	5.2	5.5	5.6
Hispanic origin and race and percent of poverty level ^{3,4,5}								
Hispanic or Latino:								
Below 100%	22.1	22.4	20.7	25.0	9.8	9.7	6.8	11.8
100%–less than 200%	19.2	18.1	16.0	17.0	8.1	6.7	5.9	6.2
200% or more	17.6	16.8	16.5	16.6	5.4	6.1	5.2	5.4
Not Hispanic or Latino:								
White only:								
Below 100%	29.5	30.1	31.7	32.6	13.0	13.9	15.2	14.9
100%–less than 200%	24.3	25.5	26.3	25.6	9.1	10.4	11.7	11.1
200% or more	16.8	17.7	18.3	17.7	4.8	5.0	5.3	5.4
Black or African American only:								
Below 100%	34.6	35.4	31.4	32.2	17.5	17.4	15.8	15.8
100%–less than 200%	29.2	28.5	30.3	28.6	12.8	12.2	13.6	13.4
200% or more	19.7	22.6	21.5	22.8	7.2	8.0	8.5	8.7
Health insurance status at the time of interview ^{6,7}								
18–64 years:								
Insured:								
Private	18.8	19.5	19.9	19.4	6.1	6.4	7.2	7.0
Medicaid	16.9	17.6	17.2	16.9	4.7	5.1	5.3	5.1
Uninsured	37.6	42.2	39.0	37.9	19.7	21.0	20.7	21.2
Uninsured	20.0	19.3	18.9	20.3	7.5	6.9	6.9	7.4

See footnotes at end of table.

Table 89 (page 2 of 2). Emergency department visits within the past 12 months among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more emergency department visits				Two or more emergency department visits			
	1997	2000	2006	2007	1997	2000	2006	2007
Health insurance status prior to interview ^{6,7}								
Percent of adults with emergency department visits ¹								
18–64 years:								
Insured continuously all 12 months	18.3	19.0	19.1	18.9	5.8	6.1	6.7	6.7
Uninsured for any period up to 12 months	25.5	28.2	27.4	26.4	9.4	10.3	11.8	11.6
Uninsured more than 12 months	18.9	17.3	17.4	19.6	7.1	6.4	6.3	6.9
Percent of poverty level and health insurance status prior to interview ^{5,6,7}								
18–64 years:								
Below 100%:								
Insured continuously all 12 months	30.2	31.6	29.6	32.0	14.7	15.4	14.3	15.6
Uninsured for any period up to 12 months	34.1	43.7	39.5	33.1	16.1	18.1	21.9	19.6
Uninsured more than 12 months	20.8	20.5	19.4	23.5	8.1	9.1	8.2	7.4
100%–less than 200%:								
Insured continuously all 12 months	24.5	25.5	25.6	24.1	8.9	10.2	11.8	11.2
Uninsured for any period up to 12 months	28.7	27.7	27.2	32.6	12.3	11.7	12.6	14.9
Uninsured more than 12 months	19.0	17.4	16.8	18.9	8.3	6.4	5.8	7.2
200% or more:								
Insured continuously all 12 months	16.0	17.0	16.8	16.7	4.4	4.7	4.9	5.0
Uninsured for any period up to 12 months	20.2	22.9	22.8	21.6	5.3	7.0	7.3	7.4
Uninsured more than 12 months	17.4	15.6	16.7	18.0	5.3	4.7	5.3	6.6
Geographic region ³								
Northeast	19.5	20.0	22.4	21.2	6.9	6.2	8.9	7.6
Midwest	19.3	20.1	20.6	20.1	6.2	6.9	7.3	7.5
South	20.9	21.2	21.0	20.8	7.3	7.6	7.7	7.6
West	17.7	18.6	18.1	18.5	6.0	6.3	5.9	6.7
Location of residence ³								
Within MSA ⁸	19.1	19.6	20.1	19.7	6.4	6.6	7.3	7.1
Outside MSA ⁸	21.5	22.5	22.6	22.9	7.8	7.8	8.2	9.1

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹See [Appendix II, Emergency department visit](#).

²Includes all other races not shown separately and unknown health insurance status.

³Estimates are for persons 18 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶Estimates for persons 18–64 years of age are age-adjusted to the year 2000 standard population using three age groups: 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

⁷Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children’s Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, CHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

Table 90 (page 1 of 2). Injury-related visits to hospital emergency departments, by sex, age, and intent and mechanism of injury: United States, average annual 1995–1996, 1999–2000, and 2006–2007

[Data are based on reporting by a sample of hospital emergency departments]

<i>Sex, age, and intent and mechanism of injury¹</i>	<i>1995–1996</i>	<i>1999–2000</i>	<i>2006–2007²</i>	<i>1995–1996</i>	<i>1999–2000</i>	<i>2006–2007²</i>
Both sexes	Injury-related visits in thousands			Injury-related visits per 10,000 persons		
All ages ^{3,4}	33,191	35,316	29,512	1,231.9	1,266.6	993.7
Male						
All ages ^{3,4}	18,788	19,596	15,749	1,406.5	1,423.4	1,074.4
Under 18 years ³	5,985	6,020	4,548	1,644.9	1,624.4	1,204.0
Unintentional injuries ⁵	5,432	5,421	3,961	1,492.9	1,462.8	1,048.6
Falls	1,402	1,303	1,210	385.2	351.6	320.4
Struck by or against objects or persons	1,011	1,377	812	277.9	371.5	215.0
Motor vehicle traffic	450	432	288	123.7	116.6	76.2
Cut or pierce	493	455	257	135.6	122.8	68.0
Intentional injuries	290	242	163	79.7	65.4	43.1
18–24 years ³	2,882	2,927	2,346	2,259.7	2,177.6	1,582.2
Unintentional injuries ⁵	2,419	2,404	1,806	1,896.7	1,788.5	1,218.1
Falls	299	307	274	234.8	228.1	184.6
Struck by or against objects or persons	387	401	279	303.2	298.2	187.9
Motor vehicle traffic	347	469	368	272.4	348.6	248.0
Cut or pierce	304	394	213	238.7	293.0	143.6
Intentional injuries	335	322	274	262.4	239.8	184.8
25–44 years ³	6,794	6,688	4,842	1,622.3	1,604.1	1,158.7
Unintentional injuries ⁵	5,720	5,503	3,746	1,365.7	1,320.0	896.4
Falls	817	850	705	195.2	204.0	168.6
Struck by or against objects or persons	619	781	387	147.8	187.3	92.7
Motor vehicle traffic	909	848	623	217.0	203.3	149.0
Cut or pierce	860	762	462	205.3	182.8	110.5
Intentional injuries	697	511	387	166.4	122.5	92.6
45–64 years ³	2,034	2,634	2,779	795.1	893.1	753.2
Unintentional injuries ⁵	1,821	2,315	2,232	711.9	785.1	605.2
Falls	445	582	631	174.1	197.4	171.0
Struck by or against objects or persons	186	232	204	72.6	78.8	55.2
Motor vehicle traffic	244	316	278	95.5	107.1	75.5
Cut or pierce	203	294	271	79.2	99.6	73.4
Intentional injuries	86	99	169	33.5	33.5	45.7
65 years and over ³	1,093	1,327	1,235	797.1	925.2	780.6
Unintentional injuries ⁵	1,004	1,203	1,070	732.1	838.2	676.6
Falls	505	579	617	368.3	403.2	390.0
Struck by or against objects or persons	*39	*112	*47	*28.4	*77.8	*29.5
Motor vehicle traffic	99	*114	90	72.2	*79.6	57.1
Cut or pierce	*81	102	101	*59.1	71.3	63.8
Intentional injuries	*	*	*	*	*	*

See footnotes at end of table.

Table 90 (page 2 of 2). Injury-related visits to hospital emergency departments, by sex, age, and intent and mechanism of injury: United States, average annual 1995–1996, 1999–2000, and 2006–2007

[Data are based on reporting by a sample of hospital emergency departments]

<i>Sex, age, and intent and mechanism of injury¹</i>	<i>1995–1996</i>	<i>1999–2000</i>	<i>2006–2007²</i>	<i>1995–1996</i>	<i>1999–2000</i>	<i>2006–2007²</i>
Female	Injury-related visits in thousands			Injury-related visits per 10,000 persons		
All ages ^{3,4}	14,403	15,720	13,762	1,050.5	1,104.7	904.9
Under 18 years ³	4,097	4,095	3,169	1,183.2	1,161.0	879.4
Unintentional injuries ⁵	3,741	3,713	2,719	1,080.3	1,052.7	754.3
Falls	1,040	1,025	976	300.3	290.7	270.7
Struck by or against objects or persons	477	728	377	137.7	206.5	104.6
Motor vehicle traffic	447	430	370	129.1	122.0	102.6
Cut or pierce	253	232	127	72.9	65.7	35.3
Intentional injuries	220	149	149	63.5	42.3	41.4
18–24 years ³	1,721	1,957	1,769	1,376.8	1,487.5	1,245.0
Unintentional injuries ⁵	1,405	1,564	1,313	1,123.4	1,189.1	924.1
Falls	268	234	270	214.0	177.9	189.9
Struck by or against objects or persons	134	170	126	107.1	129.5	89.0
Motor vehicle traffic	373	469	375	298.0	356.8	263.9
Cut or pierce	131	156	102	105.0	118.2	71.5
Intentional injuries	239	219	202	191.2	166.7	142.0
25–44 years ³	4,515	4,900	3,806	1,064.5	1,159.6	917.9
Unintentional injuries ⁵	3,845	3,951	2,854	906.6	935.0	688.3
Falls	817	947	834	192.7	224.1	201.1
Struck by or against objects or persons	380	382	234	89.5	90.5	56.4
Motor vehicle traffic	871	788	619	205.3	186.4	149.4
Cut or pierce	338	434	198	79.6	102.6	47.7
Intentional injuries	418	425	329	98.6	100.7	79.3
45–64 years ³	2,025	2,569	2,802	744.2	822.2	722.8
Unintentional injuries ⁵	1,810	2,168	2,183	665.2	693.9	562.9
Falls	600	749	898	220.7	239.9	231.5
Struck by or against objects or persons	159	192	167	58.4	61.4	43.0
Motor vehicle traffic	343	324	326	126.0	103.7	84.0
Cut or pierce	127	175	170	46.7	55.9	43.9
Intentional injuries	*64	125	153	*23.4	40.0	39.3
65 years and over ³	2,045	2,199	2,215	1,039.0	1,082.7	1,018.3
Unintentional injuries ⁵	1,900	2,005	1,962	965.5	986.9	901.6
Falls	1,220	1,219	1,493	619.7	600.2	686.3
Struck by or against objects or persons	82	103	*62	41.9	50.5	*28.4
Motor vehicle traffic	169	132	108	85.7	65.1	49.7
Cut or pierce	*42	72	*55	*21.2	*35.3	*25.5
Intentional injuries	*	*	*	*	*	*

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹Intent and mechanism of injury are based on the first-listed external cause of injury code (E code). Intentional injuries include suicide attempts and assaults. See [Appendix II, External cause of injury; Injury-related visit](#); and [Table IX](#) for a listing of E codes.

²Estimates for 2005–2006 (available in the spreadsheet version) and 2006–2007 were limited to those visits that were initial visits for the condition. This was determined using an imputed variable indicating that the visit was or was not the initial visit in 2005 and 2006, and in 2007 this was determined by using the initial visit data collected on the questionnaire. Limiting the estimates to initial visits decreases the total number of injury-related visits by 12% in 2006–2007. No similar variable indicating initial visits was available for 1995–1996 or 1999–2000 data. Therefore, estimates for 2005 and beyond are not directly comparable with 1995–1996 and 1999–2000 estimates.

³Includes all injury-related visits not shown separately in table including those with undetermined intent (1.2% in 2006–2007) and insufficient or no information to code cause of injury (11.7% in 2006–2007).

⁴Rates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

⁵Includes unintentional injury-related visits with mechanism of injury not shown in table.

NOTES: An emergency department visit was considered injury related if the physician's diagnosis was injury related (ICD–9-CM 800–909.2, 909.4, 909.9–994.9, 995.50–995.59, and 995.80–995.85) or an external cause of injury code was present (ICD–9-CM E800–E869, E880–E929, and E950–E999). Visits with a first-listed diagnosis or external cause code describing a complication or adverse effect of medical care are excluded. For more information on injury-related visits, see Bergen G, Chen LH, Warner M, Fingerhut LA. Injury in the United States: 2007 Chartbook. Hyattsville, MD: NCHS, 2008. Available from: <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>. Rates were calculated using estimates of the civilian population of the United States including institutionalized persons. The population estimates used are the same used for rates calculated for the National Hospital Discharge Survey. Population data are from unpublished tabulations provided by the U.S. Census Bureau. Rates prior to 2001 were calculated using population estimates based on the 1990 census. Rates for 2005 and beyond were calculated using postcensal population estimates based on the 2000 census. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 91 (page 1 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2007

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

Age, sex, and race	All places ¹				Physician offices			
	1995	2000	2006	2007	1995	2000	2006	2007
Number of visits in thousands								
Total	860,859	1,014,848	1,123,354	1,200,017	697,082	823,542	901,954	994,321
Under 18 years	194,644	212,165	231,535	240,813	150,351	163,459	181,560	194,959
18–44 years	285,184	315,774	317,502	335,440	219,065	243,011	234,063	257,257
45–64 years	188,320	255,894	310,667	334,088	159,531	216,783	256,494	283,890
45–54 years	104,891	142,233	164,692	170,514	88,266	119,474	133,402	141,478
55–64 years	83,429	113,661	145,975	163,574	71,264	97,309	123,092	142,412
65 years and over	192,712	231,014	263,649	289,675	168,135	200,289	229,837	258,214
65–74 years	102,605	116,505	124,089	142,528	90,544	102,447	108,063	127,805
75 years and over	90,106	114,510	139,560	147,147	77,591	97,842	121,774	130,409
Number of visits per 100 persons								
Total, age-adjusted ²	334	374	380	402	271	304	305	332
Total, crude	329	370	382	405	266	300	307	336
Under 18 years	275	293	315	327	213	226	247	264
18–44 years	264	291	287	304	203	224	212	233
45–64 years	364	422	418	439	309	358	345	373
45–54 years	339	385	384	392	286	323	311	325
55–64 years	401	481	465	503	343	412	392	438
65 years and over	612	706	740	799	534	612	645	712
65–74 years	560	656	665	746	494	577	579	669
75 years and over	683	766	824	859	588	654	719	761
Sex and age								
Male, age-adjusted ²	290	325	328	351	232	261	262	290
Male, crude	277	314	322	345	220	251	256	285
Under 18 years	273	302	309	331	209	231	242	268
18–44 years	190	203	197	205	139	148	139	151
45–54 years	275	316	328	321	229	260	260	262
55–64 years	351	428	410	452	300	367	344	396
65–74 years	508	614	631	732	445	539	554	661
75 years and over	711	771	810	888	616	670	709	801
Female, age-adjusted ²	377	420	431	452	309	345	346	374
Female, crude	378	424	440	462	310	348	355	384
Under 18 years	277	285	321	321	217	221	252	261
18–44 years	336	377	377	402	265	298	284	315
45–54 years	400	451	437	460	339	384	359	386
55–64 years	446	529	515	550	382	453	436	477
65–74 years	603	692	693	758	534	609	600	676
75 years and over	666	763	832	840	571	645	725	735
Race and age ³								
White, age-adjusted ²	339	380	384	398	282	315	317	335
White, crude	338	381	391	407	281	316	324	345
Under 18 years	295	306	325	330	237	243	263	273
18–44 years	267	301	292	298	211	239	225	235
45–54 years	334	386	379	381	286	330	317	324
55–64 years	397	480	465	498	345	416	402	442
65–74 years	557	641	672	735	496	568	593	666
75 years and over	689	764	820	856	598	658	721	765
Black or African American, age-adjusted	309	353	397	475	204	239	251	339
Black or African American, crude	281	324	379	450	178	214	235	317
Under 18 years	193	264	299	351	100	167	*188	247
18–44 years	260	257	331	380	158	149	180	241
45–54 years	387	383	438	490	281	269	272	341
55–64 years	414	495	515	592	294	373	347	444
65–74 years	553	656	615	900	429	512	458	748
75 years and over	534	745	744	966	395	568	569	769

See footnotes at end of table.

Table 91 (page 2 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2007

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

Age, sex, and race	Hospital outpatient departments				Hospital emergency departments			
	1995	2000	2006	2007	1995	2000	2006	2007
Number of visits in thousands								
Total	67,232	83,289	102,208	88,894	96,545	108,017	119,191	116,802
Under 18 years	17,636	21,076	23,679	18,962	26,657	27,630	26,296	26,893
18–44 years	24,299	26,947	33,301	30,300	41,820	45,816	50,139	47,883
45–64 years	14,811	20,772	28,707	25,707	13,978	18,339	25,466	24,491
45–54 years	8,029	11,558	15,626	14,138	8,595	11,201	15,663	14,898
55–64 years	6,782	9,214	13,080	11,569	5,383	7,138	9,803	9,593
65 years and over	10,486	14,494	16,522	13,926	14,090	16,232	17,290	17,535
65–74 years	6,004	7,515	8,931	7,815	6,057	6,543	7,095	6,908
75 years and over	4,482	6,979	7,591	6,111	8,033	9,690	10,195	10,627
Number of visits per 100 persons								
Total, age-adjusted ²	26	31	35	30	37	40	41	40
Total, crude	26	30	35	30	37	39	41	39
Under 18 years	25	29	32	26	38	38	36	36
18–44 years	22	25	30	27	39	42	45	43
45–64 years	29	34	39	34	27	30	34	32
45–54 years	26	31	36	32	28	30	37	34
55–64 years	33	39	42	36	26	30	31	29
65 years and over	33	44	46	38	45	50	49	48
65–74 years	33	42	48	41	33	37	38	36
75 years and over	34	47	45	36	61	65	60	62
Sex and age								
Male, age-adjusted ²	21	26	28	23	37	38	38	37
Male, crude	21	25	28	23	36	38	38	37
Under 18 years	25	29	31	25	40	41	36	38
18–44 years	14	17	19	16	37	38	39	37
45–54 years	20	26	31	26	26	30	36	34
55–64 years	26	32	34	27	25	30	31	29
65–74 years	29	38	40	35	34	36	38	36
75 years and over	34	42	44	30	61	59	58	56
Female, age-adjusted ²	31	35	41	36	37	41	44	42
Female, crude	31	35	41	37	37	41	43	42
Under 18 years	25	29	33	26	35	35	36	35
18–44 years	31	33	41	38	40	46	52	49
45–54 years	32	36	41	39	29	31	37	35
55–64 years	38	45	48	43	26	31	31	30
65–74 years	36	46	54	46	32	37	38	36
75 years and over	34	49	45	39	61	69	62	66
Race and age ³								
White, age-adjusted ²	23	28	31	26	34	37	36	36
White, crude	23	28	31	26	34	37	36	36
Under 18 years	23	27	30	23	35	36	32	34
18–44 years	20	23	27	24	36	39	40	39
45–54 years	23	28	32	28	25	28	30	30
55–64 years	28	36	36	30	24	28	27	27
65–74 years	29	38	44	36	32	35	35	33
75 years and over	31	44	41	31	60	63	57	60
Black or African American, age-adjusted	48	51	65	60	58	62	81	76
Black or African American, crude	45	48	64	58	58	62	80	75
Under 18 years	39	40	49	44	53	57	62	60
18–44 years	38	40	59	52	64	68	93	87
45–54 years	55	61	78	*73	51	53	88	76
55–64 years	73	70	97	*87	47	52	71	61
65–74 years	*77	85	84	*83	47	59	73	69
75 years and over	66	85	80	*97	73	92	94	100

See footnotes at end of table.

Table 91 (page 3 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2007

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

¹All places includes visits to physician offices and hospital outpatient and emergency departments.

²Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

³Estimates by racial group should be used with caution because information on race was collected from medical records. In 2007, race data were missing and imputed for 29% of ambulatory care visits, including 32% of visits to physician offices, 16% of visits to hospital outpatient departments, and 15% of visits to hospital emergency departments. Information on the race imputation process used in each data year is available in the public use file documentation. Available from: <http://www.cdc.gov/nchs/ahcd.htm>. Starting with 1999 data, the instruction for the race item on the Patient Record Form was changed so that more than one race could be recorded. In previous years only one race could be checked. Estimates for race in this table are for visits where only one race was recorded. Because of the small number of responses with more than one racial group checked, estimates for visits with multiple races checked are unreliable and are not presented.

NOTES: Rates for 1995–2000 were computed using 1990-based postcensal estimates of the civilian noninstitutionalized population as of July 1 adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Starting with 2001 data, rates were computed using 2000-based postcensal estimates of the civilian noninstitutionalized population as of July 1. The difference between rates for 2000 computed using 1990-based postcensal estimates and 2000 census counts is minimal. More information is available from: <http://www.cdc.gov/nchs/ahcd.htm>. Rates will be overestimated to the extent that visits by institutionalized persons are counted in the numerator (for example, hospital emergency department visits by nursing home residents) and institutionalized persons are omitted from the denominator (the civilian noninstitutionalized population). Starting with *Health, United States, 2005*, data for physician offices for 2001 and beyond use a revised weighting scheme. See [Appendix I, National Ambulatory Medical Care Survey \(NAMCS\)](#) and [National Hospital Ambulatory Medical Care Survey \(NHAMCS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

Table 92 (page 1 of 2). Visits to primary care generalist and specialist physicians, by selected characteristics and type of physician: United States, selected years 1980–2007

[Data are based on reporting by a sample of office-based physicians]

Age, sex, and race	Type of primary care generalist physician ¹											
	All primary care generalists				General and family practice				Internal medicine			
	1980	1990	2000	2007	1980	1990	2000	2007	1980	1990	2000	2007
	Percent of all physician office visits											
Total	66.2	63.6	58.9	57.4	33.5	29.9	24.1	22.8	12.1	13.8	15.3	14.5
Under 18 years	77.8	79.5	79.7	82.4	26.1	26.5	19.9	16.7	2.0	2.9	*	*
18–44 years	65.3	65.2	62.1	64.7	34.3	31.9	28.2	29.2	8.6	11.8	12.7	13.4
45–64 years	60.2	55.5	51.2	48.4	36.3	32.1	26.4	24.9	19.5	18.6	20.1	18.2
45–54 years	60.2	55.6	52.3	50.1	37.4	32.0	27.8	27.2	17.1	17.1	18.7	16.2
55–64 years	60.2	55.5	49.9	46.8	35.4	32.1	24.7	22.6	21.8	20.0	21.7	20.3
65 years and over	61.6	52.6	46.5	41.3	37.5	28.1	20.2	18.8	22.7	23.3	24.5	20.7
65–74 years	61.2	52.7	46.6	41.7	37.4	28.1	19.7	19.7	22.1	23.0	24.5	19.8
75 years and over	62.3	52.4	46.4	40.8	37.6	28.0	20.8	18.0	23.5	23.7	24.5	21.6
Sex and age												
Male:												
Under 18 years	77.3	78.1	77.7	80.9	25.6	24.1	18.3	16.1	2.0	3.0	*	*
18–44 years	50.8	51.8	51.5	51.7	38.0	35.9	34.2	33.2	11.5	15.0	14.4	16.5
45–64 years	55.6	50.6	49.4	46.2	34.4	31.0	28.7	26.5	20.5	19.2	19.8	19.2
65 years and over	58.2	51.2	43.1	37.0	35.6	27.7	19.3	18.1	22.3	23.3	23.8	18.8
Female:												
Under 18 years	78.5	81.1	82.0	84.0	26.6	29.1	21.7	17.4	2.0	2.8	*	*
18–44 years	72.1	71.3	67.2	70.9	32.5	30.0	25.3	27.3	7.3	10.3	11.9	12.0
45–64 years	63.4	58.8	52.5	50.0	37.7	32.8	24.9	23.7	18.9	18.2	20.2	17.5
65 years and over	63.9	53.5	48.9	44.5	38.7	28.3	20.9	19.5	22.9	23.3	25.0	22.2
Race and age ²												
White:												
Under 18 years	77.6	79.2	78.5	82.3	26.4	27.1	21.2	17.2	2.0	2.3	*	*
18–44 years	64.8	64.4	61.4	62.8	34.5	31.9	29.2	30.2	8.6	10.6	11.0	11.6
45–64 years	59.6	54.2	49.3	46.0	36.0	31.5	27.3	25.3	19.2	17.6	17.1	15.6
65 years and over	61.4	51.9	45.1	39.6	36.6	27.5	20.3	19.0	23.3	23.1	23.0	19.0
Black or African American:												
Under 18 years	79.9	85.5	87.3	82.8	23.7	20.2	*	*12.9	*2.2	9.8	*	*
18–44 years	68.5	68.3	65.0	69.4	31.7	31.9	22.0	26.5	9.0	18.1	20.9	*15.3
45–64 years	66.1	61.6	61.7	58.9	38.6	31.2	23.3	23.1	22.6	26.9	35.9	29.5
65 years and over	64.6	58.6	52.8	51.0	49.0	28.9	*18.5	15.8	14.2	28.7	33.4	*32.9

See footnotes at end of table.

Table 92 (page 2 of 2). Visits to primary care generalist and specialist physicians, by selected characteristics and type of physician: United States, selected years 1980–2007

[Data are based on reporting by a sample of office-based physicians]

Age, sex, and race	Type of primary care generalist physician ¹								Specialty care physicians			
	Obstetrics and gynecology				Pediatrics				1980	1990	2000	2007
	1980	1990	2000	2007	1980	1990	2000	2007				
	Percent of all physician office visits											
Total	9.6	8.7	7.8	7.4	10.9	11.2	11.7	12.7	33.8	36.4	41.1	42.6
Under 18 years	1.3	1.2	*1.1	*1.1	48.5	48.9	57.3	62.5	22.2	20.5	20.3	17.6
18–44 years	21.7	20.8	20.4	20.7	0.7	0.7	*0.9	*1.3	34.7	34.8	37.9	35.3
45–64 years	4.2	4.6	4.5	5.0	*	*	*	*	39.8	44.5	48.8	51.6
45–54 years	5.6	6.3	5.6	6.4	*	*	*	*	39.8	44.4	47.7	49.9
55–64 years	2.9	3.1	3.3	3.6	*	*	*	*	39.8	44.5	50.1	53.2
65 years and over	1.4	1.1	1.5	*1.5	*	*	*	*	38.4	47.4	53.5	58.7
65–74 years	1.7	1.6	2.0	*2.0	*	*	*	*	38.8	47.3	53.4	58.3
75 years and over	1.0	*0.6	*1.0	*1.0	*	*	*	*	37.7	47.6	53.6	59.2
Sex and age												
Male:												
Under 18 years . . . . .	...	...	...	...	49.4	50.7	58.0	62.7	22.7	21.9	22.3	19.1
18–44 years . . . . .	...	...	...	...	1.0	0.7	*1.7	*1.6	49.2	48.2	48.5	48.3
45–64 years . . . . .	...	...	...	...	*	*	*	*	44.4	49.4	50.6	53.8
65 years and over . . . . .	...	...	...	...	*	*	*	*	41.8	48.8	56.9	63.0
Female:												
Under 18 years	2.5	2.3	2.1	*2.3	47.4	46.9	56.5	62.3	21.5	18.9	18.0	16.0
18–44 years	31.7	30.4	29.6	30.4	0.6	0.7	*	*1.1	27.9	28.7	32.8	29.1
45–64 years	6.7	7.7	7.3	8.4	*	*	*	*	36.6	41.2	47.5	50.0
65 years and over	2.1	1.8	2.6	*2.7	*	*	*	*	36.1	46.5	51.1	55.5
Race and age ²												
White:												
Under 18 years	1.1	1.0	*1.2	*1.0	48.2	48.8	54.7	62.3	22.4	20.8	21.5	17.7
18–44 years	21.0	21.1	20.4	19.5	0.7	0.7	*0.8	*1.4	35.2	35.6	38.6	37.2
45–64 years	4.1	4.8	4.7	4.8	*	*	*	*	40.4	45.8	50.7	54.0
65 years and over	1.4	1.2	1.5	*1.4	*	*	*	*	38.6	48.1	54.9	60.4
Black or African American:												
Under 18 years	2.8	*3.4	*	*	51.2	52.1	75.0	64.5	20.1	14.5	*12.7	17.2
18–44 years	27.1	17.9	20.7	26.6	*	*	*	*	31.5	31.7	35.0	30.6
45–64 years	4.8	3.5	*2.4	*	*	*	*	*	33.9	38.4	38.3	41.1
65 years and over	*	*	*	*	*	*	*	*	35.4	41.4	47.2	49.0

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have a RSE of greater than 30%.

... Category not applicable.

¹Type of physician is based on physician's self-designated primary area of practice. Primary care generalist physicians are defined as practitioners in the fields of general and family practice, general internal medicine, general obstetrics and gynecology, and general pediatrics and exclude primary care specialists. Primary care generalists in general and family practice exclude primary care specialties, such as sports medicine and geriatrics. Primary care internal medicine physicians exclude internal medicine specialists, such as allergists, cardiologists, and endocrinologists. Primary care obstetrics and gynecology physicians exclude obstetrics and gynecology specialties, such as gynecological oncology, maternal and fetal medicine, obstetrics and gynecology critical care medicine, and reproductive endocrinology. Primary care pediatricians exclude pediatric specialists, such as adolescent medicine specialists, neonatologists, pediatric allergists, and pediatric cardiologists. See [Appendix II, Physician specialty](#).

²Estimates by racial group should be used with caution because information on race was collected from medical records. In 2007, race data were missing and imputed for 32% of visits to physician offices. Information on the race imputation process used in each data year is available in the public use file documentation. Available from: <http://www.cdc.gov/nchs/ahcd.htm>. Starting with 1999 data, the instruction for the race item on the Patient Record Form was changed so that more than one race could be recorded. In previous years only one racial category could be checked. Estimates for racial groups presented in this table are for visits where only one race was recorded. Because of the small number of responses with more than one racial group checked, estimates for visits with multiple races checked are unreliable and are not presented.

NOTES: This table presents data on visits to physician offices and excludes visits to other sites, such as hospital outpatient and emergency departments. See [Appendix II, Office visits](#). In 1980, the survey excluded Alaska and Hawaii. Data for all other years include all 50 states and the District of Columbia. Visits with specialty of physician unknown are excluded. Starting with *Health, United States, 2005*, data for 2001 and later years for physician offices use a revised weighting scheme. See [Appendix I, National Ambulatory Medical Care Survey \(NAMCS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

**Table 93 (page 1 of 2). Dental visits in the past year, by selected characteristics:
United States, 1997, 2006, and 2007**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	2 years and over			2–17 years			18–64 years			65 years and over ¹		
	1997	2006	2007	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent of persons with a dental visit in the past year ²												
Total ³	65.1	64.9	65.3	72.7	75.7	76.7	64.1	62.4	62.7	54.8	58.0	57.7
Sex												
Male	62.9	61.5	62.8	72.3	75.0	76.5	60.4	57.5	58.8	55.4	55.3	56.4
Female	67.1	68.2	67.7	73.0	76.5	76.9	67.7	67.1	66.5	54.4	60.0	58.7
Race ⁴												
White only	66.4	65.7	66.4	74.0	76.4	77.2	65.7	63.3	64.2	56.8	59.5	59.7
Black or African American only	58.9	59.0	59.3	68.8	72.4	75.0	57.0	55.6	55.0	35.4	40.7	40.1
American Indian or Alaska Native only	55.1	55.4	57.8	66.8	72.0	85.4	49.9	51.0	45.6	*	*	*41.2
Asian only	62.5	69.8	64.3	69.9	75.5	70.7	60.3	68.7	63.7	53.9	66.0	55.3
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*	---	*	*
2 or more races	---	65.8	62.7	---	78.1	75.3	---	54.9	55.2	---	62.9	*41.6
Black or African American; White American Indian or Alaska Native; White	---	72.3	70.7	---	79.5	76.6	---	59.5	57.7	---	*	*70.8
White	---	55.7	55.6	---	69.6	75.9	---	48.5	51.0	---	62.9	*35.7
Hispanic origin and race ⁴												
Hispanic or Latino	54.0	53.0	55.8	61.0	66.3	71.2	50.8	47.2	48.9	47.8	44.2	48.0
Not Hispanic or Latino	66.4	66.9	67.0	74.7	78.1	78.1	65.7	64.9	65.1	55.2	58.9	58.4
White only	68.0	68.2	68.7	76.4	79.6	79.5	67.5	66.5	67.3	57.2	60.6	60.7
Black or African American only	58.8	59.0	59.3	68.8	72.4	75.0	56.9	55.5	55.1	35.3	40.9	39.6
Percent of poverty level ⁵												
Below 100%	50.5	51.5	51.7	62.0	67.5	67.3	46.9	44.8	46.7	31.5	36.9	32.8
100%–less than 200%	50.8	52.0	52.8	62.5	68.4	70.2	48.3	46.8	47.0	40.8	44.5	43.3
200% or more	72.5	71.7	71.5	80.1	81.5	82.0	71.2	69.6	69.3	65.9	67.3	66.9
Hispanic origin and race and percent of poverty level ^{4,5}												
Hispanic or Latino:												
Below 100%	45.7	46.6	47.6	55.9	63.1	66.8	39.2	36.7	35.0	33.6	29.7	36.9
100%–less than 200%	47.2	47.5	51.0	53.8	62.2	69.4	43.5	40.7	40.6	47.9	36.5	48.1
200% or more	65.1	60.5	63.2	73.7	72.9	76.5	62.3	56.1	59.3	58.8	59.5	53.1
Not Hispanic or Latino:												
White only:												
Below 100%	51.7	55.1	53.9	64.4	71.6	65.1	50.6	50.6	54.8	32.0	41.4	32.5
100%–less than 200%	52.4	53.2	53.1	66.1	71.5	70.0	50.4	48.6	49.3	42.2	46.7	44.4
200% or more	73.8	73.4	73.6	81.3	83.3	83.5	72.7	71.7	71.7	67.0	68.1	69.0
Black or African American only:												
Below 100%	52.8	49.3	51.0	66.1	67.1	70.1	46.2	39.9	40.7	27.7	27.8	28.6
100%–less than 200%	48.7	52.8	53.8	61.2	70.1	72.1	46.3	48.7	48.6	26.9	28.6	28.7
200% or more	67.7	67.7	66.1	77.1	79.2	81.9	66.1	65.1	63.4	49.8	58.3	51.0

See footnotes at end of table.

Table 93 (page 2 of 2). Dental visits in the past year, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	2 years and over			2–17 years			18–64 years			65 years and over ¹		
	1997	2006	2007	1997	2006	2007	1997	2006	2007	1997	2006	2007
Percent of persons with a dental visit in the past year ²												
Geographic region												
Northeast	69.6	72.0	70.7	77.5	82.6	79.3	69.6	70.7	70.3	55.5	57.6	58.4
Midwest	68.4	67.0	67.2	76.4	78.2	78.7	67.4	64.5	65.3	57.6	59.9	56.1
South	60.2	60.4	61.6	68.0	72.6	75.6	59.4	57.4	57.8	49.0	54.1	55.3
West	65.0	64.6	65.2	71.5	72.6	74.4	62.9	62.0	62.2	61.9	63.1	63.0
Location of residence												
Within MSA ⁶	66.7	66.5	66.4	73.6	76.3	77.1	65.7	63.9	63.8	57.6	61.1	59.5
Outside MSA ⁶	59.1	57.6	60.0	69.3	73.0	74.8	58.0	54.7	57.0	46.1	46.8	51.6

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

-- Data not available.

¹Based on the 1997–2007 National Health Interview Surveys, about 25%–30% of persons 65 years and over were edentulous (having lost all their natural teeth). In 1997–2007 about 68%–70% of older dentate persons compared with 16%–21% of older edentate persons had a dental visit in the past year.

²Respondents were asked “About how long has it been since you last saw or talked to a dentist?” See [Appendix II, Dental visit](#).

³Includes all other races not shown separately.

⁴The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁵Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 25%–29% of persons 2 years of age and over in 1997–1998 and 31%–34% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁶MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997 the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample child and sample adult questionnaires.

Table 94 (page 1 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class ¹ (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
All ages						
Drug visits ³	189.8	239.4	156.5	201.9	221.5	275.2
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	400.3	684.2	321.1	568.4	475.6	795.0
Antidepressants (depression and related disorders)	13.8	35.5	9.1	22.8	18.2	47.7
Hypertension control drugs, not otherwise specified (high blood pressure)	6.0	32.1	4.1	28.1	7.8	35.9
Hyperlipidemia (high cholesterol)	5.4	30.8	5.4	31.0	5.4	30.6
Antiasthmatics/bronchodilators (asthma, breathing)	13.1	29.0	11.7	25.6	14.4	32.1
NSAID ⁶ (pain relief)	19.9	28.8	16.0	24.4	23.7	33.1
Nonnarcotic analgesics (pain relief)	14.4	28.7	13.0	27.3	15.7	30.0
Acid/peptic disorders (gastrointestinal reflux, ulcers)	12.0	25.1	9.8	20.8	14.1	29.2
Blood glucose/sugar regulators (diabetes)	9.5	24.0	8.6	24.4	10.4	23.6
Antihistamines (allergies)	13.7	23.4	10.8	18.3	16.4	28.2
Vitamins/minerals (dietary supplements)	9.2	21.2	3.4	12.6	14.8	29.5
Beta blockers (high blood pressure, heart disease)	5.9	20.0	5.1	17.7	6.7	22.3
ACE inhibitors (high blood pressure, heart disease)	9.6	19.9	9.0	19.5	10.2	20.4
Narcotic analgesics (pain relief)	11.2	19.7	10.3	15.9	12.2	23.3
Diuretics (high blood pressure, heart disease)	10.2	19.5	7.8	15.5	12.6	23.3
Estrogens/progestins (menopause, hot flashes)	...	...	...	...	19.8	15.1
Under 18 years						
Drug visits ³	153.9	178.2	152.3	183.2	155.6	173.0
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	261.3	338.4	255.6	350.2	267.3	326.1
Antiasthmatics/bronchodilators (asthma, breathing)	13.4	29.1	14.8	34.2	11.9	23.7
Penicillins (bacterial infections)	37.2	27.5	36.4	29.4	38.0	25.5
Antihistamines (allergies)	17.5	25.1	16.7	23.7	18.4	26.5
Nonnarcotic analgesics (pain relief)	12.1	15.5	10.4	15.7	13.9	15.3
NSAID ⁶ (pain relief)	7.4	14.6	6.9	15.6	7.9	13.5
Cephalosporins (bacterial infections)	18.1	11.3	18.8	11.6	17.3	10.9
Antitussives/expectorants (cough and cold, congestion)	11.8	11.1	11.0	10.2	12.7	11.9
Erythromycins/lincosamides (infections)	10.2	10.9	11.0	10.1	9.4	11.6
Adrenal corticosteroids (anti-inflammatory)	4.3	10.5	4.7	12.4	3.9	8.6
Nasal corticosteroid inhalants (asthma, breathing, allergies)	3.5	10.1	3.5	10.9	3.5	9.3
Nasal decongestants (congestion)	14.0	9.9	12.4	9.9	15.7	10.0
Anorexiant/CNS stimulants (attention deficit disorder, hyperactivity)	3.9	8.9	5.6	13.8	2.1	3.9
Antidepressants (depression and related disorders)	1.9	7.5	1.9	7.9	1.9	7.0
18–44 years						
Drug visits ³	136.2	159.9	90.9	109.0	180.4	210.0
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	251.0	356.1	168.8	244.7	331.2	466.1
Antidepressants (depression and related disorders)	14.0	29.3	9.3	17.8	18.5	40.5
NSAID ⁶ (pain relief)	16.7	19.3	14.5	16.5	18.8	22.1
Narcotic analgesics (pain relief)	11.7	17.7	10.8	14.3	12.7	21.0
Antihistamines (allergies)	10.8	17.5	7.5	11.4	14.1	23.6
Vitamins/minerals (dietary supplements)	11.8	15.3	1.1	3.2	22.2	27.3
Antiasthmatics/bronchodilator (asthma, breathing)	6.9	14.0	3.3	8.7	10.3	19.3
Acid/peptic disorders (gastrointestinal reflux, ulcers)	6.6	11.6	5.3	8.3	7.9	14.9
Anticonvulsants (epilepsy, seizure and related disorders)	4.5	10.6	3.8	8.0	5.1	13.3
Nonnarcotic analgesics (pain relief)	6.0	8.7	4.5	6.7	7.4	10.7
Antitussives/expectorants (cough and cold, congestion)	7.7	8.1	5.8	5.9	9.5	10.3
Nasal corticosteroid inhalants (asthma, breathing, allergies)	4.7	8.1	3.3	6.2	6.1	9.9
Antianxiety agents (generalized anxiety and related disorders)	5.8	8.0	4.5	5.3	7.1	10.6
Erythromycins/lincosamides (infections)	7.5	7.9	5.4	6.2	9.5	9.6
Hypertension control drugs, not otherwise specified (high blood pressure)	1.5	7.9	1.0	7.9	2.0	7.8
Contraceptive agents (prevent pregnancy)	...	...	...	...	13.4	20.6

See footnotes at end of table.

Table 94 (page 2 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class ¹ (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
45–64 years						
Drug visits ³	222.4	290.3	185.0	249.6	257.4	328.6
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	505.1	912.0	403.2	780.7	600.4	1,035.9
Antidepressants (depression and related disorders)	23.5	59.8	14.9	39.8	31.5	78.6
Hyperlipidemia (high cholesterol)	10.4	53.4	12.0	58.1	8.8	49.0
Hypertension control drugs, not otherwise specified (high blood pressure)	9.4	52.5	6.9	50.6	11.7	54.3
Blood glucose/sugar regulators (diabetes)	17.7	44.4	16.7	49.0	18.7	40.0
NSAID ⁶ (pain relief)	30.3	41.2	23.9	34.8	36.4	47.3
Acid/peptic disorders (gastrointestinal reflux, ulcers)	19.8	38.4	18.3	33.6	21.3	43.0
Nonnarcotic analgesics (pain relief)	16.3	35.7	15.6	37.3	17.0	34.3
Antiasthmatics/bronchodilators (asthma, breathing)	14.4	34.0	11.4	27.3	17.1	40.3
ACE inhibitors (high blood pressure, heart disease)	16.8	33.4	17.7	35.0	16.0	31.9
Narcotic analgesics (pain relief)	17.5	31.4	17.0	27.7	18.0	34.9
Beta blockers (high blood pressure, heart disease)	10.4	28.5	9.8	27.5	11.0	29.4
Antihistamines (allergies)	13.5	27.3	9.1	19.9	17.7	34.3
Diuretics (high blood pressure, heart disease)	13.6	26.5	11.2	22.3	15.8	30.4
Vitamins/minerals (dietary supplements)	6.4	23.3	4.0	19.0	8.6	27.3
Estrogens/progestins (menopause, hot flashes) . . . . .	...	...	...	...	55.7	30.4
65 years and over						
Drug visits ³	399.4	515.3	378.1	481.1	414.7	540.5
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	1,047.4	1,982.0	956.9	1,820.3	1,112.5	2,101.6
Hypertension control drugs, not otherwise specified (high blood pressure)	29.1	133.3	22.7	120.7	33.8	142.6
Hyperlipidemia (high cholesterol)	24.7	128.1	25.1	135.0	24.5	123.0
Nonnarcotic analgesics (pain relief)	44.9	104.7	49.0	109.3	42.0	101.3
Diuretics (high blood pressure, heart disease)	55.2	95.4	48.5	86.0	60.0	102.4
Beta blockers (high blood pressure, heart disease)	24.9	92.7	22.8	89.5	26.4	95.0
Blood glucose/sugar regulators (diabetes)	37.5	86.4	38.0	95.7	37.1	79.6
Acid/peptic disorders (gastrointestinal reflux, ulcers)	42.2	84.2	36.0	78.8	46.6	88.2
ACE inhibitors (high blood pressure, heart disease)	42.6	81.7	41.2	84.8	43.6	79.4
Vitamins/minerals (dietary supplements)	17.1	69.8	13.1	54.4	20.0	81.2
Calcium channel blockers (high blood pressure, heart disease)	57.3	69.5	52.2	64.0	60.9	73.5
Antiasthmatics/bronchodilators (asthma, breathing)	31.3	65.7	37.1	62.7	27.0	67.9
Antidepressants (depression and related disorders)	23.5	64.7	16.7	38.9	28.5	83.7
NSAID ⁶ (pain relief)	41.8	63.5	31.9	51.3	49.0	72.5
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots)	20.7	56.8	24.0	65.5	18.3	50.4
Estrogens/progestins (menopause, hot flashes) . . . . .	...	...	...	...	37.1	28.6
65–74 years						
Drug visits ³	362.8	470.5	323.0	435.7	394.9	499.7
Visits with at least one drug per 100 population ²						
Number of drugs per 100 population ⁴						
Total number of drugs ⁵	930.5	1,747.5	804.7	1,632.9	1,032.1	1,843.9
Hyperlipidemia (high cholesterol)	27.3	127.5	27.1	141.7	27.4	115.5
Hypertension control drugs, not otherwise specified (high blood pressure)	24.8	114.6	19.2	103.8	29.3	123.6
Blood glucose/sugar regulators (diabetes)	35.7	87.9	32.4	97.2	38.4	80.1
Nonnarcotic analgesics (pain relief)	38.0	86.0	40.5	93.7	35.9	79.5
Beta blockers (high blood pressure, heart disease)	23.5	78.8	20.4	79.2	26.0	78.4
Acid/peptic disorders (gastrointestinal reflux, ulcers)	38.7	78.0	30.6	73.0	45.2	82.3
ACE inhibitors (high blood pressure, heart disease)	37.1	71.5	35.6	77.9	38.3	66.1
Diuretics (high blood pressure, heart disease)	40.1	71.4	32.4	66.7	46.4	75.3
NSAID ⁶ (pain relief)	42.0	64.8	31.2	53.0	50.8	74.8
Antiasthmatics/bronchodilators (asthma, breathing)	31.1	63.8	33.0	58.7	29.5	68.1
Antidepressants (depression and related disorders)	22.7	62.9	14.2	40.0	29.6	82.1
Calcium channel blockers (high blood pressure, heart disease)	48.9	61.2	46.2	58.7	51.2	63.2
Vitamins/minerals (dietary supplements)	14.1	56.4	10.1	47.5	17.4	63.9
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots)	14.9	42.1	17.2	50.1	12.9	35.4
Estrogens/progestins (menopause, hot flashes) . . . . .	...	...	...	...	47.5	37.6

See footnotes at end of table.

Table 94 (page 3 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class ¹ (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
75 years and over	Visits with at least one drug per 100 population ²					
Drug visits ³	449.2	564.7	466.3	539.8	438.7	580.6
	Number of drugs per 100 population ⁴					
Total number of drugs ⁵	1,206.8	2,240.8	1,200.9	2,062.6	1,210.4	2,354.8
Hypertension control drugs, not otherwise specified (high blood pressure)	35.1	154.0	28.4	142.6	39.2	161.3
Hyperlipidemia (high cholesterol)	21.3	128.7	21.8	126.2	21.0	130.4
Nonnarcotic analgesics (pain relief)	54.4	125.4	62.6	129.4	49.4	122.8
Diuretics (high blood pressure, heart disease)	75.8	122.0	74.5	111.1	76.6	129.0
Beta blockers (high blood pressure, heart disease)	26.8	108.0	26.5	102.9	26.9	111.2
ACE inhibitors (high blood pressure, heart disease)	50.2	93.0	50.2	93.7	50.1	92.5
Acid/peptic disorders (gastrointestinal reflux, ulcers)	47.0	91.1	44.7	86.4	48.3	94.1
Blood glucose/sugar regulators (diabetes)	39.8	84.8	46.9	93.7	35.5	79.1
Vitamins/minerals (dietary supplements)	21.2	84.6	18.0	63.3	23.2	98.2
Calcium channel blockers (high blood pressure, heart disease)	68.6	78.6	61.8	70.7	72.7	83.6
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots)	28.6	73.1	34.9	85.4	24.7	65.2
Antiasthmatics/bronchodilators (asthma, breathing)	31.5	67.7	43.7	67.8	24.0	67.7
Antidepressants (depression and related disorders)	24.6	66.6	20.7	37.5	27.0	85.3
NSAID ⁶ (pain relief)	41.5	62.0	33.1	49.1	46.7	70.2
Thyroid/antithyroid (hyper- and hypothyroidism)	27.1	61.0	15.1	36.3	34.4	76.7

. . . Category not applicable.

¹The NDC Directory therapeutic class is a general therapeutic or pharmacological classification scheme for drug products reported to the Food and Drug Administration under the provisions of the Drug Listing Act. Drugs are classified based on the NDC Directory classifications for 2005 data. See [Appendix II, National Drug Code Directory therapeutic class; Table XII](#).

²Estimated number of drug visits during the 2-year period divided by the sum of population estimates for both years times 100.

³Drug visits are physician office and hospital outpatient department visits in which at least one prescription or nonprescription drug was recorded on the patient record form.

⁴Estimated number of drugs recorded during visits during the 2-year period divided by the sum of population estimates for both years times 100.

⁵Until 2002, up to six prescription and nonprescription medications were recorded on the patient record form. Starting with 2003 data, up to eight prescription and nonprescription medications are recorded on the patient record form. If 2004–2005 data were restricted to six instead of eight drugs, the 2004–2005 total drug rate for all ages would be 6.4% lower. See [Appendix II, Drug](#).

⁶NSAID is nonsteroidal anti-inflammatory drug. Aspirin was not included as an NSAID in this analysis. See [Appendix II, National Drug Code Directory therapeutic class](#).

NOTES: Drugs recorded on the patient record form are those prescribed, continued, administered, or provided during a physician office or hospital outpatient department visit. Numbers have been revised and differ from previous editions of *Health, United States*.

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

Table 95. Prescription drug use in the past month by sex, age, race and Hispanic origin: United States, 1988–1994 and 2003–2006

[Data are based on a sample of the civilian noninstitutionalized population]

Sex and age	Not Hispanic or Latino							
	All persons ¹		White only ²		Black or African American only ²		Mexican ^{2,3}	
	1988–1994	2003–2006	1988–1994	2003–2006	1988–1994	2003–2006	1988–1994	2003–2006
Percent of population with at least one prescription drug in past month								
Both sexes, age-adjusted ⁴	39.1	46.9	41.1	50.8	36.9	41.9	31.7	33.3
Male	32.7	41.7	34.2	45.1	31.1	37.1	27.5	28.4
Female	45.0	51.9	47.6	56.3	41.4	45.7	36.0	38.2
Both sexes, crude	37.8	47.3	41.4	53.5	31.2	38.7	24.0	25.2
Male	30.6	41.2	33.5	46.9	25.5	33.0	20.1	21.1
Female	44.6	53.2	48.9	59.9	36.2	43.7	28.1	29.8
Under 18 years	20.5	24.7	22.9	28.5	14.8	19.4	16.1	16.3
18–44 years	31.3	37.5	34.3	43.3	27.8	29.9	21.1	19.8
45–64 years	54.8	65.2	55.5	67.3	57.5	63.3	48.1	53.3
65 years and over	73.6	89.4	74.0	90.6	74.5	87.4	67.7	74.5
Male:								
Under 18 years	20.4	25.3	22.3	29.2	15.5	19.8	16.3	17.1
18–44 years	21.5	28.1	23.5	32.5	21.1	22.2	14.9	14.0
45–64 years	47.2	58.4	48.1	60.5	48.2	57.4	43.8	46.9
65 years and over	67.2	88.2	67.4	90.0	64.4	82.8	61.3	63.9
Female:								
Under 18 years	20.6	24.0	23.6	27.8	14.2	19.0	16.0	15.5
18–44 years	40.7	46.6	44.7	54.0	33.4	36.3	28.1	26.7
45–64 years	62.0	71.6	62.6	74.0	64.4	68.1	52.2	59.5
65 years and over	78.3	90.3	78.8	91.0	81.3	90.5	73.0	83.4
Percent of population with three or more prescription drugs in past month								
Both sexes, age-adjusted ⁴	11.8	21.1	12.4	22.8	12.6	19.2	9.0	14.6
Male	9.4	18.1	9.9	19.3	10.2	17.3	7.0	11.4
Female	13.9	23.9	14.6	26.1	14.3	20.7	11.0	17.8
Both sexes, crude	11.0	21.4	12.5	25.3	9.2	16.6	4.8	8.5
Male	8.3	17.5	9.5	20.8	7.0	14.0	3.4	6.1
Female	13.6	25.1	15.4	29.7	11.1	18.8	6.4	11.1
Under 18 years	2.4	4.0	3.2	4.9	1.5	3.4	*1.2	2.2
18–44 years	5.7	10.6	6.3	12.9	5.4	8.1	3.0	4.4
45–64 years	20.0	35.4	20.9	37.0	21.9	33.8	16.0	27.8
65 years and over	35.3	63.1	35.0	64.8	41.2	60.7	31.3	49.0
Male:								
Under 18 years	2.6	4.0	3.3	4.6	1.7	4.3	*	2.8
18–44 years	3.6	6.9	4.1	8.4	4.2	6.8	*1.8	*1.9
45–64 years	15.1	30.0	15.8	31.1	18.7	28.9	11.6	21.9
65 years and over	31.3	60.8	30.9	62.8	31.7	55.7	27.6	39.9
Female:								
Under 18 years	2.3	4.0	3.0	5.2	*1.2	2.5	*1.5	*1.6
18–44 years	7.6	14.3	8.5	17.4	6.4	9.2	4.3	7.3
45–64 years	24.7	40.6	25.8	42.9	24.3	37.7	20.3	33.5
65 years and over	38.2	64.8	38.0	66.3	47.7	63.9	34.5	56.5

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹Includes persons of all races and Hispanic origins, not just those shown separately.

²Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

³Persons of Mexican origin may be of any race.

⁴Age-adjusted to the 2000 standard population using four age groups: Under 18 years, 18–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

NOTES: See [Appendix II, Drug](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 96. Dietary supplement use among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006

[Data are based on interviews of a sample of the civilian noninstitutionalized population]

Sex, age, race and Hispanic origin ¹ , and percent of poverty level	Any supplement use in past month ²			Any vitamin D supplement use in past month ³			Any folate (folic acid) supplement use in past month ⁴		
	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006
20 years and over, age-adjusted ⁵									
Both sexes ⁶	42.1	52.3	53.7	28.1	37.3	39.9	30.0	38.1	39.8
Male	35.7	46.8	47.4	24.1	31.8	34.8	25.9	33.6	36.0
Female	47.8	57.4	59.6	31.8	42.3	44.5	33.8	42.2	43.4
Not Hispanic or Latino:									
White only, male	37.5	52.1	51.8	25.8	35.7	38.5	27.9	37.7	39.9
White only, female	50.9	63.4	64.3	35.0	48.3	49.5	37.3	48.2	48.5
Black or African American only, male	29.5	30.4	32.4	18.3	19.8	21.5	18.0	20.7	23.4
Black or African American only, female	38.2	39.7	40.9	22.5	26.6	27.4	23.5	27.5	27.9
Mexican male	28.9	31.2	29.4	16.9	19.3	20.7	18.4	21.1	19.9
Mexican female	36.8	44.0	44.0	21.7	29.2	31.1	23.1	27.9	29.3
Percent of poverty level: ⁷									
Below 100%	30.0	37.8	37.4	16.6	24.5	25.3	18.1	24.1	25.1
100%–less than 200%	36.0	42.7	47.0	23.1	27.7	31.6	24.0	27.7	31.4
200% or more	46.9	59.1	58.7	32.3	43.6	45.2	34.7	44.7	45.2
20 years and over, crude									
Both sexes ⁶	41.8	52.1	53.9	28.1	37.3	40.0	30.0	38.0	40.0
Male	35.3	46.2	47.0	23.9	31.6	34.6	25.7	33.4	35.8
Female	47.7	57.6	60.2	31.8	42.5	44.9	33.8	42.3	43.8
Not Hispanic or Latino:									
White only, male	37.4	52.4	52.4	25.7	36.0	38.9	27.8	38.0	40.4
White only, female	51.1	64.1	66.0	35.0	48.9	50.6	37.3	48.5	49.3
Black or African American only, male	28.9	29.7	31.6	18.6	19.6	21.1	18.3	20.5	22.6
Black or African American only, female	37.0	39.5	40.4	22.7	26.5	27.3	23.7	27.6	27.7
Mexican male	25.6	27.0	24.0	15.3	17.0	16.9	16.9	18.3	16.3
Mexican female	34.9	40.1	39.8	21.6	26.5	28.0	22.9	26.1	27.6
Percent of poverty level: ⁷									
Below 100%	29.4	36.3	35.3	16.9	23.7	24.4	18.2	23.6	24.1
100%–less than 200%	36.8	43.5	48.0	23.9	28.1	32.6	24.8	28.0	32.2
200% or more	46.6	59.0	59.0	32.3	43.6	45.4	34.8	44.9	45.4
Male									
20–34 years	31.0	34.4	34.6	21.7	24.3	25.5	23.3	24.7	25.8
35–44 years	36.8	45.0	42.5	26.0	30.8	32.4	28.3	34.0	33.6
45–54 years	32.8	48.8	50.6	23.3	35.1	37.4	25.1	37.1	39.2
55–64 years	42.9	57.0	57.2	27.9	39.1	43.5	30.0	40.9	44.5
65–74 years	39.4	59.9	62.8	24.1	36.8	42.7	25.9	39.4	45.2
75 years and over	40.9	59.2	65.3	22.7	36.0	46.1	23.8	37.7	47.7
Female									
20–34 years	43.6	47.7	47.6	32.7	35.3	37.3	35.1	37.0	38.3
35–44 years	46.5	54.3	51.4	31.6	39.0	38.0	34.1	40.7	37.0
45–54 years	47.8	60.4	64.2	31.9	45.6	45.7	33.3	46.1	45.1
55–64 years	52.3	66.7	74.2	33.2	50.6	55.2	35.5	48.2	52.8
65–74 years	52.9	66.4	75.1	29.6	48.7	57.2	30.7	43.6	53.8
75 years and over	54.0	68.2	73.8	29.5	48.9	53.8	30.3	44.8	49.1

¹Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

²Respondents were asked "Have you used or taken any vitamins, minerals or other dietary supplements in the past month?" To facilitate their response, respondents were shown a card with some examples of different types of dietary supplements. The question wording differs slightly on the earlier, 1988–1994, survey. See [Appendix II, Dietary supplement](#).

³Includes supplements with vitamin D, cholecalciferol, calciferol, ergocalciferol, or calcitriol as an ingredient. ⁴Includes supplements with folate or folic acid as an ingredient. ⁵Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over. Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

⁶Includes persons of all races and Hispanic origins, not just those shown separately. ⁷Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (5% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: For more information see [Appendix II, Dietary supplement](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

Table 97. Admissions to mental health organizations, by type of service and organization: United States, selected years 1986–2004

[Data are based on inventories of mental health organizations]

<i>Service and organization</i>	<i>1986</i>	<i>1990</i>	<i>2002</i>	<i>2004</i>	<i>1986</i>	<i>1990</i>	<i>2002</i>	<i>2004</i>
	Admissions in thousands ¹				Admissions per 100,000 civilian population ²			
24-hour hospital and residential treatment								
All organizations	1,819	2,110	2,158	2,713	759.9	833.0	738.9	910.5
State and county mental hospitals	333	283	234	266	139.1	111.6	80.1	89.1
Private psychiatric hospitals	235	411	477	599	98.0	162.4	163.3	200.9
Nonfederal general hospital psychiatric services ³	849	962	1,087	1,533	354.8	379.9	372.2	514.6
Department of Veterans Affairs medical centers ⁴	180	203	158	---	75.1	80.3	54.1	---
Residential treatment centers for emotionally disturbed children	25	50	63	61	10.2	19.8	21.6	20.3
All other organizations ⁵	198	200	139	255	82.7	79.0	47.6	85.5
Less than 24-hour care ⁶								
All organizations	2,955	3,377	4,099	4,667	1,233.4	1,333.3	1,403.2	1,566.6
State and county mental hospitals	68	50	62	130	28.4	19.7	21.2	43.6
Private psychiatric hospitals	132	163	598	447	55.2	64.5	204.7	150.1
Nonfederal general hospital psychiatric services	533	661	681	900	222.4	260.8	233.0	302.2
Department of Veterans Affairs medical centers ⁴	133	235	99	---	55.3	92.8	33.9	---
Residential treatment centers for emotionally disturbed children	67	100	222	194	28.1	39.3	75.8	65.2
All other organizations ⁵	2,022	2,168	2,438	2,995	844.0	856.2	834.3	1,005.4

--- Data not available.

¹Admissions sometimes are referred to as additions. See [Appendix II, Admission](#).

²Civilian population estimates for 2000 and beyond are based on the 2000 census as of July 1; population estimates for 1992–1998 are 1990 postcensal estimates.

³These data exclude mental health care provided in nonpsychiatric units of hospitals such as general medical units.

⁴Department of Veterans Affairs medical centers (VA general hospital psychiatric services and VA psychiatric outpatient clinics) were dropped from the survey as of 2004.

⁵Includes freestanding psychiatric outpatient clinics, partial care organizations, and multiservice mental health organizations. See [Appendix I, Survey of Mental Health Organizations](#).

⁶Formerly reported as partial care and outpatient treatment, the survey format was changed in 1994 and the reporting of these services was combined due to similarities in the care provided. These data exclude private office-based mental health care.

NOTES: Data for 1990, 1992, 1994, 1998, 2000, and 2002 are revised final estimates and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (CMHS). Revised 1990, 1992, 1994, 1998, 2000, and 2002 Estimates from the Survey of Mental Health Organizations. 2004 Survey of Mental Health Organizations, unpublished data.

Table 98 (page 1 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays ¹			Two or more hospital stays ¹		
	1997	2006	2007	1997	2006	2007
	Percent					
1 year and over, age-adjusted ^{2,3}	7.8	7.3	7.4	1.8	1.8	1.9
1 year and over, crude ²	7.7	7.3	7.5	1.7	1.8	1.9
Age						
1–17 years	2.8	2.6	2.5	0.5	0.4	0.5
1–5 years	3.9	3.7	3.5	0.7	0.6	0.7
6–17 years	2.3	2.1	2.1	0.4	0.4	0.4
18–44 years	7.4	6.6	6.8	1.2	1.2	1.2
18–24 years	7.9	6.4	6.3	1.3	1.0	1.4
25–44 years	7.3	6.7	6.9	1.2	1.2	1.1
45–64 years	8.2	8.1	8.3	2.2	2.3	2.5
45–54 years	6.9	6.8	7.2	1.7	1.9	2.0
55–64 years	10.2	9.8	9.8	2.9	2.9	3.1
65 years and over	18.0	17.3	17.4	5.4	5.3	5.5
65–74 years	16.1	14.2	14.7	4.8	4.4	4.3
75 years and over	20.4	20.8	20.6	6.2	6.2	7.0
1–64 years						
Total, 1–64 years ^{2,4}	6.3	5.8	5.9	1.3	1.2	1.3
Sex						
Male	4.5	4.2	4.3	1.0	1.0	1.1
1–17 years	2.9	2.6	2.7	0.6	0.4	0.5
18–44 years	3.6	3.3	3.3	0.6	0.6	0.7
45–54 years	6.0	6.3	7.0	1.4	1.9	2.0
55–64 years	11.1	9.6	9.6	3.0	2.9	3.1
Female	8.0	7.4	7.5	1.6	1.5	1.6
1–17 years	2.6	2.6	2.2	0.5	0.4	0.5
18–44 years	11.2	9.8	10.2	1.8	1.7	1.7
45–54 years	7.6	7.4	7.3	2.0	1.9	2.0
55–64 years	9.4	10.0	9.9	2.9	3.0	3.1
Race ^{4,5}						
White only	6.2	5.8	5.8	1.2	1.2	1.2
Black or African American only	7.6	7.0	7.0	1.9	1.8	2.0
American Indian or Alaska Native only	7.6	7.0	7.2	*	*	*
Asian only	3.9	3.5	3.8	*0.5	*0.6	*0.7
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*
2 or more races	---	6.3	8.8	---	*1.9	3.0
Hispanic origin and race ^{4,5}						
Hispanic or Latino	6.8	5.0	5.8	1.3	1.0	1.1
Not Hispanic or Latino	6.2	5.9	5.9	1.3	1.3	1.4
White only	6.1	5.9	5.8	1.2	1.2	1.3
Black or African American only	7.5	7.0	6.9	1.9	1.8	2.0
Percent of poverty level ^{4,6}						
Below 100%	10.3	8.8	8.9	2.8	2.6	2.7
100%–less than 200%	7.3	6.7	7.1	1.7	1.7	2.0
200% or more	5.3	5.0	5.1	0.9	0.9	1.0
Hispanic origin and race and percent of poverty level ^{4,5,6}						
Hispanic or Latino:						
Below 100%	9.1	6.4	8.0	2.0	1.4	1.9
100%–less than 200%	5.9	5.0	5.9	1.0	*0.8	1.1
200% or more	5.8	4.2	4.8	1.1	0.8	0.8
Not Hispanic or Latino:						
White only:						
Below 100%	10.7	10.2	9.5	3.2	3.0	2.9
100%–less than 200%	7.7	6.9	7.5	1.8	1.8	2.2
200% or more	5.3	5.2	5.2	0.9	0.9	0.9
Black or African American only:						
Below 100%	11.4	9.0	9.4	3.3	2.9	3.5
100%–less than 200%	8.0	9.2	7.9	2.1	*2.5	2.5
200% or more	5.5	5.2	5.5	1.2	1.2	1.2

See footnotes at end of table.

Table 98 (page 2 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays ¹			Two or more hospital stays ¹		
	1997	2006	2007	1997	2006	2007
Health insurance status at the time of interview ^{4,7}						
	Percent					
Insured	6.6	6.2	6.4	1.3	1.4	1.4
Private	5.6	5.1	5.3	1.0	0.9	1.0
Medicaid	16.1	13.3	13.7	4.9	4.7	4.8
Uninsured	4.8	4.4	4.1	1.0	0.8	0.8
Health insurance status prior to interview ^{4,7}						
Insured continuously all 12 months	6.5	6.0	6.3	1.3	1.3	1.4
Uninsured for any period up to 12 months	8.5	8.3	7.8	1.8	1.9	2.1
Uninsured more than 12 months	3.8	3.4	3.3	0.8	0.6	0.6
Percent of poverty level and health insurance status prior to interview ^{4,6,7}						
Below 100%:						
Insured continuously all 12 months	12.4	10.3	10.3	3.7	3.2	3.4
Uninsured for any period up to 12 months	13.7	12.8	12.8	3.4	*3.4	3.5
Uninsured more than 12 months	4.9	4.4	4.3	1.0	*1.2	*
100%–less than 200%:						
Insured continuously all 12 months	8.5	7.9	8.5	2.0	2.1	2.4
Uninsured for any period up to 12 months	9.3	9.8	9.1	*1.9	*2.0	*2.4
Uninsured more than 12 months	3.8	2.7	3.3	*0.7	*0.6	*0.9
200% or more:						
Insured continuously all 12 months	5.5	5.2	5.4	0.9	0.9	1.0
Uninsured for any period up to 12 months	5.9	5.6	5.3	*1.1	*1.3	*1.4
Uninsured more than 12 months	3.0	3.2	2.7	*0.6	*	*0.4
Geographic region ⁴						
Northeast	6.0	5.8	6.1	1.2	1.2	1.4
Midwest	6.5	6.2	6.4	1.5	1.4	1.5
South	6.8	6.5	6.0	1.4	1.4	1.4
West	5.4	4.4	5.2	0.8	1.0	1.0
Location of residence ⁴						
Within MSA ⁸	6.1	5.6	5.8	1.2	1.2	1.3
Outside MSA ⁸	7.0	7.0	6.7	1.6	1.4	1.7
65 years and over						
Total 65 years and over ^{2,9}	18.1	17.3	17.5	5.4	5.3	5.6
65–74 years	16.1	14.2	14.7	4.8	4.4	4.3
75 years and over	20.4	20.8	20.6	6.2	6.2	7.0
Sex ⁹						
Male	19.0	17.6	17.1	5.8	5.3	5.5
Female	17.5	17.1	17.8	5.1	5.2	5.6
Hispanic origin and race ^{5,9}						
Hispanic or Latino	17.3	11.8	14.3	6.2	*3.1	5.6
Not Hispanic or Latino	18.2	17.7	17.7	5.4	5.4	5.6
White only	18.3	17.8	17.7	5.4	5.4	5.4
Black or African American only	18.9	18.8	17.6	5.5	6.1	6.6
Percent of poverty level ^{6,9}						
Below 100%	20.9	18.8	22.3	6.4	5.9	9.4
100%–less than 200%	19.6	19.0	18.6	6.5	6.3	6.5
200% or more	17.1	16.4	16.5	4.9	4.7	4.7
Geographic region ⁹						
Northeast	17.2	18.8	18.4	5.1	5.0	5.9
Midwest	18.2	18.9	18.2	5.6	6.4	5.9
South	19.4	16.7	17.0	6.1	5.1	5.5
West	16.5	14.9	16.8	4.4	4.4	5.1

See footnotes at end of table.

Table 98 (page 3 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2006, and 2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays ¹			Two or more hospital stays ¹		
	1997	2006	2007	1997	2006	2007
Location of residence ⁹						
	Percent					
Within MSA ⁸	17.8	17.3	17.1	5.2	5.2	5.3
Outside MSA ⁸	19.1	17.5	19.2	6.3	5.4	6.4

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹These estimates exclude hospitalizations for institutionalized persons and those who died while hospitalized. See [Appendix II, Hospital utilization](#).

²Includes all other races not shown separately and unknown health insurance status.

³Estimates for persons 1 year and over are age-adjusted to the year 2000 standard population using six age groups: 1–17 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years of age and over. See [Appendix II, Age adjustment](#).

⁴Estimates are for persons 1–64 years of age and are age-adjusted to the year 2000 standard population using four age groups: 1–17 years, 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

⁵The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁶Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 23%–27% of persons 1–64 years of age in 1997–1998 and 29%–33% in 1999–2007; and 34%–39% of persons 65 years of age and over in 1997–1998 and 41%–45% in 1999–2007. See [Appendix II, Family income; Poverty](#).

⁷Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the Children’s Health Insurance Program (CHIP) is included with Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, CHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

⁸MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

⁹Estimates are for persons 65 years of age and over and are age-adjusted to the year 2000 standard population using two age groups: 65–74 years and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core questionnaire.

Table 99 (page 1 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006

[Data are based on a sample of hospital records]

Characteristic	1980 ¹	1985 ¹	1990	1995	2000	2004	2005	2006
Discharges per 10,000 population								
Total, age-adjusted ²	1,744.5	1,522.3	1,252.4	1,180.2	1,132.8	1,184.3	1,162.4	1,153.1
Total, crude	1,676.8	1,484.1	1,222.7	1,157.4	1,128.3	1,192.3	1,174.4	1,168.7
Age								
Under 18 years	756.5	614.0	463.5	423.7	402.6	430.2	411.0	393.9
Under 1 year	2,317.6	2,137.9	1,915.3	1,977.6	2,027.6	2,065.3	1,949.3	1,818.4
1–4 years	864.6	650.2	466.9	457.1	458.0	458.9	429.7	418.8
5–17 years	609.3	477.4	334.1	290.2	268.6	296.2	286.5	276.0
18–44 years	1,578.8	1,301.2	1,026.6	914.3	849.4	910.8	898.0	906.7
18–24 years	1,570.3	1,297.8	1,065.3	928.9	854.1	863.5	862.4	870.4
25–44 years	1,582.8	1,302.5	1,013.8	909.9	847.9	927.2	910.3	919.3
25–34 years	1,682.9	1,416.9	1,140.3	1,015.0	942.5	1,021.8	1,007.8	1,011.2
35–44 years	1,438.3	1,153.1	868.8	808.0	764.8	841.8	821.5	834.6
45–64 years	1,947.6	1,707.8	1,354.5	1,185.4	1,114.2	1,177.9	1,147.0	1,161.2
45–54 years	1,750.2	1,470.7	1,123.9	984.7	920.8	997.2	964.3	970.5
55–64 years	2,153.6	1,948.0	1,632.6	1,483.4	1,415.0	1,436.3	1,402.4	1,422.1
65 years and over	3,836.9	3,698.0	3,341.2	3,477.4	3,533.6	3,628.9	3,595.6	3,507.9
65–74 years	3,158.4	2,972.6	2,616.3	2,600.0	2,546.0	2,592.3	2,628.9	2,533.6
75 years and over	4,893.0	4,756.1	4,340.3	4,590.7	4,619.6	4,702.2	4,588.4	4,512.6
75–84 years	4,638.6	4,464.2	3,957.0	4,155.7	4,124.4	4,269.7	4,131.7	4,025.9
85 years and over	5,764.6	5,728.9	5,606.3	5,925.1	6,050.9	5,856.7	5,758.1	5,711.4
Sex ²								
Male	1,543.9	1,382.5	1,130.0	1,048.5	990.8	1,025.7	1,013.0	1,000.5
Female	1,951.9	1,675.6	1,389.5	1,317.3	1,277.3	1,349.0	1,319.6	1,312.3
Sex and age								
Male, all ages	1,390.4	1,240.2	1,002.2	941.7	910.6	964.9	959.0	954.9
Under 18 years	762.6	626.4	463.1	431.3	408.6	436.4	412.2	401.5
18–44 years	950.9	776.9	579.2	507.2	450.0	464.8	471.1	476.8
45–64 years	1,953.1	1,775.6	1,402.7	1,212.0	1,127.4	1,183.6	1,148.8	1,175.7
65–74 years	3,474.1	3,255.2	2,877.6	2,762.2	2,649.1	2,685.0	2,742.6	2,584.3
75–84 years	5,093.5	5,031.8	4,417.3	4,361.1	4,294.1	4,540.5	4,388.1	4,220.3
85 years and over	6,372.3	6,406.9	6,420.9	6,387.9	6,166.6	5,838.3	5,984.1	5,983.5
Female, all ages	1,944.0	1,712.2	1,431.7	1,362.9	1,336.6	1,411.3	1,382.2	1,375.3
Under 18 years	750.2	601.0	464.1	415.7	396.2	423.7	409.8	385.9
18–44 years	2,180.2	1,808.3	1,468.0	1,318.0	1,248.1	1,361.9	1,330.9	1,343.5
45–64 years	1,942.5	1,645.9	1,309.7	1,160.5	1,101.7	1,172.5	1,145.3	1,147.3
65–74 years	2,916.6	2,754.8	2,411.2	2,469.4	2,461.0	2,514.4	2,533.1	2,490.7
75–84 years	4,370.4	4,130.4	3,678.9	4,024.1	4,013.5	4,087.4	3,957.7	3,893.0
85 years and over	5,500.3	5,458.0	5,289.6	5,743.7	6,003.3	5,865.0	5,654.4	5,584.1
Geographic region ²								
Northeast	1,622.9	1,428.7	1,332.2	1,335.3	1,274.8	1,287.9	1,245.9	1,261.4
Midwest	1,925.2	1,584.7	1,287.5	1,132.8	1,109.2	1,143.9	1,174.9	1,168.0
South	1,814.1	1,569.4	1,325.0	1,252.4	1,209.2	1,255.5	1,202.5	1,198.8
West	1,519.7	1,469.6	1,006.6	967.4	894.0	1,011.5	1,005.9	964.1

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 99 (page 2 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006

[Data are based on a sample of hospital records]

Characteristic	1980 ¹	1985 ¹	1990	1995	2000	2004	2005	2006
Days of care per 10,000 population								
Total, age-adjusted ²	13,027.0	10,017.9	8,189.3	6,386.2	5,576.8	5,686.8	5,541.7	5,474.7
Total, crude	12,166.8	9,576.6	7,840.5	6,201.7	5,546.5	5,741.2	5,620.9	5,577.8
Age								
Under 18 years	3,415.1	2,812.3	2,263.1	1,846.7	1,789.7	1,931.8	1,918.3	1,857.6
Under 1 year	13,213.9	14,141.2	11,484.7	10,834.5	11,524.0	12,434.5	12,131.6	11,624.2
1–4 years	3,333.5	2,280.4	1,700.1	1,525.6	1,482.2	1,416.8	1,355.3	1,405.4
5–17 years	2,698.5	2,049.8	1,633.2	1,240.3	1,172.1	1,281.8	1,300.9	1,239.1
18–44 years	8,323.6	6,294.7	4,676.7	3,517.2	3,093.8	3,349.3	3,305.0	3,360.6
18–24 years	7,174.6	5,287.2	4,015.9	2,987.4	2,679.5	2,817.3	2,819.9	2,889.4
25–44 years	8,861.4	6,685.2	4,895.5	3,676.4	3,225.5	3,532.5	3,472.8	3,524.5
25–34 years	8,497.5	6,688.9	4,939.7	3,536.1	3,161.7	3,427.4	3,434.3	3,462.2
35–44 years	9,386.6	6,680.4	4,844.8	3,812.3	3,281.5	3,627.4	3,507.9	3,581.9
45–64 years	15,969.5	12,015.9	9,139.3	6,574.5	5,515.4	5,915.8	5,717.3	5,793.0
45–54 years	13,167.2	9,692.8	6,996.6	5,162.0	4,374.2	4,911.4	4,711.2	4,667.4
55–64 years	18,895.4	14,369.5	11,722.6	8,671.6	7,290.8	7,352.0	7,124.0	7,333.6
65 years and over	40,983.5	32,279.7	28,956.1	23,736.5	21,118.9	20,486.0	19,882.8	19,197.5
65–74 years	31,470.3	24,373.3	20,878.2	16,847.0	14,389.7	14,051.7	13,985.3	13,170.2
75 years and over	55,788.2	43,812.7	40,090.8	32,478.1	28,518.6	27,148.7	25,939.4	25,413.1
75–84 years	51,836.2	40,521.6	35,995.1	28,947.5	25,397.8	24,540.6	23,155.3	22,671.7
85 years and over	69,332.0	54,782.4	53,616.9	43,305.9	37,537.8	34,110.0	33,071.5	32,165.5
Sex ²								
Male	12,475.8	9,792.1	8,057.8	6,239.0	5,358.8	5,411.5	5,301.3	5,208.8
Female	13,662.9	10,340.4	8,404.5	6,548.8	5,809.7	5,996.5	5,828.7	5,764.2
Sex and age								
Male, all ages	10,674.1	8,518.8	6,943.0	5,507.5	4,860.8	5,049.4	4,979.7	4,947.3
Under 18 years	3,473.1	2,942.7	2,335.7	1,998.0	1,955.7	2,015.2	2,006.2	1,968.0
18–44 years	6,102.4	4,746.6	3,517.4	2,729.7	2,175.0	2,255.6	2,282.7	2,375.6
45–64 years	15,894.9	12,290.1	9,434.2	6,822.7	5,704.4	6,123.8	5,773.5	6,004.3
65–74 years	33,697.6	26,220.5	22,515.5	17,697.4	14,897.4	14,423.4	14,502.6	13,262.1
75–84 years	54,723.3	44,087.4	38,257.8	29,642.6	26,616.7	26,458.3	25,106.9	23,972.7
85 years and over	77,013.1	58,609.5	60,347.3	45,263.6	37,765.3	34,025.9	35,179.0	32,604.0
Female, all ages	13,560.1	10,566.3	8,691.1	6,863.4	6,202.7	6,407.7	6,239.5	6,186.8
Under 18 years	3,354.5	2,675.5	2,186.8	1,687.9	1,615.1	1,844.4	1,826.1	1,741.8
18–44 years	10,450.7	7,792.0	5,820.3	4,297.9	4,010.8	4,455.4	4,341.8	4,361.5
45–64 years	16,037.1	11,765.5	8,865.1	6,341.7	5,336.4	5,718.2	5,663.9	5,592.2
65–74 years	29,764.7	22,949.2	19,592.7	16,162.0	13,971.3	13,739.5	13,549.0	13,092.4
75–84 years	50,133.3	38,424.7	34,628.3	28,502.5	24,601.0	23,249.9	21,830.1	21,782.1
85 years and over	65,990.5	53,253.6	51,000.5	42,538.6	37,444.4	34,147.9	32,103.5	31,960.3
Geographic region ²								
Northeast	14,024.4	11,143.1	10,266.8	8,389.7	7,185.9	6,875.9	6,636.5	6,608.5
Midwest	14,871.9	10,803.6	8,306.5	5,908.8	5,005.3	4,987.1	4,954.3	4,893.5
South	12,713.5	9,642.6	8,204.1	6,659.9	5,925.1	6,141.7	5,830.4	5,844.8
West	9,635.2	8,300.7	5,755.1	4,510.6	4,082.0	4,575.1	4,690.3	4,451.6

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 99 (page 3 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006

[Data are based on a sample of hospital records]

Characteristic	1980 ¹	1985 ¹	1990	1995	2000	2004	2005	2006
Average length of stay in days								
Total, age-adjusted ²	7.5	6.6	6.5	5.4	4.9	4.8	4.8	4.7
Total, crude	7.3	6.5	6.4	5.4	4.9	4.8	4.8	4.8
Age								
Under 18 years	4.5	4.6	4.9	4.4	4.4	4.5	4.7	4.7
Under 1 year	5.7	6.6	6.0	5.5	5.7	6.0	6.2	6.4
1–4 years	3.9	3.5	3.6	3.3	3.2	3.1	3.2	3.4
5–17 years	4.4	4.3	4.9	4.3	4.4	4.3	4.5	4.5
18–44 years	5.3	4.8	4.6	3.8	3.6	3.7	3.7	3.7
18–24 years	4.6	4.1	3.8	3.2	3.1	3.3	3.3	3.3
25–44 years	5.6	5.1	4.8	4.0	3.8	3.8	3.8	3.8
25–34 years	5.0	4.7	4.3	3.5	3.4	3.4	3.4	3.4
35–44 years	6.5	5.8	5.6	4.7	4.3	4.3	4.3	4.3
45–64 years	8.2	7.0	6.7	5.5	5.0	5.0	5.0	5.0
45–54 years	7.5	6.6	6.2	5.2	4.8	4.9	4.9	4.8
55–64 years	8.8	7.4	7.2	5.8	5.2	5.1	5.1	5.2
65 years and over	10.7	8.7	8.7	6.8	6.0	5.6	5.5	5.5
65–74 years	10.0	8.2	8.0	6.5	5.7	5.4	5.3	5.2
75 years and over	11.4	9.2	9.2	7.1	6.2	5.8	5.7	5.6
75–84 years	11.2	9.1	9.1	7.0	6.2	5.7	5.6	5.6
85 years and over	12.0	9.6	9.6	7.3	6.2	5.8	5.7	5.6
Sex ²								
Male	8.1	7.1	7.1	6.0	5.4	5.3	5.2	5.2
Female	7.0	6.2	6.0	5.0	4.5	4.4	4.4	4.4
Sex and age								
Male, all ages	7.7	6.9	6.9	5.8	5.3	5.2	5.2	5.2
Under 18 years	4.6	4.7	5.0	4.6	4.8	4.6	4.9	4.9
18–44 years	6.4	6.1	6.1	5.4	4.8	4.9	4.8	5.0
45–64 years	8.1	6.9	6.7	5.6	5.1	5.2	5.0	5.1
65–74 years	9.7	8.1	7.8	6.4	5.6	5.4	5.3	5.1
75–84 years	10.7	8.8	8.7	6.8	6.2	5.8	5.7	5.7
85 years and over	12.1	9.1	9.4	7.1	6.1	5.8	5.9	5.4
Female, all ages	7.0	6.2	6.1	5.0	4.6	4.5	4.5	4.5
Under 18 years	4.5	4.5	4.7	4.1	4.1	4.4	4.5	4.5
18–44 years	4.8	4.3	4.0	3.3	3.2	3.3	3.3	3.2
45–64 years	8.3	7.1	6.8	5.5	4.8	4.9	4.9	4.9
65–74 years	10.2	8.3	8.1	6.5	5.7	5.5	5.3	5.3
75–84 years	11.5	9.3	9.4	7.1	6.1	5.7	5.5	5.6
85 years and over	12.0	9.8	9.6	7.4	6.2	5.8	5.7	5.7
Geographic region ²								
Northeast	8.6	7.8	7.7	6.3	5.6	5.3	5.3	5.2
Midwest	7.7	6.8	6.5	5.2	4.5	4.4	4.2	4.2
South	7.0	6.1	6.2	5.3	4.9	4.9	4.8	4.9
West	6.3	5.6	5.7	4.7	4.6	4.5	4.7	4.6

¹Comparisons of data from 1980–1985 with data from subsequent years should be made with caution because estimates of change may reflect improvements in the survey design rather than true changes in hospital use. See [Appendix I, National Hospital Discharge Survey](#).

²Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Excludes newborn infants. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 100 (page 1 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
All ages ¹	30,788	31,706	34,854	12,280	12,514	13,990	18,508	19,192	20,864
Under 18 years ¹	3,072	2,912	2,905	1,572	1,515	1,515	1,500	1,397	1,389
Dehydration	63	114	116	32	64	*59	31	50	57
Acute bronchitis and bronchiolitis	114	201	152	67	116	84	47	85	*69
Pneumonia	221	182	180	126	95	101	95	87	79
Asthma	182	214	155	111	129	*99	71	85	56
Appendicitis	83	86	99	50	48	64	34	38	35
Injury	329	243	249	210	156	167	119	87	82
Fracture	117	100	90	76	68	64	42	32	26
Complications of care and adverse effects	41	*52	45	22	*29	27	19	*23	18
18–44 years ¹	11,138	9,439	10,193	3,120	2,498	2,701	8,018	6,941	7,492
HIV/AIDS	*20	47	48	*15	32	30	*	15	17
Cancer, all	181	117	107	64	41	39	116	76	68
Childbirth . . . . .	...	...	...	...	...	...	3,815	3,588	3,980
Uterine fibroids . . . . .	...	...	...	...	...	...	110	121	103
Diabetes	105	127	160	61	72	86	44	55	74
Alcohol and drug ²	284	330	286	199	217	186	84	*112	101
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ³	384	*596	707	184	*296	336	200	*300	370
Schizophrenia	145	*160	176	88	*104	110	57	*56	65
Mood disorders	211	*399	478	83	*172	193	128	*227	286
Heart disease	236	242	273	163	148	173	73	95	100
Ischemic heart disease	129	109	93	95	79	62	34	31	30
Pneumonia	136	121	102	69	55	47	67	66	55
Asthma	106	100	79	27	30	21	79	70	58
Intervertebral disc disorders	222	138	101	138	81	50	84	58	51
Injury	935	509	574	641	346	398	294	164	176
Fracture	302	198	216	217	141	161	85	57	55
Poisoning and toxic effects	124	95	141	54	37	68	70	57	73
Complications of care and adverse effects	135	135	187	63	62	88	72	73	99
45–64 years ¹	6,244	6,958	8,686	3,115	3,424	4,287	3,129	3,534	4,399
HIV/AIDS	*3	*20	26	*3	*15	18	*	*	*8
Cancer, all	545	393	438	236	189	222	309	204	217
Colorectal cancer	59	49	46	33	27	24	26	22	23
Lung/bronchus/tracheal cancer	101	43	51	60	26	25	41	17	26
Breast cancer ⁴ . . . . .	...	...	...	...	...	...	69	45	30
Prostate cancer . . . . .	...	...	...	19	29	51	...	...	...
Uterine fibroids . . . . .	...	...	...	...	...	...	70	114	106
Diabetes	134	207	205	65	114	105	70	93	100
Alcohol and drug ²	100	146	199	77	102	148	23	44	51
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ³	152	267	422	56	*120	179	95	146	243
Schizophrenia	47	80	134	19	*44	66	28	36	69
Mood disorders	91	*168	256	32	*66	97	58	*103	158
Heart disease	1,100	1,271	1,285	704	802	803	397	470	481
Ischemic heart disease	739	789	701	502	539	475	237	251	226
Heart attack	233	242	218	165	178	151	68	64	68
Arrhythmias	131	157	193	79	97	112	53	60	82
Heart failure	122	196	246	68	102	142	54	94	105
Hypertension	75	119	122	38	53	46	37	65	76
Stroke	162	229	236	91	116	117	72	113	119
Pneumonia	154	220	251	76	104	122	79	117	129
Chronic obstructive pulmonary disease	26	156	175	15	75	77	11	81	98
Asthma	86	84	121	26	19	34	59	65	87
Osteoarthritis	87	150	327	36	63	136	51	87	191
Intervertebral disc disorders	145	132	148	82	68	72	63	64	76
Injury	334	299	432	178	155	252	157	144	180
Fracture	149	164	202	74	77	108	75	87	94
Poisoning and toxic effects	29	39	73	10	17	37	19	23	36
Internal organ injury	36	28	60	23	18	43	14	10	17
Complications of care and adverse effects	148	215	330	79	110	167	69	105	163

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 100 (page 2 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
65–74 years ¹	4,689	4,678	4,793	2,268	2,199	2,241	2,421	2,479	2,552
Septicemia	49	65	96	27	33	51	21	32	45
Cancer, all	436	292	311	222	146	151	214	146	160
Colorectal cancer	48	42	43	24	25	17	24	17	27
Lung/bronchus/tracheal cancer	77	48	59	50	23	31	26	25	27
Breast cancer ⁴	...	...	...	...	...	...	42	31	12
Prostate cancer	...	...	...	40	31	27	...	...	...
Diabetes	93	85	88	34	39	40	59	47	48
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ³	59	68	59	20	*28	20	39	40	39
Dementia and Alzheimer's disease	10	*21	16	4	*13	*5	*6	*7	*11
Heart disease	1,000	1,111	925	547	586	519	453	525	406
Ischemic heart disease	576	564	423	331	329	259	245	235	164
Heart attack	185	184	137	110	104	78	75	81	59
Arrhythmias	124	188	169	67	90	90	57	99	79
Heart failure	188	242	219	93	113	114	95	128	105
Hypertension	39	39	57	13	14	16	26	26	41
Stroke	222	233	210	108	109	105	114	124	105
Pneumonia	176	223	212	90	106	101	86	117	112
Chronic obstructive pulmonary disease	27	159	155	14	68	72	12	91	84
Gallstones	79	61	50	30	25	17	49	36	33
Kidney disease	18	35	66	9	17	35	9	18	31
Urinary tract infection	54	47	76	17	16	22	37	31	54
Hyperplasia of the prostate	...	...	...	113	45	29	...	...	...
Osteoarthritis	122	186	269	44	86	100	78	101	169
Injury	193	187	179	71	70	70	122	117	109
Fracture	120	116	114	36	39	36	85	77	78
Hip fracture	48	49	41	12	*17	12	36	32	29
Complications of care and adverse effects	125	147	176	68	79	88	57	68	88
75–84 years ¹	3,949	5,119	5,252	1,660	2,107	2,236	2,289	3,013	3,016
Septicemia	54	85	140	24	38	65	30	46	75
Cancer, all	300	241	240	158	104	114	142	137	126
Colorectal cancer	50	41	39	20	18	16	29	23	22
Lung/bronchus/tracheal cancer	36	33	41	22	16	20	*15	18	21
Breast cancer ⁴	...	...	...	...	...	...	24	23	13
Prostate cancer	...	...	...	37	13	7	...	...	...
Diabetes	44	79	73	17	33	29	27	45	44
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ³	39	51	38	*10	*15	12	28	36	26
Dementia and Alzheimer's disease	20	45	59	9	18	23	11	27	37
Heart disease	865	1,185	1,066	377	521	496	488	664	570
Ischemic heart disease	382	517	379	177	259	199	205	258	180
Heart attack	156	207	155	83	104	70	73	103	85
Arrhythmias	133	219	232	58	86	98	76	134	134
Heart failure	261	327	319	108	133	142	153	194	177
Hypertension	23	49	41	*	*14	11	19	35	30
Stroke	258	317	247	104	137	113	154	181	134
Pneumonia	224	327	281	112	153	141	112	175	140
Chronic obstructive pulmonary disease	20	145	154	*13	68	83	7	77	71
Gallstones	48	49	50	20	20	17	28	29	33
Kidney disease	24	47	103	10	24	49	*14	23	53
Urinary tract infection	86	106	134	25	36	39	61	71	95
Hyperplasia of the prostate	...	...	...	69	33	22	...	...	...
Osteoarthritis	69	125	189	25	38	69	44	87	119
Injury	259	284	316	58	84	94	201	200	222
Fracture	195	211	238	35	57	61	161	154	177
Hip fracture	115	123	128	20	34	31	95	89	97
Complications of care and adverse effects	81	126	152	38	67	77	43	59	75

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 100 (page 3 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
85 years and over ¹	1,694	2,599	3,025	543	771	1,010	1,151	1,828	2,015
Septicemia	41	66	109	12	26	37	29	40	72
Cancer, all	77	84	86	31	31	38	45	52	47
Colorectal cancer	14	21	20	*5	*7	*8	9	14	*12
Lung/bronchus/tracheal cancer	*6	5	*10	*	*3	*3	*	*3	*6
Breast cancer ⁴	...	...	...	...	...	...	*9	*6	*2
Prostate cancer	...	...	...	*7	*6	*	...	...	...
Diabetes	16	28	27	*5	*7	10	11	21	18
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ³	*8	*16	13	*	*	*	*7	*13	*9
Dementia and Alzheimer's disease	15	46	46	*2	12	13	13	34	33
Heart disease	335	558	633	112	176	209	223	382	424
Ischemic heart disease	128	183	164	49	67	60	79	117	104
Heart attack	60	108	101	23	37	35	37	71	66
Arrhythmias	51	100	121	16	31	37	35	69	84
Heart failure	126	206	270	39	57	89	87	149	180
Hypertension	*5	18	27	*	*2	*8	*4	15	19
Stroke	129	161	148	35	50	44	95	111	105
Pneumonia	151	221	217	64	76	82	88	145	134
Chronic obstructive pulmonary disease	*4	48	47	*	15	20	*	33	27
Gallstones	18	17	16	*6	*4	*5	13	*13	10
Kidney disease	14	21	69	8	*9	28	*6	*13	41
Urinary tract infection	65	82	132	20	19	41	45	63	92
Hyperplasia of the prostate	...	...	...	13	*9	*11	...	...	...
Osteoarthritis	13	24	41	*	*	14	8	17	27
Injury	164	234	274	37	44	71	127	190	203
Fracture	133	194	214	28	32	49	104	162	165
Hip fracture	82	118	125	19	18	29	63	100	96
Complications of care and adverse effects	29	34	45	11	11	20	18	23	25

... Category not applicable.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹Includes discharges with first-listed diagnoses not shown in table.

²Includes abuse, dependence, and withdrawal. These estimates are for nonfederal short-stay hospitals only and do not include alcohol and drug discharges from other types of facilities or programs such as the Department of Veterans Affairs or day treatment programs.

³These estimates are for nonfederal short-stay hospitals only and do not include discharges from other types of facilities or programs such as the Department of Veterans Affairs or long-term hospitals.

⁴Shown for women only.

NOTES: Excludes newborn infants. Diagnostic categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Diagnosis; Human immunodeficiency virus \(HIV\) disease; International Classification of Diseases, Ninth Revision, Clinical Modification; Table X](#) for ICD–9–CM codes. Additional data and diagnosis categories are available from <http://www.cdc.gov/nchs/hdi.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 101 (page 1 of 3). Discharge rate in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
All ages, age-adjusted ^{1,2}	1,252.4	1,132.8	1,153.1	1,130.0	990.8	1,000.5	1,389.5	1,277.3	1,312.3
All ages, crude ²	1,222.7	1,128.3	1,168.7	1,002.2	910.6	954.9	1,431.7	1,336.6	1,375.3
Under 18 years ²	463.5	402.6	393.9	463.1	408.6	401.5	464.1	396.2	385.9
Dehydration	9.5	15.7	15.7	9.4	17.2	*15.6	9.7	14.2	15.8
Acute bronchitis and bronchiolitis	17.2	27.8	20.7	19.6	31.4	22.2	14.6	24.1	*19.1
Pneumonia	33.3	25.2	24.5	37.0	25.7	26.8	29.5	24.6	22.0
Asthma	27.5	29.6	21.0	32.7	34.8	*26.2	22.0	24.0	15.5
Appendicitis	12.6	11.9	13.4	14.6	13.0	17.0	10.5	10.8	9.7
Injury	49.7	33.6	33.8	62.0	42.0	44.2	36.8	24.8	22.9
Fracture	17.7	13.8	12.3	22.3	18.3	17.0	12.9	9.0	7.3
Complications of care and adverse effects	6.2	*7.3	6.1	6.5	*7.9	7.1	5.9	*6.6	5.1
18–44 years ²	1,026.6	849.4	906.7	579.2	450.0	476.8	1,468.0	1,248.1	1,343.5
HIV/AIDS	*1.8	4.3	4.2	*2.8	5.8	5.4	*	2.8	3.1
Cancer, all	16.6	10.5	9.5	11.9	7.3	6.8	21.3	13.7	12.2
Childbirth	...	...	...	...	...	...	698.6	645.2	713.8
Uterine fibroids	...	...	...	...	...	...	20.2	21.7	18.4
Diabetes	9.7	11.5	14.2	11.3	13.0	15.2	8.1	9.9	13.2
Alcohol and drug ³	26.2	29.7	25.5	37.0	39.1	32.8	15.5	*20.2	18.0
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	35.4	*53.6	62.9	34.1	*53.2	59.4	36.7	*53.9	66.4
Schizophrenia	13.4	*14.4	15.6	16.4	*18.6	19.4	10.5	*10.1	11.7
Mood disorders	19.4	*35.9	42.5	15.4	*31.0	34.0	23.4	*40.9	51.2
Heart disease	21.7	21.8	24.3	30.2	26.6	30.5	13.4	17.0	18.0
Ischemic heart disease	11.9	9.9	8.3	17.7	14.2	11.0	6.3	5.6	5.4
Pneumonia	12.5	10.9	9.1	12.8	10.0	8.2	12.2	11.9	9.9
Asthma	9.8	9.0	7.1	5.1	5.4	3.8	14.4	12.6	10.4
Intervertebral disc disorders	20.5	12.5	9.0	25.6	14.5	8.9	15.4	10.4	9.1
Injury	86.2	45.8	51.0	119.0	62.3	70.3	53.8	29.4	31.5
Fracture	27.8	17.8	19.2	40.2	25.4	28.4	15.5	10.2	9.8
Poisoning and toxic effects	11.4	8.5	12.5	10.0	6.7	11.9	12.7	10.3	13.2
Complications of care and adverse effects	12.5	12.2	16.6	11.7	11.2	15.5	13.3	13.1	17.7
45–64 years ²	1,354.5	1,114.2	1,161.2	1,402.7	1,127.4	1,175.7	1,309.7	1,101.7	1,147.3
HIV/AIDS	*0.6	*3.2	3.4	*1.2	*4.9	4.9	*	*	*2.1
Cancer, all	118.3	62.9	58.6	106.3	62.1	60.8	129.5	63.6	56.5
Colorectal cancer	12.7	7.9	6.2	14.8	8.9	6.5	10.8	6.9	5.9
Lung/bronchus/tracheal cancer	21.8	6.9	6.8	26.8	8.6	6.8	17.2	5.2	6.9
Breast cancer ⁵	...	...	...	...	...	...	29.0	14.2	7.8
Prostate cancer	...	...	...	8.5	9.6	14.1	...	...	...
Uterine fibroids	...	...	...	...	...	...	29.3	35.6	27.5
Diabetes	29.1	33.1	27.4	29.1	37.4	28.8	29.2	29.0	26.1
Alcohol and drug ³	21.7	23.3	26.5	34.6	33.5	40.5	9.6	13.7	13.3
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	32.9	42.7	56.5	25.4	*39.6	49.2	39.8	45.6	63.4
Schizophrenia	10.1	12.8	18.0	8.4	*14.4	18.0	11.7	11.3	18.0
Mood disorders	19.6	*26.9	34.2	14.5	*21.6	26.7	24.4	*32.0	41.3
Heart disease	238.7	203.6	171.7	316.8	264.0	220.3	166.1	146.4	125.5
Ischemic heart disease	160.3	126.4	93.7	226.1	177.3	130.3	99.2	78.2	58.9
Heart attack	50.6	38.8	29.2	74.4	58.7	41.3	28.4	19.9	17.7
Arrhythmias	28.5	25.1	25.9	35.5	31.8	30.7	22.1	18.7	21.3
Heart failure	26.4	31.4	32.9	30.7	33.5	38.8	22.4	29.3	27.3
Hypertension	16.3	19.0	16.4	16.9	17.6	12.7	15.6	20.3	19.9
Stroke	35.2	36.7	31.5	40.8	38.3	32.1	30.1	35.2	30.9
Pneumonia	33.5	35.3	33.6	34.0	34.2	33.5	33.0	36.4	33.7
Chronic obstructive pulmonary disease	5.7	25.0	23.3	6.8	24.6	21.0	4.6	25.3	25.6
Asthma	18.6	13.4	16.2	11.8	6.2	9.3	24.9	20.2	22.8
Osteoarthritis	18.9	24.0	43.7	16.3	20.8	37.4	21.2	27.0	49.7
Intervertebral disc disorders	31.5	21.2	19.7	36.8	22.5	19.8	26.5	20.0	19.7
Injury	72.5	47.9	57.7	79.9	51.2	69.1	65.6	44.7	46.8
Fracture	32.4	26.2	27.0	33.4	25.3	29.5	31.5	27.0	24.6
Poisoning and toxic effects	6.3	6.3	9.8	4.5	5.5	10.2	8.0	7.1	9.4
Internal organ injury	7.9	4.5	8.0	10.2	5.9	11.9	5.7	3.2	4.4
Complications of care and adverse effects	32.0	34.5	44.1	35.6	36.3	45.9	28.7	32.7	42.5

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 101 (page 2 of 3). Discharge rate in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
65–74 years ²	2,616.3	2,546.0	2,533.6	2,877.6	2,649.1	2,584.3	2,411.2	2,461.0	2,490.7
Septicemia	27.2	35.6	50.8	34.9	40.1	58.3	21.2	32.0	44.3
Cancer, all	243.1	159.0	164.1	281.4	176.4	173.8	213.0	144.7	156.0
Colorectal cancer	27.0	22.8	22.7	30.6	29.9	19.0	24.1	16.9	25.9
Lung/bronchus/tracheal cancer	42.9	26.1	31.1	63.9	28.2	36.3	26.4	24.5	26.8
Breast cancer ⁵	...	...	...	...	...	...	42.3	31.2	11.6
Prostate cancer	...	...	...	50.6	37.1	31.1	...	...	...
Diabetes	51.8	46.4	46.5	43.6	46.8	46.3	58.3	46.2	46.7
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	32.7	37.1	31.1	25.3	*34.2	23.0	38.6	39.6	38.0
Dementia and Alzheimer's disease	5.6	*11.2	8.3	4.9	*16.2	*5.8	*6.1	*7.0	*10.4
Heart disease	558.1	604.8	489.0	694.2	706.4	598.4	451.3	521.0	396.5
Ischemic heart disease	321.3	307.0	223.5	419.9	396.5	298.2	243.9	233.2	160.4
Heart attack	103.3	100.3	72.6	139.8	124.7	90.3	74.6	80.2	57.7
Arrhythmias	69.1	102.6	89.4	84.7	108.3	103.8	56.9	97.9	77.3
Heart failure	105.2	131.6	115.6	118.0	136.4	131.0	95.1	127.6	102.6
Hypertension	21.8	21.5	30.2	16.2	16.5	18.6	26.2	25.5	39.9
Stroke	123.9	127.1	111.2	137.5	131.8	121.4	113.1	123.2	102.6
Pneumonia	98.1	121.3	112.3	113.6	127.7	116.4	85.9	116.1	108.8
Chronic obstructive pulmonary disease	14.8	86.4	82.0	18.1	81.8	82.5	12.3	90.2	81.6
Gallstones	44.2	33.4	26.6	38.2	30.2	19.9	48.9	36.0	32.2
Kidney disease	9.9	19.1	34.7	11.0	21.0	39.9	9.0	17.5	30.2
Urinary tract infection	30.2	25.5	40.4	21.7	19.7	25.7	36.9	30.3	52.8
Hyperplasia of the prostate	...	...	...	143.5	53.6	33.9	...	...	...
Osteoarthritis	68.0	101.4	142.2	55.2	103.1	115.2	78.0	100.1	165.1
Injury	107.7	101.5	94.5	90.7	83.8	80.4	121.1	116.2	106.4
Fracture	67.2	63.3	60.1	45.2	46.8	41.3	84.4	76.9	76.0
Hip fracture	26.7	26.4	21.5	15.3	*20.0	13.6	35.7	31.7	28.2
Complications of care and adverse effects	69.7	80.0	93.1	85.7	95.7	101.4	57.2	67.1	86.0
75–84 years ²	3,957.0	4,124.4	4,025.9	4,417.3	4,294.1	4,220.3	3,678.9	4,013.5	3,893.0
Septicemia	53.9	68.3	107.3	63.8	78.1	121.8	47.9	61.9	97.4
Cancer, all	300.3	194.0	183.6	420.8	211.0	214.5	227.6	182.9	162.5
Colorectal cancer	49.8	33.0	29.7	54.0	37.5	30.9	47.3	30.1	28.8
Lung/bronchus/tracheal cancer	36.5	27.0	31.3	57.2	32.2	37.0	*24.0	23.6	27.5
Breast cancer ⁵	...	...	...	...	...	...	38.7	30.8	17.4
Prostate cancer	...	...	...	99.2	27.4	13.9	...	...	...
Diabetes	44.3	63.4	55.6	44.8	68.1	54.2	44.0	60.3	56.6
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	38.8	41.4	28.9	*27.3	*30.6	22.7	45.7	48.5	33.2
Dementia and Alzheimer's disease	20.0	36.5	45.6	22.8	36.8	42.9	18.3	36.3	47.4
Heart disease	866.6	954.8	817.2	1,003.8	1,062.5	936.9	783.7	884.3	735.3
Ischemic heart disease	382.4	416.7	290.6	470.5	528.5	375.3	329.1	343.6	232.6
Heart attack	155.9	166.9	118.8	220.9	212.8	132.4	116.7	136.9	109.5
Arrhythmias	133.4	176.8	178.0	153.3	174.4	185.7	121.4	178.3	172.7
Heart failure	261.4	263.1	244.2	286.2	271.1	268.0	246.4	257.9	228.0
Hypertension	22.6	39.7	31.6	*	*28.4	20.9	30.7	47.1	38.8
Stroke	259.0	255.5	189.2	277.7	278.4	214.0	247.7	240.6	172.3
Pneumonia	224.6	263.5	215.7	297.8	310.8	266.0	180.4	232.6	181.2
Chronic obstructive pulmonary disease	19.6	117.1	118.2	*33.3	138.5	157.5	11.2	103.1	91.4
Gallstones	47.6	39.6	38.3	51.9	41.4	32.5	45.0	38.5	42.2
Kidney disease	24.5	37.6	78.6	27.6	48.7	93.2	*22.6	30.4	68.6
Urinary tract infection	86.0	85.6	102.6	66.6	72.5	73.8	97.8	94.2	122.3
Hyperplasia of the prostate	...	...	...	183.3	67.2	41.0	...	...	...
Osteoarthritis	68.6	100.6	144.5	65.2	76.5	131.0	70.7	116.4	153.7
Injury	259.1	229.1	242.3	153.4	171.7	178.1	323.0	266.6	286.1
Fracture	195.8	170.2	182.7	92.6	116.4	115.7	258.1	205.4	228.5
Hip fracture	115.2	99.0	98.0	53.7	68.6	58.5	152.4	118.8	125.0
Complications of care and adverse effects	81.5	101.4	116.2	101.4	136.0	145.0	69.4	78.8	96.5

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 101 (page 3 of 3). Discharge rate in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
85 years and over ²	5,606.3	6,050.9	5,711.4	6,420.9	6,166.6	5,983.5	5,289.6	6,003.3	5,584.1
Septicemia	135.6	153.9	205.3	139.0	207.3	219.8	134.3	131.9	198.6
Cancer, all	254.0	194.5	161.9	370.6	250.5	227.5	208.7	171.5	131.3
Colorectal cancer	47.6	49.7	37.5	*59.1	*58.8	*47.8	43.2	45.9	*32.7
Lung/bronchus/tracheal cancer	*19.1	12.1	*18.2	*	*20.9	*18.9	*	*8.5	*17.8
Breast cancer ⁵	...	...	...	...	...	...	*41.7	*20.5	*5.1
Prostate cancer	...	...	...	*87.8	*49.3	*	...	...	...
Diabetes	53.0	65.6	51.5	*53.5	*54.2	56.8	52.8	70.3	49.0
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	*27.9	*37.3	24.0	*	*	*	*30.7	*43.0	*24.8
Dementia and Alzheimer's disease	49.7	107.0	87.5	*28.9	94.3	77.1	57.7	112.2	92.4
Heart disease	1,107.0	1,298.2	1,194.3	1,320.3	1,407.4	1,238.5	1,024.1	1,253.4	1,173.6
Ischemic heart disease	423.0	427.2	310.0	581.6	534.4	357.9	361.3	383.2	287.6
Heart attack	199.8	251.1	191.3	274.2	296.0	208.0	170.9	232.7	183.5
Arrhythmias	167.2	232.4	228.5	189.6	247.1	218.1	158.5	226.4	233.3
Heart failure	416.7	480.4	509.3	460.5	455.7	529.0	399.7	490.5	500.1
Hypertension	*17.9	41.1	51.4	*	*18.3	*49.4	*19.3	50.4	52.4
Stroke	427.2	373.8	280.1	408.2	396.7	258.5	434.6	364.3	290.2
Pneumonia	501.0	514.9	408.8	753.7	607.8	487.2	402.8	476.8	372.1
Chronic obstructive pulmonary disease	*14.1	110.9	89.1	*	117.4	117.2	*	108.2	75.9
Gallstones	60.7	39.2	29.5	*68.2	*29.7	*30.4	57.8	*43.1	29.0
Kidney disease	47.1	49.5	130.2	92.4	*68.1	166.5	*29.4	*41.9	113.2
Urinary tract infection	216.5	191.5	250.1	239.3	153.1	240.2	207.6	207.2	254.7
Hyperplasia of the prostate	...	...	...	158.6	*69.9	*64.4	...	...	...
Osteoarthritis	44.5	56.0	78.0	*	*	85.7	35.8	57.3	74.4
Injury	542.0	545.5	516.8	435.4	355.6	419.1	583.4	623.5	562.5
Fracture	439.0	450.9	403.6	335.7	252.4	287.3	479.2	532.4	458.0
Hip fracture	272.3	275.1	235.7	224.4	146.5	170.7	291.0	327.9	266.0
Complications of care and adverse effects	96.6	79.1	84.8	132.3	90.5	118.3	82.7	74.4	69.1

... Category not applicable.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹ Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

² Includes discharges with first-listed diagnoses not shown in table.

³ Includes abuse, dependence, and withdrawal. These estimates are for nonfederal short-stay hospitals only and do not include alcohol and drug discharges from other types of facilities or programs such as the Department of Veterans Affairs or day treatment programs.

⁴ These estimates are for nonfederal short-stay hospitals only and do not include discharges from other types of facilities or programs such as the Department of Veterans Affairs or long-term hospitals.

⁵ Shown for women only.

NOTES: Excludes newborn infants. Diagnostic categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Diagnosis; Human immunodeficiency virus \(HIV\) disease](#); *International Classification of Diseases, Ninth Revision, Clinical Modification*; [Table X](#) for ICD–9–CM codes. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Additional data and diagnosis categories are available from <http://www.cdc.gov/nchs/hdi.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 102 (page 1 of 3). Average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay ¹								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
All ages, crude ²	6.4	4.9	4.8	6.9	5.3	5.2	6.1	4.6	4.5
Under 18 years ²	4.9	4.4	4.7	5.0	4.8	4.9	4.7	4.1	4.5
Dehydration	3.0	2.2	*2.4	2.9	2.2	*2.6	3.0	2.1	2.2
Acute bronchitis and bronchiolitis	3.7	3.1	*3.2	3.6	3.0	*3.4	3.8	*3.3	*2.9
Pneumonia	4.6	3.6	3.4	4.6	3.4	*3.3	4.7	3.9	3.5
Asthma	2.9	2.2	2.2	2.8	2.1	*2.1	3.1	2.3	2.4
Appendicitis	4.0	3.2	*3.2	3.9	2.9	*3.3	4.0	3.5	*3.1
Injury	4.1	3.8	*3.9	4.2	4.1	*3.9	3.8	*3.2	*3.9
Fracture	4.5	3.5	3.0	4.2	3.9	3.2	5.0	2.5	2.6
Complications of care and adverse effects	*5.3	*5.7	*5.6	*6.0	*5.5	*5.8	*4.5	*5.9	*5.4
18–44 years ²	4.6	3.6	3.7	6.1	4.8	5.0	4.0	3.2	3.2
HIV/AIDS	*10.7	*8.8	6.3	*10.6	*9.4	6.4	*	*7.5	6.0
Cancer, all	7.8	6.3	5.4	8.4	7.9	6.4	7.5	5.4	4.9
Childbirth . . . . .	...	...	...	...	...	...	2.8	2.5	2.6
Uterine fibroids . . . . .	...	...	...	...	...	...	4.2	2.5	2.4
Diabetes	5.8	3.9	3.9	6.2	3.7	4.1	5.2	4.3	3.7
Alcohol and drug ³	9.0	*5.0	*4.4	8.9	4.8	*4.4	9.1	*5.3	*4.5
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	14.3	*7.9	7.6	13.8	*8.2	8.2	14.8	*7.6	7.1
Schizophrenia	15.4	*11.0	11.5	15.3	*10.6	11.4	15.6	*11.9	11.8
Mood disorders	14.3	*6.6	6.1	*13.2	*6.6	6.1	15.0	*6.5	6.1
Heart disease	5.4	3.6	3.6	5.4	3.5	3.7	5.4	3.7	3.4
Ischemic heart disease	4.6	3.0	3.0	4.8	2.8	3.2	4.1	3.6	2.6
Pneumonia	6.9	5.1	5.0	7.8	5.0	5.3	6.0	5.2	4.7
Asthma	4.4	2.9	2.7	3.8	2.5	2.5	4.6	3.1	2.8
Intervertebral disc disorders	4.4	2.3	2.6	4.2	2.2	2.6	4.7	2.3	2.5
Injury	5.1	4.3	4.5	5.0	4.5	4.8	5.3	4.1	3.7
Fracture	6.0	4.9	5.4	5.6	5.0	5.7	6.9	4.4	4.5
Poisoning and toxic effects	2.7	2.5	2.5	2.7	2.8	2.8	2.7	2.4	2.2
Complications of care and adverse effects	5.6	4.7	5.9	5.3	4.9	6.1	*5.9	4.6	5.7
45–64 years ²	6.7	5.0	5.0	6.7	5.1	5.1	6.8	4.8	4.9
HIV/AIDS	*	*	7.0	*	*	6.7	*	*	*7.9
Cancer, all	8.8	6.2	6.2	9.3	6.8	6.6	8.4	5.6	5.8
Colorectal cancer	13.3	7.4	6.9	*13.0	7.4	6.9	*13.6	7.4	6.8
Lung/bronchus/tracheal cancer	7.7	6.2	7.1	7.1	6.0	7.9	8.6	6.4	6.4
Breast cancer ⁵ . . . . .	...	...	...	...	...	...	4.3	2.0	2.7
Prostate cancer . . . . .	...	...	...	7.3	3.2	2.7	...	...	...
Uterine fibroids . . . . .	...	...	...	...	...	...	4.5	2.8	2.4
Diabetes	8.1	5.6	5.0	7.3	6.0	5.2	8.9	5.2	4.8
Alcohol and drug ³	8.5	4.8	4.6	8.6	4.6	4.6	8.3	*5.0	*4.7
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	14.6	9.1	8.9	13.7	*8.8	8.8	15.2	9.4	8.9
Schizophrenia	15.6	*11.9	*12.1	14.2	*11.4	10.9	16.5	*12.5	*13.2
Mood disorders	14.7	*7.9	7.4	13.4	*7.3	7.8	15.4	*8.3	7.2
Heart disease	5.9	3.9	3.9	5.8	3.8	3.7	6.1	4.1	4.2
Ischemic heart disease	5.7	3.7	3.4	5.7	3.6	3.3	5.8	3.8	3.6
Heart attack	7.5	4.8	4.5	7.5	4.7	4.3	7.6	5.0	4.9
Arrhythmias	4.6	2.9	2.8	4.6	2.8	2.7	4.6	2.9	3.0
Heart failure	7.0	4.9	5.3	6.9	5.2	5.1	7.3	4.7	5.7
Hypertension	3.9	2.2	2.2	*4.3	2.0	1.9	3.6	2.4	2.3
Stroke	10.3	5.3	5.1	10.0	5.2	4.7	10.7	5.5	5.6
Pneumonia	8.0	5.8	5.0	8.0	6.0	5.0	7.9	5.7	5.1
Chronic obstructive pulmonary disease	5.9	5.1	4.4	*6.4	5.5	3.9	5.2	4.7	4.7
Asthma	5.2	3.9	3.8	5.3	*3.2	3.3	5.2	4.0	4.1
Osteoarthritis	7.4	3.9	3.7	7.1	3.6	3.4	7.5	4.1	3.8
Intervertebral disc disorders	5.2	2.8	2.9	5.0	2.6	2.8	5.4	3.1	2.9
Injury	6.5	5.1	5.8	6.6	5.5	6.6	6.4	4.6	4.7
Fracture	7.6	5.6	5.5	7.2	6.4	6.1	7.9	4.9	4.8
Poisoning and toxic effects	4.9	3.0	3.6	*	*2.9	4.0	4.3	3.1	3.2
Internal organ injury	*8.3	7.6	*8.5	*	8.3	*9.5	*8.1	*	*6.0
Complications of care and adverse effects	7.9	6.1	5.9	8.4	5.9	5.8	7.4	6.4	6.1

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 102 (page 2 of 3). Average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay ¹								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
65–74 years ²	8.0	5.7	5.2	7.8	5.6	5.1	8.1	5.7	5.3
Septicemia	*15.9	8.6	9.2	*	8.5	8.9	14.4	8.8	9.5
Cancer, all	9.4	7.0	6.8	9.9	6.9	6.7	9.0	7.1	6.9
Colorectal cancer	12.9	9.1	7.9	11.3	9.2	8.3	14.5	9.0	7.7
Lung/bronchus/tracheal cancer	9.2	7.0	7.2	8.7	6.8	7.4	10.2	*7.1	7.1
Breast cancer ⁵	...	...	...	...	...	...	4.4	*	*2.6
Prostate cancer	...	...	...	6.5	3.8	*2.7	...	...	...
Diabetes	8.4	5.9	5.2	9.1	6.2	5.6	8.0	5.6	4.8
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	16.6	11.7	9.8	17.4	*11.7	8.7	16.3	11.7	10.4
Dementia and Alzheimer's disease	*12.6	*9.3	*7.2	*10.4	*9.6	*7.0	*14.0	*8.9	*
Heart disease	7.0	4.8	4.5	7.0	4.7	4.3	7.0	4.9	4.7
Ischemic heart disease	6.6	4.6	4.0	6.8	4.3	4.0	6.3	4.9	4.1
Heart attack	8.4	5.9	5.8	8.8	5.3	5.9	7.8	6.6	5.7
Arrhythmias	5.7	3.8	3.4	5.6	3.8	3.2	5.8	3.7	3.6
Heart failure	8.4	5.5	5.1	7.9	5.7	4.8	8.8	5.4	5.5
Hypertension	4.3	2.6	1.9	*4.6	*2.7	1.6	4.1	2.4	2.1
Stroke	8.4	4.7	4.6	8.3	4.5	4.7	8.5	4.8	4.4
Pneumonia	9.5	6.4	5.5	9.5	6.4	5.1	9.5	6.3	5.8
Chronic obstructive pulmonary disease	*9.6	5.1	4.5	*11.1	5.0	4.0	*7.9	5.2	4.8
Gallstones	6.6	4.4	4.9	6.9	*5.2	4.3	6.5	3.9	5.1
Kidney disease	10.4	7.6	6.0	8.4	6.9	5.9	*12.4	8.2	6.1
Urinary tract infection	8.0	4.8	4.5	7.2	5.1	4.7	8.4	4.7	4.4
Hyperplasia of the prostate	...	...	...	4.5	2.8	2.5	...	...	...
Osteoarthritis	9.3	4.7	3.7	8.8	4.7	3.6	9.5	4.7	3.7
Injury	9.2	5.6	5.4	8.4	5.7	4.7	9.7	5.6	5.9
Fracture	11.1	5.9	5.2	10.2	6.4	5.0	11.5	5.7	5.3
Hip fracture	*15.5	7.1	6.3	*11.8	*7.9	6.1	*16.7	6.7	6.3
Complications of care and adverse effects	7.8	6.4	6.6	7.3	6.1	6.7	8.5	6.8	6.5
75–84 years ²	9.1	6.2	5.6	8.7	6.2	5.7	9.4	6.1	5.6
Septicemia	12.1	7.9	8.8	12.9	7.4	8.8	11.5	8.4	8.8
Cancer, all	10.4	7.2	7.2	9.3	7.2	8.0	11.7	7.2	6.5
Colorectal cancer	12.9	9.0	8.9	12.5	*9.3	10.1	13.2	8.8	8.0
Lung/bronchus/tracheal cancer	9.5	6.5	7.1	9.6	6.2	7.4	*9.4	6.9	6.9
Breast cancer ⁵	...	...	...	...	...	...	5.7	*3.2	*3.0
Prostate cancer	...	...	...	6.6	*5.1	*3.9	...	...	...
Diabetes	12.5	6.0	5.8	11.7	6.4	6.0	13.1	5.6	5.6
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	15.8	10.8	11.1	*15.7	*11.6	*11.4	15.8	10.4	10.9
Dementia and Alzheimer's disease	*15.3	8.2	7.5	*12.8	7.6	8.0	*	8.6	7.3
Heart disease	8.0	5.3	4.8	8.1	5.4	4.8	7.8	5.3	4.9
Ischemic heart disease	7.9	5.1	4.8	8.5	5.2	4.9	7.4	5.1	4.6
Heart attack	9.7	6.2	6.5	10.1	5.8	6.8	9.3	6.6	6.2
Arrhythmias	6.6	4.2	3.7	6.5	4.3	3.3	6.7	4.1	4.0
Heart failure	8.0	5.9	5.3	7.7	6.1	5.2	8.2	5.8	5.3
Hypertension	6.0	2.6	2.6	*	*2.1	2.3	*5.6	2.8	2.7
Stroke	10.4	5.9	4.6	10.0	5.7	4.5	10.6	6.0	4.8
Pneumonia	10.4	6.3	5.6	9.8	6.4	5.4	11.0	6.3	5.8
Chronic obstructive pulmonary disease	6.9	5.1	5.1	*6.9	5.0	4.9	*7.0	5.3	5.2
Gallstones	8.5	5.3	5.3	8.0	5.6	5.4	8.8	5.1	5.2
Kidney disease	10.5	7.4	6.9	11.0	8.2	6.8	*10.1	6.6	7.0
Urinary tract infection	11.0	5.2	5.0	8.1	5.5	5.0	12.3	5.1	4.9
Hyperplasia of the prostate	...	...	...	6.0	3.1	3.2	...	...	...
Osteoarthritis	10.1	4.6	4.1	9.9	4.4	4.3	10.2	4.7	4.0
Injury	10.1	6.8	5.8	8.9	*8.2	6.7	10.4	6.3	5.4
Fracture	11.0	7.4	5.9	10.0	*	6.6	11.2	6.7	5.6
Hip fracture	12.1	7.7	6.4	10.4	7.8	7.1	12.5	7.6	6.2
Complications of care and adverse effects	12.5	7.1	6.1	14.0	8.1	6.2	11.2	6.0	5.9

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 102 (page 3 of 3). Average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay ¹								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
85 years and over ²	9.6	6.2	5.6	9.4	6.1	5.4	9.6	6.2	5.7
Septicemia	12.6	6.9	7.2	*11.8	6.7	6.7	12.9	6.9	7.5
Cancer, all	12.1	7.5	6.4	13.4	8.6	5.9	11.3	6.8	6.9
Colorectal cancer	22.4	*10.1	7.9	*	*	*8.6	*21.1	8.2	*7.4
Lung/bronchus/tracheal cancer	*	*8.0	*6.8	*	*5.9	*	*	*	*
Breast cancer ⁵ . . . . .	...	...	...	...	...	...	*5.3	*	*
Prostate cancer . . . . .	...	...	...	*7.5	*	*	...	...	...
Diabetes	9.1	5.5	4.6	*	*	5.1	9.2	4.9	4.4
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses ⁴	*	*10.5	7.1	*	*	*	*	*10.8	*7.4
Dementia and Alzheimer's disease	11.4	7.9	7.0	*	*8.8	6.6	*11.0	*7.6	*7.2
Heart disease	8.1	5.2	4.8	7.8	5.1	4.7	8.2	5.3	4.8
Ischemic heart disease	7.5	5.4	4.9	6.8	5.4	4.7	7.9	5.4	5.0
Heart attack	9.8	6.7	5.7	8.9	6.4	5.8	10.3	6.9	5.7
Arrhythmias	8.3	4.4	4.2	*9.6	4.3	4.2	7.7	4.4	4.2
Heart failure	8.6	5.3	4.8	8.0	4.9	4.9	8.8	5.5	4.7
Hypertension	*	*4.2	2.9	*	*	*	*	*	2.8
Stroke	9.6	5.3	5.3	9.6	5.6	4.6	9.5	5.1	5.6
Pneumonia	10.9	7.0	5.7	11.1	6.1	5.6	10.7	7.5	5.9
Chronic obstructive pulmonary disease	*	5.8	4.7	*	5.4	4.9	*	5.9	4.5
Gallstones	10.3	5.8	5.9	*9.3	*5.6	*5.8	10.7	*5.9	5.9
Kidney disease	*12.6	8.5	6.2	*	*9.0	6.2	*13.8	*8.2	6.1
Urinary tract infection	10.2	5.6	5.1	9.3	5.7	5.0	10.7	5.5	5.1
Hyperplasia of the prostate . . . . .	...	...	...	6.6	*3.7	*2.9	...	...	...
Osteoarthritis	10.5	4.7	4.0	*	*	*3.9	*9.6	4.4	4.0
Injury	10.5	5.9	5.3	11.0	6.4	5.2	10.3	5.8	5.4
Fracture	11.1	6.1	5.6	11.2	6.4	5.8	11.1	6.0	5.5
Hip fracture	12.7	6.5	6.1	12.6	6.8	6.5	12.7	6.5	6.0
Complications of care and adverse effects	*11.7	*8.2	5.7	*10.7	*6.4	6.3	*12.3	*9.1	5.3

... Category not applicable.

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

¹ Average length of stay is calculated by dividing days of care by number of discharges. See [Appendix II, Average length of stay; Days of care](#).

² Includes discharges with first-listed diagnoses not shown in table.

³ Includes abuse, dependence, and withdrawal. These estimates are for nonfederal short-stay hospitals only and do not include alcohol and drug discharges from other types of facilities or programs such as the Department of Veterans Affairs or day treatment programs.

⁴ These estimates are for nonfederal short-stay hospitals only and do not include discharges from other types of facilities or programs such as the Department of Veterans Affairs or long-term hospitals.

⁵ Shown for women only.

NOTES: Excludes newborn infants. Diagnostic categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Diagnosis; Human immunodeficiency virus \(HIV\) disease](#); *International Classification of Diseases, Ninth Revision, Clinical Modification*; Table X for ICD–9–CM codes. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Additional data and diagnosis categories are available from <http://www.cdc.gov/nchs/hdi.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 103 (page 1 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
18 years and over									
Hospital discharges with at least one procedure, crude ¹	67.4	62.1	63.3	65.2	59.2	60.3	68.7	63.9	65.2
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure, age-adjusted ^{1,2}	1,020.1	859.9	899.0	882.2	701.4	723.0	1,176.4	1,026.2	1,086.0
Hospital discharges with at least one procedure, crude ¹	1,006.4	856.8	900.8	788.1	648.4	691.2	1,205.9	1,049.8	1,097.8
Operations on vessels of heart	28.3	41.2	42.2	41.9	56.9	58.0	15.8	26.7	27.4
Coronary angioplasty or arthroectomy	14.0	26.2	29.0	20.5	34.9	38.9	8.0	18.1	19.7
Coronary artery stent insertion	...	21.7	28.4	...	28.7	38.1	...	15.3	19.2
Drug-eluting stent insertion	...	...	24.2	...	...	32.7	...	...	16.3
Coronary artery bypass graft (CABG)	14.1	15.0	11.3	21.2	21.8	16.6	7.7	8.7	6.3
Cardiac catheterization	52.1	57.8	49.0	68.3	72.1	60.3	37.4	44.6	38.4
Pacemaker	8.6	8.5	10.0	10.1	8.5	10.0	7.1	8.5	10.1
Carotid (neck arteries) endarterectomy	3.6	5.9	4.4	4.1	6.6	5.1	3.1	5.3	3.8
Endoscopy of small intestine	40.8	42.5	44.8	38.6	39.1	40.0	42.8	45.6	49.3
Endoscopy of large intestine	27.9	25.0	22.5	22.5	20.2	18.7	32.8	29.4	26.1
Gall bladder removal	27.9	19.6	18.1	16.5	13.3	12.2	38.2	25.5	23.6
Laparoscopic gall bladder removal	...	14.8	14.0	...	9.2	8.8	...	20.1	19.0
Treatment of intra-abdominal scar tissue	17.0	14.4	14.9	6.5	5.7	6.8	26.6	22.4	22.5
Reduction of fracture	27.6	24.9	24.7	27.3	22.0	22.9	27.8	27.7	26.3
Excision of intervertebral disc and spinal fusion	18.7	18.2	18.5	22.3	20.0	18.7	15.4	16.4	18.4
Total hip replacement	6.4	7.3	10.3	5.4	6.8	9.3	7.3	7.7	11.1
Partial hip replacement	4.8	5.0	10.9	2.0	2.3	7.7	7.3	7.6	13.9
Total knee replacement	6.7	13.8	23.0	4.9	11.0	17.1	8.4	16.4	28.6
CAT scan	68.4	29.2	25.4	68.6	27.4	25.1	68.2	30.9	25.7
Arteriography and angiocardiology with contrast	59.7	63.0	48.2	75.6	76.2	55.2	45.2	50.7	41.6
Diagnostic ultrasound	72.3	36.9	34.9	62.1	33.1	33.8	81.7	40.4	35.9
Magnetic resonance imaging	9.5	9.2	10.8	9.4	8.2	9.3	9.6	10.2	12.3
Mechanical ventilation	17.6	23.0	25.4	18.8	23.9	27.6	16.4	22.1	23.4
18–44 years									
Hospital discharges with at least one procedure ¹	73.0	71.7	72.3	62.6	55.9	55.7	77.0	77.4	78.2
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure ¹	749.3	609.1	655.2	362.8	251.6	265.8	1,130.6	965.9	1,050.8
Operations on vessels of heart	3.0	3.9	3.9	4.9	5.5	5.6	*1.2	2.3	2.1
Coronary angioplasty or arthroectomy	1.9	3.0	2.9	3.0	4.3	4.2	*0.8	1.6	1.6
Coronary artery stent insertion	...	2.5	2.8	...	3.6	4.1	...	1.4	1.6
Drug-eluting stent insertion	...	...	2.5	...	...	3.7	...	...	*1.3
Coronary artery bypass graft (CABG)	1.0	0.9	*0.7	*1.8	1.1	*	...	*0.7	*
Cardiac catheterization	9.0	8.5	7.7	12.5	11.0	9.7	5.5	5.9	5.6
Endoscopy of small intestine	13.1	10.3	13.0	13.2	10.4	11.2	13.0	10.2	14.8
Endoscopy of large intestine	6.9	5.5	5.7	5.6	4.7	5.3	8.1	6.3	6.2
Gall bladder removal	18.7	11.9	13.3	6.2	4.3	5.7	31.0	19.4	21.0
Laparoscopic gall bladder removal	...	9.9	11.5	...	3.0	4.6	...	16.8	18.5
Treatment of intra-abdominal scar tissue	14.1	10.8	10.5	2.0	1.5	2.6	26.0	20.1	18.5
Hysterectomy	...	...	...	...	...	...	63.3	55.7	46.2
Abdominal hysterectomy	...	...	...	...	...	...	47.1	34.6	24.3
Vaginal hysterectomy	...	...	...	...	...	...	15.8	19.1	16.2
Forceps, vacuum, and breech delivery	...	...	...	...	...	...	77.5	59.9	48.3
Episiotomy	...	...	...	...	...	...	293.3	160.8	77.3
Other procedures inducing or assisting delivery	...	...	...	...	...	...	387.9	384.2	423.9
Medical induction of labor	...	...	...	...	...	...	41.1	77.7	113.3
Cesarean section	...	...	...	...	...	...	167.1	149.5	227.1
Reduction of fracture	19.1	13.7	13.1	27.9	19.0	18.6	10.4	8.4	7.4
Excision of intervertebral disc and spinal fusion	17.0	14.1	10.1	21.5	16.2	10.9	12.6	12.1	9.4
CAT scan	27.5	10.6	11.4	32.3	11.0	12.3	22.7	10.3	10.6
Arteriography and angiocardiology with contrast	12.5	10.3	10.7	17.4	12.9	11.8	7.6	7.7	9.5
Diagnostic ultrasound	34.2	11.6	11.4	19.3	8.3	9.5	48.9	14.9	13.4
Magnetic resonance imaging	4.9	3.8	4.5	4.9	3.6	4.0	4.9	*4.0	5.0
Mechanical ventilation	4.6	7.0	8.7	5.4	8.2	10.5	3.8	5.8	6.8

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 103 (page 2 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
45–64 years									
Hospital discharges with at least one procedure ¹	68.2	62.3	63.2	68.9	63.4	64.3	67.6	61.3	62.1
Percent									
Hospital discharges with at least one procedure ¹	924.2	694.6	733.7	965.9	714.4	755.6	885.4	675.9	712.8
Number per 10,000 population									
Operations on vessels of heart	53.0	57.7	56.1	83.2	88.5	83.6	24.8	28.4	29.8
Coronary angioplasty or arthroectomy	29.4	37.5	39.7	45.3	55.9	58.2	14.5	20.0	22.2
Coronary artery stent insertion	...	31.1	38.7	...	46.5	56.6	...	16.5	21.8
Drug-eluting stent insertion	...	...	33.0	...	...	48.2	...	...	18.5
Coronary artery bypass graft (CABG)	23.4	20.3	14.1	37.5	32.5	22.6	10.3	8.6	6.0
Cardiac catheterization	98.2	83.0	64.9	136.8	113.9	84.0	62.3	53.7	46.8
Pacemaker	7.8	4.0	3.6	10.9	5.2	4.4	*4.9	2.8	2.8
Carotid (neck arteries) endarterectomy	4.0	5.2	2.9	5.2	5.2	*3.4	3.0	*5.2	2.4
Endoscopy of small intestine	45.0	36.4	40.2	46.3	40.7	39.1	43.8	32.3	41.2
Endoscopy of large intestine	28.5	19.3	19.8	25.4	18.1	17.4	31.4	20.4	22.1
Gall bladder removal	36.4	20.6	17.1	22.3	16.3	13.8	49.5	24.6	20.3
Laparoscopic gall bladder removal	...	15.3	12.8	...	12.1	10.0	...	18.5	15.4
Treatment of intra-abdominal scar tissue	17.1	15.0	15.6	9.5	7.0	7.8	24.2	22.6	23.0
Removal of prostate	...	...	...	35.8	15.6	17.8	...	...	...
Transurethral prostatectomy	...	...	...	30.4	7.0	3.9	...	...	...
Hysterectomy	...	...	...	...	...	...	76.4	78.2	64.0
Abdominal hysterectomy	...	...	...	...	...	...	58.4	53.2	38.1
Vaginal hysterectomy	...	...	...	...	...	...	17.6	21.6	19.7
Reduction of fracture	20.3	18.5	19.3	19.5	17.6	20.4	21.0	19.3	18.3
Excision of intervertebral disc and spinal fusion	26.1	25.7	26.8	29.4	27.1	26.7	23.1	24.4	26.9
Total hip replacement	6.2	8.1	12.2	5.7	9.1	13.1	6.5	7.2	11.5
Partial hip replacement	*	*1.3	9.5	*	*0.8	9.3	*	*1.7	9.8
Total knee replacement	6.7	12.7	25.7	5.8	8.7	19.2	*7.4	16.4	31.9
Mastectomy	...	...	...	...	...	...	21.2	10.6	6.1
CAT scan	65.4	25.2	24.5	69.9	25.9	25.7	61.2	24.5	23.4
Arteriography and angiocardiology with contrast	105.4	85.3	59.0	138.5	111.4	72.1	74.6	60.7	46.5
Diagnostic ultrasound	69.5	34.3	34.1	73.8	38.0	36.1	65.5	30.9	32.3
Magnetic resonance imaging	10.9	8.9	10.9	10.7	9.4	10.5	11.0	8.4	11.2
Mechanical ventilation	17.6	21.2	24.3	18.6	22.9	27.6	16.7	19.6	21.1
65–74 years									
Hospital discharges with at least one procedure ¹	66.5	61.3	63.3	69.3	63.9	66.1	63.8	58.9	60.8
Percent									
Hospital discharges with at least one procedure ¹	1,739.4	1,559.8	1,602.7	1,994.1	1,692.3	1,708.1	1,539.4	1,450.6	1,513.6
Number per 10,000 population									
Operations on vessels of heart	97.0	139.8	133.4	148.9	195.3	194.9	56.3	94.1	81.4
Coronary angioplasty or arthroectomy	44.1	86.3	86.9	64.9	116.0	121.8	27.8	61.9	57.3
Coronary artery stent insertion	...	71.7	87.0	...	94.9	125.1	...	52.5	54.7
Drug-eluting stent insertion	...	...	76.0	...	...	111.2	...	...	46.3
Coronary artery bypass graft (CABG)	52.1	53.9	40.1	83.1	79.7	61.2	27.7	32.6	22.3
Cardiac catheterization	164.0	174.2	144.0	213.8	222.7	190.3	124.9	134.2	104.8
Pacemaker	24.6	22.5	26.7	32.1	22.8	32.9	18.7	22.3	21.4
Carotid (neck arteries) endarterectomy	14.6	24.1	17.0	18.0	29.5	19.5	11.9	19.6	15.0
Endoscopy of small intestine	92.8	106.6	107.4	91.5	102.4	113.9	93.7	110.0	101.9
Endoscopy of large intestine	70.3	64.8	53.2	62.5	59.7	51.3	76.5	69.0	54.8
Gall bladder removal	45.0	42.1	33.6	42.0	37.9	28.4	47.4	45.5	37.9
Laparoscopic gall bladder removal	...	29.5	23.0	...	24.4	18.6	...	33.7	26.8
Treatment of intra-abdominal scar tissue	23.1	21.4	24.7	17.1	14.5	16.8	27.7	27.1	31.4
Removal of prostate	...	...	...	201.1	83.7	63.0	...	...	...
Transurethral prostatectomy	...	...	...	180.9	59.4	36.9	...	...	...
Hysterectomy	...	...	...	...	...	...	37.4	35.9	39.7
Abdominal hysterectomy	...	...	...	...	...	...	20.8	20.5	*25.6
Vaginal hysterectomy	...	...	...	...	...	...	16.5	14.7	13.2
Reduction of fracture	36.2	36.4	33.1	24.3	26.2	23.2	45.5	44.8	41.4
Excision of intervertebral disc and spinal fusion	16.3	21.1	32.7	14.2	22.5	30.1	18.0	20.0	34.9
Total hip replacement	24.0	25.4	35.7	23.0	26.4	31.5	24.9	24.5	39.3
Partial hip replacement	8.9	7.6	21.2	*4.0	*	12.8	*12.7	10.5	28.3
Total knee replacement	33.2	65.4	93.8	26.4	64.5	71.2	38.6	66.0	112.9
Mastectomy	...	...	...	...	...	...	30.7	22.7	9.5
CAT scan	153.7	64.3	50.7	163.4	65.7	55.7	146.1	63.1	46.6
Arteriography and angiocardiology with contrast	184.5	186.2	132.8	239.0	231.9	160.6	141.7	148.5	109.2
Diagnostic ultrasound	155.2	92.7	84.8	165.2	94.1	97.2	147.4	91.6	74.4
Magnetic resonance imaging	20.6	17.2	22.3	19.2	*14.6	20.1	21.7	*19.3	24.2
Mechanical ventilation	48.6	60.0	67.0	58.7	70.3	75.5	40.6	51.6	59.8

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 103 (page 3 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
75–84 years									
Hospital discharges with at least one procedure ¹	59.0	53.6	56.1	61.7	56.3	57.5	57.0	51.8	55.1
	Percent								
	Number per 10,000 population								
Hospital discharges with at least one procedure ¹	2,332.9	2,212.3	2,259.0	2,723.9	2,416.5	2,427.7	2,096.7	2,078.8	2,143.6
Operations on vessels of heart	69.1	143.2	152.4	107.6	202.5	208.2	45.8	104.5	114.2
Coronary angioplasty or arthroectomy	22.4	84.7	100.3	33.7	109.3	133.4	15.7	68.7	77.6
Coronary artery stent insertion . . . . .	..	69.8	95.7	..	86.5	124.1	..	58.8	76.2
Drug-eluting stent insertion . . . . .	..	..	79.6	..	..	102.3	..	..	64.1
Coronary artery bypass graft (CABG)	47.0	57.7	44.2	74.7	90.5	65.1	30.3	36.2	29.9
Cardiac catheterization	116.6	190.2	160.9	166.0	236.9	206.9	86.8	159.6	129.5
Pacemaker	50.8	58.1	69.9	70.6	72.2	78.4	38.8	48.9	64.1
Carotid (neck arteries) endarterectomy	19.8	32.8	29.5	24.2	45.5	44.2	*17.1	24.5	19.5
Endoscopy of small intestine	171.4	189.7	172.5	188.9	193.8	171.4	160.8	187.0	173.2
Endoscopy of large intestine	131.1	123.7	95.3	126.1	113.8	88.1	134.1	130.1	100.2
Gall bladder removal	51.8	43.4	38.4	64.4	46.7	38.8	44.2	41.3	38.1
Laparoscopic gall bladder removal . . . . .	..	28.9	26.7	..	29.6	23.6	..	28.5	28.8
Treatment of intra-abdominal scar tissue	34.0	28.6	29.9	28.2	26.3	18.1	37.5	30.2	38.0
Removal of prostate . . . . .	..	..	..	273.5	98.0	64.7	..	..	..
Transurethral prostatectomy . . . . .	..	..	..	257.5	89.0	57.9	..	..	..
Hysterectomy . . . . .	..	..	..	..	..	..	28.5	25.5	16.6
Abdominal hysterectomy . . . . .	..	..	..	..	..	..	18.8	16.2	*9.1
Vaginal hysterectomy . . . . .	..	..	..	..	..	..	*9.4	8.1	*7.2
Reduction of fracture	86.2	80.1	82.7	43.4	57.2	50.5	112.1	95.0	104.7
Excision of intervertebral disc and spinal fusion	12.0	17.4	26.1	*13.2	*20.4	30.1	11.3	15.3	23.4
Total hip replacement	30.7	26.3	34.2	*26.9	*21.3	29.1	33.1	29.6	37.7
Partial hip replacement	43.6	36.6	43.5	*14.3	20.0	28.5	61.2	47.5	53.8
Total knee replacement	28.4	59.3	90.3	*19.5	48.7	79.5	33.9	66.3	97.6
Mastectomy . . . . .	..	..	..	..	..	..	29.2	22.0	14.6
CAT scan	279.7	119.2	75.9	307.2	127.9	79.9	263.0	113.5	73.2
Arteriography and angiocardiology with contrast	141.0	219.2	166.3	192.3	287.9	209.5	109.9	174.3	136.7
Diagnostic ultrasound	273.5	134.1	119.4	315.7	142.8	134.0	248.0	128.4	109.3
Magnetic resonance imaging	30.5	*37.3	37.3	43.0	*33.6	32.5	*23.0	*39.8	*40.6
Mechanical ventilation	79.8	91.1	88.6	110.3	106.5	104.7	61.3	80.9	77.5
85 years and over									
Hospital discharges with at least one procedure ¹	49.3	44.6	45.9	52.4	45.4	48.5	47.8	44.3	44.6
	Percent								
	Number per 10,000 population								
Hospital discharges with at least one procedure ¹	2,762.1	2,700.5	2,620.8	3,367.3	2,797.9	2,904.6	2,526.8	2,660.6	2,488.0
Operations on vessels of heart	*14.0	51.1	64.3	*	83.0	89.9	*	38.0	52.3
Coronary angioplasty or arthroectomy	*	36.3	48.9	*	*52.9	65.7	*	29.5	41.0
Coronary artery stent insertion . . . . .	..	31.6	49.4	..	*48.9	65.2	..	*24.4	42.0
Drug-eluting stent insertion . . . . .	..	..	39.7	..	..	*49.8	..	..	35.0
Coronary artery bypass graft (CABG)	*	*15.1	10.5	*	*30.1	*20.2	*	*9.0	*6.0
Cardiac catheterization	*23.7	87.7	86.8	*	122.8	120.4	*19.0	73.2	71.1
Pacemaker	79.5	82.9	95.6	120.4	104.3	111.8	63.5	74.2	88.0
Carotid (neck arteries) endarterectomy	*	*12.0	*12.1	*	*	*	*	*4.8	*
Endoscopy of small intestine	228.8	262.4	246.4	288.7	245.1	232.5	205.5	269.5	252.9
Endoscopy of large intestine	180.8	158.1	127.3	188.0	133.3	110.4	178.0	168.3	135.2
Gall bladder removal	46.4	40.9	28.4	*68.4	*42.9	*30.7	37.8	*40.1	27.3
Laparoscopic gall bladder removal . . . . .	..	*30.4	22.1	..	*	*24.9	..	*30.5	20.8
Treatment of intra-abdominal scar tissue	29.6	24.3	26.2	*	*16.4	*	33.7	*27.5	20.7
Removal of prostate . . . . .	..	..	..	257.2	*113.0	*77.3	..	..	..
Transurethral prostatectomy . . . . .	..	..	..	247.1	*110.0	*73.7	..	..	..
Hysterectomy . . . . .	..	..	..	..	..	..	*	*	*
Abdominal hysterectomy . . . . .	..	..	..	..	..	..	*	*	*
Vaginal hysterectomy . . . . .	..	..	..	..	..	..	*	*	*
Reduction of fracture	196.2	200.5	173.2	150.6	93.8	133.8	213.9	244.3	191.7
Excision of intervertebral disc and spinal fusion	*	*2.3	*11.1	*	*	*	*	*	*
Total hip replacement	*27.8	*20.7	25.8	*	*	*	*23.2	*26.3	26.4
Partial hip replacement	67.4	82.2	80.3	*52.9	*44.1	*45.5	73.1	97.9	96.6
Total knee replacement	*12.4	*22.9	34.5	*	*	*48.3	*	*16.2	*28.1
Mastectomy . . . . .	..	..	..	..	..	..	*28.9	*15.7	*
CAT scan	378.4	158.7	119.1	401.2	141.4	*112.5	369.5	165.9	122.2
Arteriography and angiocardiology with contrast	50.6	120.8	100.3	*87.6	164.4	122.1	36.2	102.8	90.1
Diagnostic ultrasound	327.7	208.5	158.4	394.5	181.4	*164.6	301.7	219.6	155.4
Magnetic resonance imaging	*18.5	*40.4	39.2	*	*	*33.1	*16.2	*	42.1
Mechanical ventilation	91.5	106.0	93.6	97.9	116.5	114.8	89.1	101.7	83.7

See footnotes at end of table.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 103 (page 4 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006

[Data are based on a sample of hospital records]

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

. . . Category not applicable.

¹Includes discharges for procedures not shown separately.

²Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Excludes newborn infants. Up to four procedures were coded for each hospital discharge. If more than one procedure with the same code (e.g., a coronary artery bypass graft) was performed during the hospital stay, it was counted only once (any listed). Procedure categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM)*. See [Appendix II, International Classification of Diseases, Ninth Revision, Clinical Modification; Procedure; Table XI](#) for ICD–9–CM codes. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

This table will be updated on the Web. Go to <http://www.cdc.gov/nchs/hus.htm>.

Table 104. Hospital admissions, average length of stay, outpatient visits, and outpatient surgery by type of ownership and size of hospital: United States, selected years 1975–2007

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1975	1980	1990	1995	2000	2005	2006	2007
Admissions								
Number in thousands								
All hospitals	36,157	38,892	33,774	33,282	34,891	37,006	37,189	37,120
Federal	1,913	2,044	1,759	1,559	1,034	952	1,008	981
Nonfederal ¹	34,243	36,848	32,015	31,723	33,946	36,054	36,180	36,139
Community ²	33,435	36,143	31,181	30,945	33,089	35,239	35,378	35,346
Nonprofit	23,722	25,566	22,878	22,557	24,453	25,881	25,798	25,752
For profit	2,646	3,165	3,066	3,428	4,141	4,618	4,732	4,626
State-local government	7,067	7,413	5,236	4,961	4,496	4,740	4,848	4,967
6–24 beds	174	159	95	124	141	186	192	200
25–49 beds	1,431	1,254	870	944	995	1,173	1,188	1,170
50–99 beds	3,675	3,700	2,474	2,299	2,355	2,412	2,301	2,295
100–199 beds	7,017	7,162	5,833	6,288	6,735	6,678	6,662	6,341
200–299 beds	6,174	6,596	6,333	6,495	6,702	7,075	7,008	7,009
300–399 beds	4,739	5,358	5,091	4,693	5,135	6,025	5,721	5,637
400–499 beds	3,689	4,401	3,644	3,413	3,617	3,634	3,872	4,044
500 beds or more	6,537	7,513	6,840	6,690	7,410	8,054	8,435	8,650
Average length of stay ³								
Number of days								
All hospitals	11.4	10.0	9.1	7.8	6.8	6.5	6.4	6.3
Federal	20.3	16.8	14.9	13.1	12.8	11.6	11.2	11.5
Nonfederal ¹	10.8	9.6	8.8	7.5	6.6	6.3	6.3	6.2
Community ²	7.7	7.6	7.2	6.5	5.8	5.6	5.6	5.5
Nonprofit	7.8	7.7	7.3	6.4	5.7	5.5	5.4	5.4
For profit	6.6	6.5	6.4	5.8	5.4	5.3	5.2	5.2
State-local government	7.6	7.3	7.7	7.4	6.7	6.6	6.5	6.4
6–24 beds	5.6	5.3	5.4	5.5	4.3	4.2	4.0	4.0
25–49 beds	6.0	5.8	6.1	5.7	5.1	4.9	4.9	4.9
50–99 beds	6.8	6.7	7.2	7.0	6.5	6.4	6.3	6.3
100–199 beds	7.1	7.0	7.1	6.4	5.7	5.6	5.5	5.5
200–299 beds	7.5	7.4	6.9	6.2	5.7	5.3	5.2	5.2
300–399 beds	7.8	7.6	7.0	6.1	5.5	5.4	5.4	5.3
400–499 beds	8.1	7.9	7.3	6.3	5.6	5.5	5.4	5.3
500 beds or more	9.1	8.7	8.1	7.1	6.3	6.0	5.9	5.9
Outpatient visits ⁴								
Number in thousands								
All hospitals	254,844	262,951	368,184	483,195	592,673	673,689	690,425	693,510
Federal	51,957	50,566	58,527	59,934	63,402	80,018	83,974	82,187
Nonfederal ¹	202,887	212,385	309,657	423,261	531,972	593,671	606,452	611,323
Community ²	190,672	202,310	301,329	414,345	521,405	584,429	599,553	603,300
Nonprofit	131,435	142,156	221,073	303,851	393,168	441,653	453,501	455,825
For profit	7,713	9,696	20,110	31,940	43,378	46,016	44,207	43,943
State-local government	51,525	50,459	60,146	78,554	84,858	96,760	101,845	103,532
6–24 beds	915	1,155	1,471	3,644	4,555	7,970	7,803	7,698
25–49 beds	5,855	6,227	10,812	19,465	27,007	35,172	37,054	39,176
50–99 beds	16,303	17,976	27,582	38,597	49,385	53,382	52,975	54,312
100–199 beds	35,156	36,453	58,940	91,312	114,183	121,053	124,426	119,455
200–299 beds	32,772	36,073	60,561	84,080	99,248	107,332	103,431	106,535
300–399 beds	29,169	30,495	43,699	54,277	73,444	85,366	82,916	81,671
400–499 beds	22,127	25,501	33,394	44,284	52,205	56,023	60,440	60,604
500 beds or more	48,375	48,430	64,870	78,685	101,378	118,131	130,508	133,849
Outpatient surgery								
Percent of total surgeries ⁵								
Community hospitals ²	---	16.3	50.5	58.1	62.7	63.3	63.1	62.7

--- Data not available.

¹The category of nonfederal hospitals comprises psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See [Appendix II, Hospital](#).

²Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See [Appendix II, Hospital](#).

³Average length of stay is calculated as the number of inpatient days divided by the number of admissions. See [Appendix II, Average length of stay](#).

⁴Outpatient visits include visits to the emergency department, outpatient department, referred visits (pharmacy, EKG, radiology), and outpatient surgery. See [Appendix II, Outpatient visit](#).

⁵Total surgeries is a measure of patients with at least one surgical procedure. Persons with multiple surgical procedures during the same outpatient visit or inpatient stay are counted only once. See [Appendix II, Outpatient surgery](#).

NOTE: Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1976, 1981, 1991–2009 editions. Chicago, IL. (Copyrights 1976, 1981, 1991–2009: Used with the permission of Health Forum LLC, an affiliate of the AHA.)

Table 105. Nursing home residents 65 years of age and over, by age, sex, and race: United States, selected years 1973–2004

[Data are based on a sample of nursing home residents]

Age, sex, and race	Number of residents in hundreds					Residents per 1,000 population ¹				
	1973–1974	1985	1995	1999	2004	1973–1974	1985	1995	1999	2004
Age										
65 years and over, age-adjusted ²	...	...	...	...	...	58.5	54.0	46.4	43.3	34.8
65 years and over, crude	9,615	13,183	14,229	14,695	13,173	44.7	46.2	42.8	42.9	36.3
65–74 years	1,631	2,121	1,897	1,948	1,741	12.3	12.5	10.2	10.8	9.4
75–84 years	3,849	509	5,096	5,176	4,687	57.7	57.7	46.1	43.0	36.1
85 years and over	4,136	5,973	7,235	7,571	6,745	257.3	220.3	200.9	182.5	138.8
Male										
65 years and over, age-adjusted ²	...	...	...	...	...	42.5	38.8	33.0	30.6	24.1
65 years and over, crude	2,657	3,344	3,571	3,778	3,369	30.0	29.0	26.2	26.5	22.2
65–74 years	651	806	795	841	754	11.3	10.8	9.6	10.3	8.9
75–84 years	1,023	1,413	1,443	1,495	1,409	39.9	43.0	33.5	30.8	27.0
85 years and over	983	1,126	1,333	1,442	1,206	182.7	145.7	131.5	116.5	80.0
Female										
65 years and over, age-adjusted ²	...	...	...	...	...	67.5	61.5	52.8	49.8	40.4
65 years and over, crude	6,958	9,839	10,658	10,917	9,804	54.9	57.9	54.3	54.6	46.4
65–74 years	980	1,315	1,103	1,107	988	13.1	13.8	10.7	11.2	9.8
75–84 years	2,826	3,677	3,654	3,681	3,278	68.9	66.4	54.3	51.2	42.3
85 years and over	3,153	4,847	5,902	6,129	5,539	294.9	250.1	228.1	210.5	165.2
White³										
65 years and over, age-adjusted ²	...	...	...	...	...	61.2	55.5	45.8	41.9	34.0
65 years and over, crude	9,206	12,274	12,715	12,796	11,489	46.9	47.7	42.7	42.1	36.2
65–74 years	1,501	1,878	1,541	1,573	1,342	12.5	12.3	9.3	10.0	8.5
75–84 years	3,697	4,736	4,513	4,406	4,058	60.3	59.1	45.0	40.5	35.2
85 years and over	4,008	5,660	6,662	6,817	6,089	270.8	228.7	203.2	181.8	139.4
Black or African American³										
65 years and over, age-adjusted ²	...	...	...	...	...	28.2	41.5	50.8	55.5	49.9
65 years and over, crude	377	820	1,229	1,459	1,454	22.0	35.0	45.5	51.0	47.7
65–74 years	122	225	296	303	345	11.1	15.4	18.5	18.2	20.2
75–84 years	134	306	475	587	546	26.7	45.3	57.8	66.5	55.5
85 years and over	121	290	458	569	563	105.7	141.5	168.2	182.8	160.7

... Category not applicable.

¹Rates are calculated using estimates of the civilian population of the United States including institutionalized persons. Population data are from unpublished tabulations provided by the U.S. Census Bureau. The 2004 population estimates are postcensal estimates as of July 1, 2004, based on the 2000 census. For more information about the 2004 population estimates, see the Technical Notes in Kozak LJ, DeFrances CJ, Hall MJ. National Hospital Discharge Survey: 2004 annual summary with detailed diagnosis and procedure data. Vital Health Stat 13(162). Hyattsville, MD: NCHS; 2006. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_162acc.pdf.

²Age-adjusted to the year 2000 population standard using the following three age groups: 65–74 years, 75–84 years, and 85 years and over. See [Appendix II, Age adjustment](#).

³Starting with 1999 data, the instruction for the race item on the Current Resident Questionnaire was changed so that more than one race could be recorded. In previous years, only one racial category could be checked. Estimates for racial groups presented in this table are for residents for whom only one race was recorded. Estimates for residents where multiple races were checked are unreliable due to small sample sizes and are not shown.

NOTES: Residents are persons on the roster of the nursing home as of the night before the survey. Residents for whom beds are maintained even though they may be away on overnight leave or in a hospital are included. People residing in personal care or domiciliary care homes are excluded. See [Appendix I, National Nursing Home Survey \(NNHS\)](#). Data for 2004 have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Nursing Home Survey.

Table 106. Persons employed in health service sites, by site and sex: United States, 2000–2008

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Site	2000	2002	2003	2004	2005	2006	2007	2008
Both sexes								
Number of persons in thousands								
All employed civilians ¹	136,891	136,485	137,736	139,252	141,730	144,427	146,047	145,362
All health service sites ²	12,211	13,069	13,615	13,817	14,052	14,352	14,687	15,108
Offices and clinics of physicians	1,387	1,533	1,673	1,727	1,801	1,785	1,720	1,562
Offices and clinics of dentists	672	734	771	780	792	852	843	774
Offices and clinics of chiropractors	120	132	142	156	163	163	144	139
Offices and clinics of optometrists	95	113	92	93	98	98	114	110
Offices and clinics of other health practitioners ³	143	149	250	274	275	292	299	195
Outpatient care centers	772	850	873	885	901	919	881	1,107
Home health care services	548	636	741	750	795	928	959	881
Other health care services ⁴	1,027	1,188	943	976	1,045	1,096	1,334	1,647
Hospitals	5,202	5,330	5,652	5,700	5,719	5,712	5,955	6,241
Nursing care facilities	1,593	1,715	1,877	1,858	1,848	1,807	1,689	1,779
Residential care facilities, without nursing	652	689	601	618	615	700	749	673
Men								
All health service sites ²	2,756	2,838	2,986	3,067	3,097	3,187	3,316	3,352
Offices and clinics of physicians	354	370	414	424	418	421	417	375
Offices and clinics of dentists	158	151	163	158	156	173	161	136
Offices and clinics of chiropractors	32	47	53	63	68	61	54	58
Offices and clinics of optometrists	26	29	29	24	27	29	26	24
Offices and clinics of other health practitioners ³	38	42	63	69	80	80	71	52
Outpatient care centers	186	172	200	203	201	199	216	266
Home health care services	45	54	56	65	81	91	96	96
Other health care services ⁴	304	362	297	314	311	344	399	470
Hospitals	1,241	1,195	1,263	1,333	1,347	1,337	1,464	1,451
Nursing care facilities	195	223	267	251	246	263	217	231
Residential care facilities, without nursing	177	193	181	164	162	189	195	193
Women								
All health service sites ²	9,457	10,232	10,631	10,750	10,958	11,167	11,370	11,755
Offices and clinics of physicians	1,034	1,164	1,259	1,302	1,383	1,364	1,303	1,187
Offices and clinics of dentists	514	584	607	623	637	679	681	638
Offices and clinics of chiropractors	88	85	90	93	95	102	90	81
Offices and clinics of optometrists	69	84	64	69	71	69	88	86
Offices and clinics of other health practitioners ³	106	106	186	204	195	213	228	143
Outpatient care centers	586	678	673	683	700	720	665	841
Home health care services	503	582	685	685	713	837	863	785
Other health care services ⁴	723	826	646	662	734	752	935	1,176
Hospitals	3,961	4,135	4,390	4,366	4,372	4,376	4,491	4,790
Nursing care facilities	1,398	1,492	1,611	1,607	1,602	1,544	1,472	1,548
Residential care facilities, without nursing	475	496	420	454	453	511	554	480
Both sexes								
Percent of employed civilians								
All health service sites	8.9	9.6	9.9	9.9	9.9	9.9	10.1	10.4
Percent distribution								
All health service sites	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Offices and clinics of physicians	11.4	11.7	12.3	12.5	12.8	12.4	11.7	10.3
Offices and clinics of dentists	5.5	5.6	5.7	5.6	5.6	5.9	5.7	5.1
Offices and clinics of chiropractors	1.0	1.0	1.0	1.1	1.2	1.1	1.0	0.9
Offices and clinics of optometrists	0.8	0.9	0.7	0.7	0.7	0.7	0.8	0.7
Offices and clinics of other health practitioners ³	1.2	1.1	1.8	2.0	2.0	2.0	2.0	1.3
Outpatient care centers	6.3	6.5	6.4	6.4	6.4	6.4	6.0	7.3
Home health care services	4.5	4.9	5.4	5.4	5.7	6.5	6.5	5.8
Other health care services ⁴	8.4	9.1	6.9	7.1	7.4	7.6	9.1	10.9
Hospitals	42.6	40.8	41.5	41.3	40.7	39.8	40.5	41.3
Nursing care facilities	13.0	13.1	13.8	13.4	13.2	12.6	11.5	11.8
Residential care facilities, without nursing	5.3	5.3	4.4	4.5	4.4	4.9	5.1	4.5

¹Excludes workers under the age of 16 years.

²Data for health service sites for men and women may not sum to total for all health service sites for both sexes due to rounding.

³Includes health service sites such as psychologists' offices, nutritionists' offices, speech defect clinics, and other offices and clinics. Complete list of clinics under this category is available from: http://www.census.gov/hhes/www/oiindex/cens_797_847.html, Census Industry Code 808.

⁴Includes health service sites such as clinical laboratories, blood banks, CT-SCAN (computer tomography) centers, and other offices and clinics. Complete list of clinics under this category is available from: http://www.census.gov/hhes/www/oiindex/cens_797_847.html, Census Industry Code 818.

NOTES: Annual data are based on data collected each month and averaged over the year. Health service sites are based on the North American Industry Classification System. See [Appendix II, Industry of employment, Table VIII](#) for codes for industries. Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey: Employment and Earnings, January 2008, available from: <http://www.bls.gov/cps/tables.htm#annual> (table 18), and unpublished data.

Table 107. Active physicians and physicians in patient care, by state: United States, selected years 1975–2007

[Data are based on reporting by physicians]

State	Active physicians ^{1,2}					Physicians in patient care ^{1,2,3}				
	1975	1985	1995	2002	2007	1975	1985	1995	2002	2007
	Number per 10,000 civilian population									
United States	15.3	20.7	24.2	25.4	27.4	13.5	18.0	21.3	22.5	25.3
Alabama	9.2	14.2	18.4	19.9	21.6	8.6	13.1	17.0	18.3	20.5
Alaska	8.4	13.0	15.7	20.0	24.2	7.8	12.1	14.2	17.7	22.6
Arizona	16.7	20.2	21.4	18.9	22.3	14.1	17.1	18.2	17.6	20.6
Arkansas	9.1	13.8	17.3	19.2	20.4	8.5	12.8	16.0	17.8	19.3
California	18.8	23.7	23.7	24.0	26.1	17.3	21.5	21.7	21.8	24.2
Colorado	17.3	20.7	23.7	24.0	26.6	15.0	17.7	20.6	21.2	24.7
Connecticut	19.8	27.6	32.8	34.4	36.1	17.7	24.3	29.5	30.9	33.0
Delaware	14.3	19.7	23.4	25.2	26.2	12.7	17.1	19.7	21.5	24.4
District of Columbia	39.6	55.3	63.6	61.8	73.2	34.6	45.6	53.6	53.9	63.8
Florida	15.2	20.2	22.9	24.1	25.5	13.4	17.8	20.3	21.4	23.9
Georgia	11.5	16.2	19.7	20.4	21.4	10.6	14.7	18.0	18.8	20.0
Hawaii	16.2	21.5	24.8	27.7	31.7	14.7	19.8	22.8	25.2	29.4
Idaho	9.5	12.1	13.9	16.6	17.9	8.9	11.4	13.1	15.2	17.0
Illinois	14.5	20.5	24.8	26.0	27.7	13.1	18.2	22.1	23.1	25.7
Indiana	10.6	14.7	18.4	20.9	22.1	9.6	13.2	16.6	18.9	20.8
Iowa	11.4	15.6	19.2	19.9	21.4	9.4	12.4	15.1	15.7	19.2
Kansas	12.8	17.3	20.8	21.7	23.6	11.2	15.1	18.0	18.8	22.0
Kentucky	10.9	15.1	19.2	21.3	23.0	10.1	13.9	18.0	19.8	21.6
Louisiana	11.4	17.3	21.7	24.4	25.5	10.5	16.1	20.3	23.0	24.4
Maine	12.8	18.7	22.3	27.1	31.5	10.7	15.6	18.2	22.6	28.5
Maryland	18.6	30.4	34.1	35.3	40.0	16.5	24.9	29.9	31.2	35.1
Massachusetts	20.8	30.2	37.5	39.2	43.2	18.3	25.4	33.2	35.1	39.1
Michigan	15.4	20.8	24.8	25.8	28.1	12.0	16.0	19.0	20.1	25.1
Minnesota	14.9	20.5	23.4	25.3	28.4	13.7	18.5	21.5	23.3	26.6
Mississippi	8.4	11.8	13.9	17.1	18.1	8.0	11.1	13.0	15.6	17.1
Missouri	15.0	20.5	23.9	24.8	26.2	11.6	16.3	19.7	20.6	24.0
Montana	10.6	14.0	18.4	21.9	22.9	10.1	13.2	17.1	20.3	21.9
Nebraska	12.1	15.7	19.8	22.6	24.1	10.9	14.4	18.3	20.8	22.5
Nevada	11.9	16.0	16.7	17.9	19.6	10.9	14.5	14.6	16.1	18.5
New Hampshire	14.3	18.1	21.5	25.2	27.7	13.1	16.7	19.8	23.0	26.0
New Jersey	16.2	23.4	29.3	31.4	33.0	14.0	19.8	24.9	26.8	30.1
New Mexico	12.2	17.0	20.2	22.0	23.8	10.1	14.7	18.0	19.0	22.2
New York	22.7	29.0	35.3	36.5	38.2	20.2	25.2	31.6	32.6	35.1
North Carolina	11.7	16.9	21.1	23.3	24.7	10.6	15.0	19.4	21.4	23.1
North Dakota	9.7	15.8	20.5	22.5	24.5	9.2	14.9	18.9	20.8	23.4
Ohio	14.1	19.9	23.8	26.0	28.0	12.2	16.8	20.0	22.0	25.6
Oklahoma	11.6	16.1	18.8	19.2	20.7	9.4	12.9	14.7	14.8	18.7
Oregon	15.6	19.7	21.6	24.1	27.3	13.8	17.6	19.5	21.7	25.6
Pennsylvania	16.6	23.6	30.1	31.5	32.9	13.9	19.2	24.6	25.5	29.3
Rhode Island	17.8	23.3	30.4	33.4	36.8	16.1	20.2	26.7	29.7	34.0
South Carolina	10.0	14.7	18.9	21.5	22.9	9.3	13.6	17.6	19.9	21.7
South Dakota	8.2	13.4	16.7	20.1	22.4	7.7	12.3	15.7	18.6	21.3
Tennessee	12.4	17.7	22.5	24.2	25.9	11.3	16.2	20.8	22.5	24.4
Texas	12.5	16.8	19.4	20.3	21.4	11.0	14.7	17.3	18.1	20.0
Utah	14.1	17.2	19.2	19.8	20.9	13.0	15.5	17.6	17.9	19.5
Vermont	18.2	23.8	26.9	33.7	36.0	15.5	20.3	24.2	30.6	33.2
Virginia	12.9	19.5	22.5	24.5	26.9	11.9	17.8	20.8	22.5	25.1
Washington	15.3	20.2	22.5	24.7	26.8	13.6	17.9	20.2	22.3	24.8
West Virginia	11.0	16.3	21.0	23.7	25.5	10.0	14.6	17.9	19.8	23.1
Wisconsin	12.5	17.7	21.5	24.1	26.1	11.4	15.9	19.6	22.0	24.5
Wyoming	9.5	12.9	15.3	18.2	19.5	8.9	12.0	13.9	16.6	18.4

¹Includes active doctors of medicine (MDs) and active doctors of osteopathy (DOs). See [Appendix II, Physician](#).

²Starting with 2003 data, federal and nonfederal physicians are included. Data prior to 2003 include nonfederal physicians only.

³Prior to 2006, excludes DOs. Excludes physicians in medical teaching, administration, research, and other nonpatient care activities. Includes residents.

NOTES: Data for MDs are as of December 31. Data for DOs are as of May 31. Data for additional years are available. See [Appendix III](#).

SOURCES: American Medical Association (AMA): Physician distribution and medical licensure in the U.S., 1975; Physician characteristics and distribution in the U.S., 1986 edition; 1996–1997 edition; 2008 and 2009 edition; Department of Physician Practice and Communication Information, Division of Survey and Data Resources, AMA. (Copyrights 1976, 1986, 1997, 2004, 2008, 2009: Used with the permission of the AMA); American Osteopathic Association: 1975–1976 Yearbook and Directory of Osteopathic Physicians, 1985–1986 Yearbook and Directory of Osteopathic Physicians; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report, 1996; American Osteopathic Association: Factsheet 2006, 2006; Osteopathic Medical Profession Report 2007.

Table 108. Doctors of medicine, by place of medical education and activity: United States and outlying U.S. areas, selected years 1975–2007

[Data are based on reporting by physicians]

Place of medical education and activity	1975	1985	1995	2000	2004	2005	2006	2007
Number of doctors of medicine								
Total doctors of medicine	393,742	552,716	720,325	813,770	884,974	902,053	921,904	941,304
Active doctors of medicine ¹	340,280	497,140	625,443	692,368	744,143	762,438	766,836	776,554
Place of medical education:								
U.S. medical graduates	---	392,007	481,137	527,931	563,118	571,798	574,315	580,336
International medical graduates ²	---	105,133	144,306	164,437	181,025	190,640	192,521	196,218
Activity:								
Patient care ^{3,4}	287,837	431,527	564,074	631,431	700,287	718,473	723,118	732,234
Office-based practice	213,334	329,041	427,275	490,398	538,538	563,225	560,411	562,897
General and family practice	46,347	53,862	59,932	67,534	73,234	74,999	74,900	75,952
Cardiovascular diseases	5,046	9,054	13,739	16,300	17,252	17,519	17,480	17,504
Dermatology	3,442	5,325	6,959	7,969	8,651	8,795	8,920	9,036
Gastroenterology	1,696	4,135	7,300	8,515	9,430	9,742	9,881	10,042
Internal medicine	28,188	52,712	72,612	88,699	101,776	107,028	107,284	108,552
Pediatrics	12,687	22,392	33,890	42,215	49,356	51,854	51,815	52,095
Pulmonary diseases	1,166	3,035	4,964	6,095	7,072	7,321	7,377	7,490
General surgery	19,710	24,708	24,086	24,475	25,229	26,079	25,592	25,434
Obstetrics and gynecology	15,613	23,525	29,111	31,726	33,811	34,659	34,225	34,405
Ophthalmology	8,795	12,212	14,596	15,598	16,304	16,580	15,765	15,852
Orthopedic surgery	8,148	13,033	17,136	17,367	18,632	19,115	19,220	19,299
Otolaryngology	4,297	5,751	7,139	7,581	8,160	8,206	8,199	8,177
Plastic surgery	1,706	3,299	4,612	5,308	5,845	6,011	6,016	6,100
Urological surgery	5,025	7,081	7,991	8,460	8,793	8,955	8,850	8,796
Anesthesiology	8,970	15,285	23,770	27,624	29,984	31,887	31,746	31,617
Diagnostic radiology	1,978	7,735	12,751	14,622	16,828	17,618	17,577	17,327
Emergency medicine	---	---	11,700	14,541	18,961	20,173	20,055	20,036
Neurology	1,862	4,691	7,623	8,559	9,632	10,400	10,423	10,476
Pathology, anatomical/clinical	4,195	6,877	9,031	10,267	10,653	11,747	11,465	11,191
Psychiatry	12,173	18,521	23,334	24,955	25,998	27,638	27,387	27,492
Radiology	6,970	7,355	5,994	6,674	6,900	7,049	6,954	6,913
Other specialty	15,320	28,453	29,005	35,314	36,037	39,850	39,280	39,111
Hospital-based practice	74,503	102,486	136,799	141,033	161,749	155,248	162,707	169,337
Residents and interns ⁵	53,527	72,159	93,650	95,125	102,563	95,391	97,102	98,688
Full-time hospital staff	20,976	30,327	43,149	45,908	59,186	59,857	65,605	70,649
Other professional activity ⁶	24,252	44,046	40,290	41,556	43,856	43,965	43,718	44,320
Inactive	21,449	38,646	72,326	75,168	92,323	99,823	108,344	111,551
Not classified	26,145	13,950	20,579	45,136	48,011	39,304	46,252	52,740
Unknown address	5,868	2,980	1,977	1,098	497	488	472	459

--- Data not available.

¹Doctors of medicine who are inactive, have unknown address, or primary specialty not classified are excluded. See [Appendix II, Physician](#).

²International medical graduates received their medical education in schools outside the United States and Canada.

³Specialty information is based on the physician's self-designated primary area of practice. Categories include generalists and specialists. See [Appendix II, Physician specialty](#).

⁴Starting with 2003 data, estimates include federal and nonfederal doctors of medicine. Prior to 2003, estimates were for nonfederal doctors of medicine only. See *Health, United States, 2004*, Table 103 for data on federal doctors of medicine.

⁵Starting with 1990 data, clinical fellows are included in this category. In prior years, clinical fellows were included in the other professional activity category.

⁶Includes medical teaching, administration, research, and other. Prior to 1990, this category also included clinical fellows.

NOTES: Data for doctors of medicine are as of December 31, except for 1990–1994 data, which are as of January 1. Outlying areas include Puerto Rico, the U.S. Virgin Islands, and the Pacific islands of Canton, Caroline, Guam, Mariana, Marshall, American Samoa, and Wake. Data for additional years are available. See [Appendix III](#).

SOURCES: American Medical Association (AMA). Distribution of physicians in the United States, 1970; Physician distribution and medical licensure in the U.S., 1975; Physician characteristics and distribution in the U.S., 1981, 1986, 1989, 1990, 1992, 1993, 1994, 1995–1996, 1996–1997, 1997–1998, 1999, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004–2009 editions, Department of Physician Practice and Communications Information, Division of Survey and Data Resources, AMA. (Copyrights 1971, 1976, 1982, 1986, 1989, 1990, 1992, 1993, 1994, 1996, 1997, 1997, 1982, 1986, 1989, 1990, 1992, 1993, 1994, 1996–2009: Used with the permission of the AMA.)

Table 109. Doctors of medicine in primary care, by specialty: United States and outlying U.S. areas, selected years 1949–2007

[Data are based on reporting by physicians]

Specialty	1949 ¹	1960 ¹	1970	1980	1990	1995	2000	2002	2006	2007
	Number									
Total doctors of medicine ²	201,277	260,484	334,028	467,679	615,421	720,325	813,770	853,187	921,904	941,304
Active doctors of medicine ³	191,577	247,257	310,845	414,916	547,310	625,443	692,368	719,431	766,836	776,554
General primary care specialists	113,222	125,359	134,354	170,705	213,514	241,329	274,653	286,294	300,907	303,749
General practice/family medicine	95,980	88,023	57,948	60,049	70,480	75,976	86,312	89,357	92,371	93,416
Internal medicine	12,453	26,209	39,924	58,462	76,295	88,240	101,353	106,499	113,340	114,449
Obstetrics/Gynecology	---	---	18,532	24,612	30,220	33,519	35,922	36,810	37,996	38,186
Pediatrics	4,789	11,127	17,950	27,582	36,519	43,594	51,066	53,628	57,200	57,698
Primary care subspecialists	---	---	3,161	16,642	30,911	39,659	52,294	57,929	67,519	69,858
Family medicine	---	---	---	---	---	236	483	627	938	1,043
Internal medicine	---	---	1,948	13,069	22,054	26,928	34,831	38,821	44,914	46,403
Obstetrics/Gynecology	---	---	344	1,693	3,477	4,133	4,319	4,228	4,337	4,408
Pediatrics	---	---	869	1,880	5,380	8,362	12,661	14,253	17,330	18,004
	Percent of active doctors of medicine									
General primary care specialists	59.1	50.7	43.2	41.1	39.0	38.6	39.7	39.8	39.2	39.1
General practice/family medicine	50.1	35.6	18.6	14.5	12.9	12.1	12.5	12.4	12.0	12.0
Internal medicine	6.5	10.6	12.8	14.1	13.9	14.1	14.6	14.8	14.8	14.7
Obstetrics/Gynecology	---	---	6.0	5.9	5.5	5.4	5.2	5.1	5.0	4.9
Pediatrics	2.5	4.5	5.8	6.6	6.7	7.0	7.4	7.5	7.5	7.4
Primary care subspecialists	---	---	1.0	4.0	5.6	6.3	7.6	8.1	8.8	9.0
Family medicine	---	---	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Internal medicine	---	---	0.6	3.1	4.0	4.3	5.0	5.4	5.9	6.0
Obstetrics/Gynecology	---	---	0.1	0.4	0.6	0.7	0.6	0.6	0.6	0.6
Pediatrics	---	---	0.3	0.5	1.0	1.3	1.8	2.0	2.3	2.3

0.0 Percent greater than zero but less than 0.05.

--- Data not available.

¹Estimated by the Bureau of Health Professions, Health Resources Administration. Active doctors of medicine (MDs) include those with address unknown and primary specialty not classified.

²Includes MDs engaged in federal and nonfederal patient care (office-based or hospital-based) and other professional activities.

³Starting with 1970 data, MDs who are inactive, have unknown address, or primary specialty not classified are excluded. Also see Table 108. See [Appendix II, Physician](#).

NOTES: See [Appendix II, Physician specialty](#). Data are as of December 31 except for 1990–1994 data, which are as of January 1, and 1949 data, which are as of midyear. Outlying areas include Puerto Rico, the U.S. Virgin Islands, and the Pacific islands of Canton, Caroline, Guam, Mariana, Marshall, American Samoa, and Wake. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Health Manpower Source Book: Medical Specialists, USDHEW, 1962; American Medical Association (AMA). Distribution of physicians in the United States, 1970; Physician characteristics and distribution in the U.S., 1981, 1992, 1996–1997, 1997–1998, 1999, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004, 2005, 2006, 2007, 2008, 2009 editions, Department of Physician Practice and Communications Information, Division of Survey and Data Resources, AMA. (Copyrights 1971, 1982, 1992, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009: Used with the permission of the AMA.)

Table 110. Active dentists, by state: United States, selected years 1993–2006

[Data are based on reporting by dentists]

State	1993	1996	1998	2000	2003	2006	1993	1996	1998	2000	2003	2006
	Number of dentists						Number of dentists per 10,000 civilian population					
United States	155,087	160,388	163,291	166,383	173,574	179,594	6.1	6.1	6.0	6.1	6.0	6.0
Alabama	1,779	1,861	1,889	1,912	1,972	2,032	4.3	4.4	4.3	4.3	4.4	4.4
Alaska	421	454	452	467	476	513	7.5	7.7	7.4	7.5	7.3	7.7
Arizona	2,032	2,140	2,207	2,322	2,643	3,107	5.3	4.9	4.7	4.5	4.7	5.0
Arkansas	1,001	1,030	1,066	1,080	1,119	1,146	4.2	4.1	4.2	4.0	4.1	4.1
California	20,909	21,661	22,298	22,963	25,496	26,887	6.8	6.8	6.8	6.8	7.2	7.4
Colorado	2,503	2,634	2,700	2,818	2,953	3,139	7.3	6.9	6.8	6.6	6.5	6.6
Connecticut	2,587	2,644	2,607	2,636	2,668	2,694	7.9	8.1	8.0	7.7	7.7	7.7
Delaware	331	356	341	357	372	395	4.8	4.9	4.6	4.6	4.6	4.6
District of Columbia	810	745	746	728	660	609	13.9	13.8	14.3	12.7	11.7	10.5
Florida	7,110	7,582	7,845	8,170	8,747	9,450	5.3	5.3	5.3	5.1	5.1	5.2
Georgia	3,251	3,389	3,475	3,611	3,811	4,167	4.9	4.7	4.5	4.4	4.4	4.5
Hawaii	976	1,012	1,020	992	1,026	1,046	8.8	8.9	8.5	8.2	8.2	8.1
Idaho	573	621	652	678	756	834	5.4	5.2	5.3	5.2	5.5	5.7
Illinois	7,978	8,169	8,160	8,205	8,211	8,249	6.9	6.9	6.8	6.6	6.5	6.4
Indiana	2,716	2,788	2,823	2,867	2,967	3,013	4.8	4.8	4.8	4.7	4.8	4.8
Iowa	1,545	1,526	1,549	1,564	1,579	1,583	5.5	5.4	5.4	5.3	5.4	5.3
Kansas	1,316	1,325	1,343	1,329	1,397	1,417	5.3	5.2	5.1	4.9	5.1	5.1
Kentucky	2,129	2,177	2,191	2,258	2,307	2,340	5.7	5.6	5.6	5.6	5.6	5.6
Louisiana	2,029	2,070	2,089	2,086	2,141	2,102	4.8	4.8	4.8	4.7	4.8	4.9
Maine	592	596	600	601	617	650	4.8	4.8	4.8	4.7	4.7	4.9
Maryland	3,753	3,900	3,938	3,986	4,147	4,132	7.7	7.8	7.7	7.5	7.5	7.4
Massachusetts	4,652	4,912	4,988	5,137	5,248	5,299	7.8	8.1	8.1	8.1	8.2	8.2
Michigan	5,884	5,911	5,939	5,913	6,154	6,141	6.2	6.2	6.0	5.9	6.1	6.1
Minnesota	2,913	2,912	2,905	2,960	3,014	3,137	6.5	6.3	6.1	6.0	6.0	6.1
Mississippi	1,040	1,075	1,095	1,115	1,158	1,173	4.0	4.0	4.0	3.9	4.0	4.0
Missouri	2,773	2,757	2,700	2,680	2,771	2,803	5.4	5.2	5.0	4.8	4.9	4.8
Montana	476	482	485	485	499	525	5.8	5.5	5.5	5.4	5.4	5.6
Nebraska	1,054	1,090	1,099	1,087	1,107	1,116	6.6	6.6	6.6	6.4	6.4	6.3
Nevada	570	605	689	763	921	1,185	4.3	3.8	3.9	3.8	4.1	4.7
New Hampshire	642	669	685	707	761	821	5.8	5.8	5.8	5.7	5.9	6.2
New Jersey	6,144	6,436	6,515	6,607	6,854	7,113	7.9	8.1	8.0	7.9	7.9	8.2
New Mexico	719	770	786	809	844	871	4.6	4.5	4.5	4.4	4.5	4.5
New York	14,395	14,968	15,155	15,159	15,231	15,110	8.0	8.2	8.3	8.0	7.9	7.8
North Carolina	2,968	3,178	3,219	3,394	3,692	4,031	4.4	4.4	4.3	4.2	4.4	4.6
North Dakota	315	332	318	300	314	323	5.0	5.2	5.0	4.7	5.0	5.1
Ohio	5,981	6,079	6,089	6,108	6,053	6,081	5.4	5.4	5.4	5.4	5.3	5.3
Oklahoma	1,584	1,641	1,669	1,683	1,722	1,774	5.0	5.0	5.0	4.9	4.9	5.0
Oregon	2,034	2,149	2,224	2,273	2,360	2,506	6.8	6.7	6.8	6.6	6.6	6.8
Pennsylvania	7,915	7,988	8,104	8,031	7,993	7,907	6.6	6.6	6.8	6.5	6.5	6.4
Rhode Island	581	591	580	589	586	596	5.8	6.0	5.9	5.6	5.4	5.6
South Carolina	1,601	1,656	1,724	1,803	1,912	2,006	4.5	4.5	4.5	4.5	4.6	4.6
South Dakota	347	353	359	359	363	387	4.9	4.8	4.9	4.8	4.8	4.9
Tennessee	2,748	2,814	2,937	2,993	3,031	3,031	5.5	5.3	5.4	5.3	5.2	5.0
Texas	8,860	9,274	9,486	9,873	10,309	10,758	5.1	4.9	4.8	4.7	4.7	4.6
Utah	1,162	1,233	1,323	1,398	1,531	1,671	6.4	6.2	6.3	6.3	6.5	6.6
Vermont	323	345	352	353	361	360	5.7	5.9	6.0	5.8	5.8	5.8
Virginia	3,686	3,805	3,931	4,036	4,209	4,489	5.9	5.8	5.8	5.7	5.7	5.9
Washington	3,271	3,495	3,701	3,860	4,209	4,510	6.4	6.4	6.5	6.5	6.9	7.1
West Virginia	816	836	841	828	824	854	4.5	4.6	4.6	4.6	4.6	4.7
Wisconsin	3,054	3,077	3,082	3,119	3,178	3,199	6.1	6.0	5.9	5.8	5.8	5.8
Wyoming	235	252	255	267	265	281	5.1	5.3	5.3	5.4	5.3	5.5

NOTES: The data include professionally active dentists only. Professionally active dentist occupation categories include active practitioners; dental school faculty or staff; armed forces dentists; government-employed dentists at the federal, state, or local levels; interns and residents; and other health or dental organization staff members. U.S. totals include dentists with unknown state of practice not shown separately. Rates were calculated using the number of dentists from ADA and the civilian population data from AMA, to be consistent with Table 107.

SOURCES: American Dental Association (ADA), Survey Center, Distribution of Dentists in the United States: Historical Report, 1993–2001, Table 1 (number of dentists); Distribution of Dentists in the United States by Region and State, 2003, Table 1 (number of dentists); Distribution of Dentists in the United States by Region and State, 2006, Table 1 (number of dentists) (Copyright 2003, 2005, 2008 American Dental Association. All rights reserved. Reprinted by permission); American Medical Association (AMA). Physician characteristics and distribution in the U.S., 2009 and previous editions (number of civilian population) (Copyright 1994, 1997, 2000, 2002, 2005, 2008: Used with the permission of the AMA).

Table 111. Employees and wages, by selected health care occupations: United States, selected years 1999–2007

[Data are based on a semiannual mail survey of nonfarm establishments]

Occupation title	1999	2002	2005	2007	1999–2007	1999	2002	2005	2007	1999–2007
Health care practitioner and technical occupations										
	Number of employees ¹				AAPC ²	Mean hourly wage ³				AAPC ²
Audiologists	12,950	10,180	10,030	11,360	-1.6	\$21.96	\$24.92	\$27.72	\$30.61	4.2
Cardiovascular Technologists and Technicians	41,490	42,870	43,560	46,980	1.6	16.00	18.12	19.99	22.37	4.3
Dental Hygienists	90,050	148,530	161,140	168,600	8.2	23.15	27.78	29.15	31.21	3.8
Diagnostic Medical Sonographers	29,280	36,530	43,590	46,770	6.0	21.04	23.90	26.65	29.13	4.2
Dietetic Technicians	29,190	28,910	23,780	24,540	-2.1	10.09	11.59	12.20	12.83	3.0
Dietitians and Nutritionists	41,320	45,150	48,850	52,800	3.1	17.96	20.16	22.09	24.05	3.7
Emergency Medical Technicians and Paramedics	172,360	178,700	196,880	201,200	2.0	11.19	12.78	13.68	14.84	3.6
Licensed Practical and Licensed Vocational Nurses	688,510	692,290	710,020	719,240	0.5	13.95	15.53	17.41	18.72	3.7
Nuclear Medicine Technologists	17,880	17,090	18,280	20,410	1.7	20.40	25.13	29.10	31.43	5.6
Occupational Therapists	78,950	78,580	87,430	91,920	1.9	24.96	25.50	28.41	31.51	3.0
Opticians, Dispensing	58,860	61,790	70,090	62,420	0.7	12.11	13.38	14.80	16.10	3.6
Pharmacists	226,300	219,390	229,740	253,110	1.4	30.31	36.13	42.62	47.58	5.8
Pharmacy Technicians	196,430	207,380	266,790	301,950	5.5	9.64	11.15	12.19	13.25	4.1
Physical Therapists	131,050	130,290	151,280	161,850	2.7	28.05	28.93	31.42	34.39	2.6
Physician Assistants	56,750	61,910	63,350	67,160	2.1	24.35	30.53	34.17	37.41	5.5
Psychiatric Technicians	54,560	58,600	62,040	60,690	1.3	11.30	13.49	14.04	15.21	3.8
Radiation Therapists	12,340	13,510	14,120	14,620	2.1	20.84	28.90	30.59	34.61	6.5
Radiologic Technologists and Technicians	177,850	173,540	184,580	200,370	1.5	17.07	19.30	22.60	24.59	4.7
Recreational Therapists	30,190	26,130	23,260	23,240	-3.2	14.08	15.23	16.90	18.43	3.4
Registered Nurses	2,205,430	2,239,530	2,368,070	2,468,340	1.4	21.38	23.96	27.35	30.04	4.3
Respiratory Therapists	80,230	85,350	95,320	101,180	2.9	17.72	19.57	22.24	24.49	4.1
Respiratory Therapy Technicians	33,990	26,220	22,060	17,610	-7.9	16.07	16.79	18.57	20.00	2.8
Speech-Language Pathologists	85,920	87,030	94,660	103,810	2.4	22.99	24.75	27.89	30.64	3.7
Health care support occupations										
Dental Assistants	175,160	268,220	270,720	283,680	6.2	11.60	13.42	14.41	15.52	3.7
Home Health Aides	577,530	569,670	663,280	834,580	4.7	9.04	9.16	9.34	10.03	1.3
Massage Therapists	21,910	27,160	37,670	45,920	9.7	13.82	16.21	19.33	19.39	4.3
Medical Assistants	281,480	361,960	382,720	434,540	5.6	10.89	11.93	12.58	13.59	2.8
Medical Equipment Preparers	29,070	35,490	41,790	43,790	5.3	10.20	11.50	12.42	13.43	3.5
Medical Transcriptionists	97,260	99,160	90,380	86,990	-1.4	11.86	13.33	14.36	15.44	3.4
Nursing Aides, Orderlies, and Attendants	1,308,740	1,329,310	1,391,430	1,390,260	0.8	8.59	9.87	10.67	11.50	3.7
Occupational Therapist Aides	9,250	8,040	6,220	7,640	-2.4	10.92	11.78	13.20	13.91	3.1
Occupational Therapist Assistants	17,290	17,970	22,160	25,130	4.8	15.97	17.76	19.13	21.72	3.9
Pharmacy Aides	48,270	58,020	46,610	49,630	0.3	9.14	9.47	9.76	10.15	1.3
Physical Therapist Aides	44,340	37,330	41,930	43,350	-0.3	9.69	10.63	11.01	11.58	2.3
Physical Therapist Assistants	48,600	50,430	58,670	59,120	2.5	16.20	17.48	18.98	21.32	3.5
Psychiatric Aides	51,100	56,260	56,150	58,310	1.7	10.76	11.42	11.47	12.54	1.9

¹Estimates do not include self-employed workers and were rounded to the nearest 10.

²AAPC is average annual percent change. See [Appendix II, Average annual rate of change \(percentage change\)](#).

³The mean hourly wage rate for an occupation is the total wages that all workers in the occupation earn in an hour divided by the total employment of the occupation. More information is available from: http://www.bls.gov/oes/current/oes_tec.htm.

NOTES: This table excludes occupations such as dentists, physicians, and chiropractors, which have a large percentage of workers who are self-employed and/or not employed by establishments. Data for additional years are available. See [Appendix III](#).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics. Occupational Employment Statistics. Available from: <http://www.bls.gov/oes>.

Table 112. First-year enrollment and graduates of health professions schools, and number of schools, by selected profession: United States, selected years 1980–1981 through 2006–2007

[Data are based on reporting by health professions associations]

<i>Profession</i>	<i>1980–1981</i>	<i>1990–1991</i>	<i>2000–2001</i>	<i>2005–2006</i>	<i>2006–2007</i>
First-year enrollment					
			Number		
Dentistry	6,030	4,001	4,327	4,688	4,733
Medicine (Allopathic) ^{1,2}	17,186	16,876	16,699	17,376	17,826
Medicine (Osteopathic) ³	1,496	1,950	2,927	3,908	4,055
Nursing: ⁴					
Baccalaureate	---	---	103,999	163,706	180,127
Generic (entry-level) baccalaureate	---	---	72,986	124,814	133,578
Registered nurse-to-baccalaureate	---	---	31,013	38,892	46,549
Master's	---	---	31,862	46,444	56,028
Doctoral	---	---	3,024	3,718	3,927
Optometry ¹	1,258	1,239	1,384	1,429	1,434
Pharmacy ^{1,5}	7,377	8,267	8,382	10,506	10,992
Podiatry ⁶	695	561	475	552	647
Public Health ^{1,7}	---	4,392	5,840	7,206	7,382
Graduates					
Dentistry	5,550	3,995	4,367	4,515	4,714
Medicine (Allopathic) ¹	15,632	15,427	15,796	15,926	16,143
Medicine (Osteopathic)	1,151	1,534	2,510	2,708	3,000
Nursing:					
Baccalaureate	---	---	32,543	51,083	56,446
Generic (entry-level) baccalaureate	---	---	22,593	37,851	41,500
Registered nurse-to-baccalaureate	---	---	9,950	13,232	14,946
Master's	---	---	9,658	13,470	15,182
Doctoral	---	---	394	437	531
Optometry ¹	1,092	1,224	1,310	1,220	1,291
Pharmacy ¹	7,323	7,122	7,000	9,040	9,812
Podiatry	597	591	531	348	331
Public Health ¹	3,168	3,995	5,747	6,792	7,315
Schools					
Dentistry	60	56	55	56	56
Medicine (Allopathic) ¹	126	126	125	125	126
Medicine (Osteopathic)	14	15	19	20	20
Nursing: ⁸					
Baccalaureate	---	---	---	688	709
Generic (entry-level) baccalaureate	---	---	---	577	585
Registered nurse-to-baccalaureate	---	---	---	618	629
Master's	---	---	---	439	448
Doctoral	---	---	---	98	103
Optometry ¹	16	17	17	17	17
Pharmacy ¹	72	74	82	92	100
Podiatry	5	7	7	7	7
Public Health ¹	21	25	28	37	38

--- Data not available.

¹Includes data from schools in Puerto Rico.

²Includes new entrants and those repeating the initial year.

³May also include persons enrolled in first year classes for data years 1980–1981 and 2006–2007.

⁴Starting with 2005–2006 data, RNs seeking the baccalaureate programs in the generic entry level program are counted in the RN to baccalaureate data.

⁵Starting with 2005–2006 data, first-year enrollment for pharmacy schools include Pharm.D.1 enrollments only. Prior to 2005, first-year enrollment data include both Pharm.D.1, B.S. Pharmacy, and B.Pharm. enrollments. In 2006, one pharmacy school did not report enrollment data.

⁶First-year enrollment data for podiatry in 1980–1981 are reported as of the beginning of the academic year.

⁷Starting with 2005–2006 data, first-year enrollment data for public health schools include Spring, Summer, and Fall enrollment. Prior to 2005–2006, the data are for Fall enrollment only and are not directly comparable to 2005–2006 data.

⁸Some nursing schools offer more than one type of program. Numbers shown for nursing are number of nursing programs. Data shown for Doctoral program excludes Doctor of Nursing (ND) program.

NOTES: Data on the number of schools and first-year enrollments are reported as of the beginning of the academic year, while data on the number of graduates are reported as of the end of the academic year. Some numbers in this table have been revised and differ from previous editions of *Health, United States*.

SOURCES: American Dental Association (ADA): 2007–2008 Survey of Dental Education: Academic Programs, Enrollments, and Graduates - Vol. 1, Chicago, IL. 2008. Table 9 (number of first-year students) and Table 22 (number of dental school graduates and number of dental schools), Available from: <http://www.ada.org/goto/edreports> (Copyright 2009 American Dental Association. All rights reserved. Reprinted by permission); Association of American Medical Colleges: FACTS - Applicants, Matriculants, Graduates, and Residency Applicants, Applicants and Matriculants data. Available from: <http://www.aamc.org>. Association of American Medical Colleges: AAMC Data Book, Medical Schools and Teaching Hospitals by the Numbers, Washington, DC. 2005, 2006, and 2009 (Copyright 2005, 2006 and 2009: Used with the permission of the AAMC); American Association of Colleges of Osteopathic Medicine. Annual Report on Osteopathic Medical Education, Chevy Chase, MD. Available from: <http://www.aacom.org/about/fastfacts/Pages/default.aspx>; American Association of Colleges of Nursing. Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC. 2001, 2002, 2006, 2007, 2008. (Copyright 2008: Used with the permission of the American Association of Colleges of Nursing); Association of Schools and Colleges of Optometry: Annual Student Data Report Academic Years 2005–2006 and 2006–2007 and unpublished data. Available from: <http://www.opted.org>; American Association of Colleges of Pharmacy: Academic Pharmacy's Vital Statistics, Profile of Pharmacy Students, Fall 2005 and Fall 2006. Available from: <http://www.aacp.org> and unpublished data; American Association of Colleges of Podiatric Medicine: Applicant, Matriculant, and Graduate Statistics, 2006, 2007. Available from: <http://www.aacpm.org>. Association of Schools of Public Health: Annual Data Reports, 2006, 2007. Washington, DC. Available from: <http://www.asph.org/document.cfm?page=749>. Bureau of Health Professions: United States Health Personnel FACTBOOK. Health Resources and Services Administration. Rockville, MD. 2003.

Table 113 (page 1 of 2). Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: United States, selected academic years 1980–1981 through 2006–2007

[Data are based on reporting by health professions associations]

<i>Occupation, race, and Hispanic origin</i>	<i>1980–1981</i>	<i>1990–1991</i>	<i>2000–2001</i>	<i>2006–2007</i>	<i>1980–1981</i>	<i>1990–1991</i>	<i>2000–2001</i>	<i>2006–2007</i>
Dentistry								
	Number of students				Percent distribution of students			
All races ¹	22,842	15,951	17,349	19,038	100.0	100.0	100.0	100.0
Not Hispanic or Latino:								
White	19,947	11,185	11,185	11,674	87.3	70.1	64.5	61.3
Black or African American	1,022	940	832	1,113	4.5	5.9	4.8	5.8
Hispanic or Latino ²	780	1,254	925	1,123	3.4	7.9	5.3	5.9
American Indian or Alaska Native	53	53	112	111	0.2	0.3	0.6	0.6
Asian or Pacific Islander	1,040	2,519	4,295	4,267	4.6	15.8	24.8	22.4
Medicine (Allopathic)³								
All races ¹	65,189	65,163	69,414	73,100	100.0	100.0	100.0	100.0
Not Hispanic or Latino:								
White	55,434	47,893	42,154	45,958	85.0	73.5	60.7	62.9
Black or African American	3,708	4,241	4,881	5,305	5.7	6.5	7.0	7.3
Hispanic or Latino	2,761	3,538	4,190	5,589	4.2	5.4	6.0	7.6
Mexican	951	1,109	1,655	1,870	1.5	1.7	2.4	2.6
Puerto Rican	1,127	1,253	1,228	1,478	1.7	1.9	1.8	2.0
Other Hispanic or Latino ⁴	683	1,176	1,307	2,241	1.0	1.8	1.9	3.1
American Indian or Alaska Native ⁵	221	277	530	646	0.3	0.4	0.8	0.9
Asian or Pacific Islander	1,924	8,436	13,264	15,482	3.0	12.9	19.1	21.2
Medicine (Osteopathic)⁶								
All races ¹	4,940	6,792	10,817	14,409	100.0	100.0	100.0	100.0
White, Non-Hispanic	4,688	5,680	7,940	10,248	94.9	83.6	73.4	71.1
Black or African American	94	217	400	590	1.9	3.2	3.7	4.1
Hispanic or Latino	52	277	381	552	1.1	4.1	3.5	3.8
American Indian or Alaska Native	19	36	72	90	0.4	0.5	0.7	0.6
Asian or Pacific Islander	87	582	1,734	2,426	1.8	8.6	16.0	16.8
Nursing, Baccalaureate⁷								
All races ¹	---	70,849	102,205	163,589	---	100.0	100.0	100.0
White	---	58,610	75,092	123,087	---	84.1	73.5	75.2
Black or African American	---	6,862	11,661	20,286	---	9.9	11.4	12.4
Hispanic or Latino	---	1,913	4,873	8,831	---	2.7	4.8	5.4
American Indian or Alaska Native	---	391	694	1,129	---	0.6	0.7	0.7
Asian or Pacific Islander	---	1,672	4,767	10,256	---	2.4	4.7	6.3
Optometry								
All races ¹	4,641	4,760	5,428	5,488	100.0	100.0	100.0	100.0
Not Hispanic or Latino:								
White	4,221	3,706	3,634	3,363	91.0	77.9	66.9	61.3
Black or African American	57	134	126	175	1.2	2.8	2.3	3.2
Hispanic or Latino	108	296	268	271	2.3	6.2	4.9	4.9
American Indian or Alaska Native	12	21	27	26	0.3	0.4	0.5	0.5
Asian or Pacific Islander	243	603	1,373	1,326	5.2	12.7	25.3	24.2
Pharmacy⁸								
All races ¹	21,628	29,797	34,481	48,592	100.0	100.0	100.0	100.0
Not Hispanic or Latino:								
White	19,153	21,717	20,409	29,235	88.6	72.9	59.2	60.2
Black or African American	945	2,103	3,132	3,275	4.4	7.1	9.1	6.7
Hispanic or Latino	459	1,118	1,255	1,888	2.1	3.8	3.6	3.9
American Indian or Alaska Native	36	85	137	220	0.2	0.3	0.4	0.5
Asian or Pacific Islander	1,035	3,346	7,392	10,312	4.8	11.2	21.4	21.2

See footnotes at end of table.

Table 113 (page 2 of 2). Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: United States, selected academic years 1980–1981 through 2006–2007

[Data are based on reporting by health professions associations]

<i>Occupation, race, and Hispanic origin</i>	<i>1980–1981</i>	<i>1990–1991</i>	<i>2000–2001</i>	<i>2006–2007</i>	<i>1980–1981</i>	<i>1990–1991</i>	<i>2000–2001</i>	<i>2006–2007</i>
Podiatry	Number of students				Percent distribution of students			
All races ¹	2,577	2,221	1,968	1,879	100.0	100.0	100.0	100.0
Not Hispanic or Latino:								
White	2,353	1,671	1,305	1,138	91.3	75.2	66.3	60.6
Black or African American	110	235	177	242	4.3	10.6	9.0	12.9
Hispanic or Latino	39	149	103	110	1.5	6.7	5.2	5.9
American Indian or Alaska Native	6	7	12	16	0.2	0.3	0.6	0.9
Asian or Pacific Islander	69	159	272	207	2.7	7.2	14.0	11.0
Public Health								
All races ¹	---	---	16,777	20,907	---	---	100.0	100.0
Not Hispanic or Latino:								
White	---	---	8,569	10,777	---	---	65.0	60.8
Black or African American	---	---	1,280	2,059	---	---	9.7	11.6
Hispanic or Latino	---	---	1,037	1,534	---	---	7.9	8.6
American Indian or Alaska Native	---	---	97	121	---	---	0.7	0.7
Asian or Pacific Islander	---	---	1,660	2,173	---	---	12.6	12.3

--- Data not available.

¹Includes other and unknown races; may also include foreign students.

²Includes students from the University of Puerto Rico.

³Starting with 2002–2003 data, allopathic medical students had the option of reporting both their race and ethnicity alone or in combination with some other race or ethnicity, allowing multiple responses. Total enrollments include unduplicated number of enrollments only. Therefore, the data for 2006–2007 and subsequent years are not directly comparable to earlier years.

⁴Includes Cuban students.

⁵Starting with 2000–2001, data includes American Indian, Alaska Native, and Native Hawaiian; for previous years included American Indian and Alaska Native only.

⁶Starting with 2006, students could be reported in multiple race/ethnicity categories. All racial/ethnic groups will not add to the total enrollment. Percentages do not total to 100%. Other/unknown are not listed and students designating multiple race/ethnicity may be counted in more than one category.

⁷Data are for generic (entry-level) or registered nurses seeking the baccalaureate degree. An evaluation of the former system revealed considerable underreporting. Therefore, race-specific data before 1990 are not comparable and not shown. Additional changes in the minority data question were introduced in academic years 2000–2001, resulting in a discontinuity in the trend. Starting with 2000–2001, data includes American Indian and Alaska Native persons and Asian or Pacific Islander persons; for previous years, included Native American and Asian only.

⁸Prior to 2000–2001, total enrollment data were only for students in the final three years of pharmacy education. Starting with 2000–2001, pharmacy data are for all students. Starting in 2005, enrollments include PharmD.1. only. In 2006–2007, one pharmacy school did not report enrollment data.

NOTES: Total enrollment data are collected at the beginning of the academic year. The race categories' summed totals may not add up to the total number of students for all races. Some numbers have been revised and differ from previous editions of *Health, United States*.

SOURCES: American Dental Association: 2007–2008 Survey of Dental Education: Academic Programs, Enrollments, and Graduates - Vol. 1, Chicago, IL. 2009. Table 20b (dental school enrollment by race and ethnicity), Available from: <http://www.ada.org/goto/edreports> (Copyright 2009 American Dental Association. All rights reserved. Reprinted by permission); Association of American Medical Colleges: FACTS - Applicants, Matriculants, Graduates, and Residency Applicants, Applicants and Matriculants data. Available from: <http://www.aamc.org>. Association of American Medical Colleges: AAMC Data Book, Medical Schools and Teaching Hospitals by the Numbers, Washington, DC. 2005, 2006, and 2009 (Copyright 2005, 2006 and 2009: Used with the permission of the AAMC); American Association of Colleges of Osteopathic Medicine. Annual Report on Osteopathic Medical Education, Chevy Chase, MD. Available from: <http://www.aacom.org/about/fastfacts/Pages/default.aspx>; American Association of Colleges of Nursing. Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC. 2001, 2002, 2007, 2008. (Copyright 2008: Used with the permission of the American Association of Colleges of Nursing); Association of Schools and Colleges of Optometry: Annual Student Data Report Academic Year 2006–2007 and unpublished data. Available from: <http://www.opted.org>; American Association of Colleges of Pharmacy: Academic Pharmacy's Vital Statistics, Profile of Pharmacy Students, Fall 2006. Available from: <http://www.aacp.org> and unpublished data; American Association of Colleges of Podiatric Medicine: Applicant, Matriculant, and Graduate Statistics, 2006–2007. Available from: <http://www.aacpm.org>. Association of Schools of Public Health: Annual Data Reports, 2007. Washington, DC. Available from: <http://www.asph.org/document.cfm?page=749>; Bureau of Health Professions: United States Health Personnel FACTBOOK. Health Resources and Services Administration. Rockville, MD. 2003.

Table 114. First-year and total enrollment of women in schools for selected health occupations: United States, selected academic years 1980–1981 through 2006–2007

[Data are based on reporting by health professions associations]

Enrollment and occupation	Both sexes				Women			
	1980–1981	1990–1991 ¹	2000–2001	2006–2007 ²	1980–1981	1990–1991 ¹	2000–2001	2006–2007 ²
First-year enrollment	Number of students				Percent of students			
Dentistry	6,030	4,001	4,327	4,733	19.8	38.0	39.8	43.2
Medicine (Allopathic) ³	17,186	16,876	16,699	17,826	28.9	38.8	45.9	48.7
Medicine (Osteopathic)	1,496	1,950	2,927	4,055	22.0	34.2	42.4	49.9
Nurses ⁴	---	---	---	---	---	---	---	---
Optometry ³	1,258	1,239	1,384	1,434	25.3	50.6	57.2	64.9
Pharmacy ^{3,5}	7,377	8,267	8,382	10,992	48.4	---	66.4	62.9
Podiatry	695	561	475	647	---	28.0	40.6	44.0
Public Health ³	3,348	4,289	5,840	7,382	---	62.1	69.8	69.8
Total enrollment	Number of students				Percent of students			
Dentistry	22,842	15,951	17,349	19,038	17.0	34.4	38.7	44.3
Medicine (Allopathic) ³	65,189	65,163	69,414	73,100	26.5	37.3	44.6	48.5
Medicine (Osteopathic)	4,940	6,792	10,817	14,409	19.7	32.7	41.1	50.3
Nurses ⁴	---	---	---	177,822	---	---	---	90.1
Optometry ³	4,641	4,760	5,428	5,488	---	47.3	55.5	64.2
Pharmacy ^{3,5}	26,617	29,797	34,481	48,592	47.4	62.4	65.9	64.2
Podiatry	2,577	2,154	1,968	1,879	11.9	28.9	36.4	45.7
Public Health ³	8,486	11,386	16,019	20,907	55.2	62.5	68.0	70.0

--- Data not available.

¹Percentage of women podiatry students is for 1991–1992.

²Starting with 2003–2004 data, osteopathic medicine data include the students of the Edward Via Virginia College of Osteopathic Medicine.

³Includes data from schools in Puerto Rico.

⁴Data are for generic (entry-level) or registered nurses seeking the baccalaureate degree. Gender data for first-year enrollment are not available.

⁵First-year enrollment data for pharmacy schools are for students in the first year of the final three years of pharmacy education. Prior to 2000–2001, pharmacy total enrollment data were for students in the final three years of pharmacy education. Starting in 2000–2001, pharmacy total enrollment data are for all students. In 2006, one pharmacy school did not report enrollment data.

NOTES: Total enrollment data are collected at the beginning of the academic year while first-year enrollment data are collected during the academic year. Some numbers in this table have been revised and differ from previous editions of *Health, United States*.

SOURCES: American Dental Association: 2007–2008 Survey of Dental Education: Academic Programs, Enrollments, and Graduates - Vol. 1, Chicago, IL. 2009. Table 11 (first-year enrollment by gender) and Table 14 (total enrollment by gender), Available from: <http://www.ada.org/goto/edreports>; (Copyright 2009 American Dental Association. All rights reserved. Reprinted by permission); Association of American Medical Colleges: FACTS - Applicants, Matriculants, Graduates, and Residency Applicants, Applicants and Matriculants data. Available from: <http://www.aamc.org>. Association of American Medical Colleges: AAMC Data Book, Medical Schools and Teaching Hospitals by the Numbers, Washington, DC. 2005, 2006, and 2009 (Copyright 2005, 2006 and 2009: Used with the permission of the AAMC); American Association of Colleges of Osteopathic Medicine. Annual Report on Osteopathic Medical Education, Chevy Chase, MD. Available from: <http://www.aacom.org/about/fastfacts/Pages/default.aspx>; American Association of Colleges of Nursing. Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing; Washington, DC. 2001, 2002, 2007, 2008. (Copyright 2008: Used with the permission of the American Association of Colleges of Nursing). Association of Schools and Colleges of Optometry: Annual Student Data Report Academic Year 2006–2007 and unpublished data. Available from: <http://www.opted.org>; American Association of Colleges of Pharmacy: Academic Pharmacy's Vital Statistics, Profile of Pharmacy Students, Fall 2006. Available from: <http://www.aacp.org> and unpublished data; American Association of Colleges of Podiatric Medicine: Applicant, Matriculant, and Graduate Statistics, 2006–2007. Available from: <http://www.aacpm.org>. Association of Schools of Public Health: Annual Data Reports, 2007. Washington, DC. Available from: <http://www.asph.org/document.cfm?page=749>; Bureau of Health Professions: United States Health Personnel FACTBOOK. Health Resources and Services Administration. Rockville, MD. 2003.

Table 115. Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2007

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1975	1980	1990	1995	2000	2006	2007
Hospitals							
	Number						
All hospitals	7,156	6,965	6,649	6,291	5,810	5,747	5,708
Federal	382	359	337	299	245	221	213
Nonfederal ¹	6,774	6,606	6,312	5,992	5,565	5,526	5,495
Community ²	5,875	5,830	5,384	5,194	4,915	4,927	4,897
Nonprofit	3,339	3,322	3,191	3,092	3,003	2,919	2,913
For profit	775	730	749	752	749	889	873
State-local government	1,761	1,778	1,444	1,350	1,163	1,119	1,111
6–24 beds	299	259	226	278	288	375	360
25–49 beds	1,155	1,029	935	922	910	1,066	1,076
50–99 beds	1,481	1,462	1,263	1,139	1,055	969	971
100–199 beds	1,363	1,370	1,306	1,324	1,236	1,117	1,083
200–299 beds	678	715	739	718	656	607	613
300–399 beds	378	412	408	354	341	354	343
400–499 beds	230	266	222	195	182	180	191
500 beds or more	291	317	285	264	247	259	260
Beds							
All hospitals	1,465,828	1,364,516	1,213,327	1,080,601	983,628	947,412	945,199
Federal	131,946	117,328	98,255	77,079	53,067	46,691	45,744
Nonfederal ¹	1,333,882	1,247,188	1,115,072	1,003,522	930,561	900,721	899,455
Community ²	941,844	988,387	927,360	872,736	823,560	802,658	800,892
Nonprofit	658,195	692,459	656,755	609,729	582,988	559,216	553,748
For profit	73,495	87,033	101,377	105,737	109,883	115,337	115,742
State-local government	210,154	208,895	169,228	157,270	130,689	128,105	131,402
6–24 beds	5,615	4,932	4,427	5,085	5,156	6,446	6,238
25–49 beds	41,783	37,478	35,420	34,352	33,333	34,217	34,350
50–99 beds	106,776	105,278	90,394	82,024	75,865	69,408	69,974
100–199 beds	192,438	192,892	183,867	187,381	175,778	160,426	155,291
200–299 beds	164,405	172,390	179,670	175,240	159,807	148,541	149,546
300–399 beds	127,728	139,434	138,938	121,136	117,220	121,747	118,160
400–499 beds	101,278	117,724	98,833	86,459	80,763	79,732	84,136
500 beds or more	201,821	218,259	195,811	181,059	175,638	182,141	183,197
Occupancy rate³							
	Percent						
All hospitals	76.7	77.7	69.5	65.7	66.1	68.9	68.3
Federal	80.7	80.1	72.9	72.6	68.2	66.4	67.7
Nonfederal ¹	76.3	77.4	69.2	65.1	65.9	69.1	68.3
Community ²	75.0	75.6	66.8	62.8	63.9	67.1	66.6
Nonprofit	77.5	78.2	69.3	64.5	65.5	68.8	68.6
For profit	65.9	65.2	52.8	51.8	55.9	58.7	57.2
State-local government	70.4	71.1	65.3	63.7	63.2	67.4	66.5
6–24 beds	48.0	46.8	32.3	36.9	31.7	32.9	34.7
25–49 beds	56.7	52.8	41.3	42.6	41.3	47.2	46.2
50–99 beds	64.7	64.2	53.8	54.1	54.8	57.6	56.2
100–199 beds	71.2	71.4	61.5	58.8	60.0	63.0	61.8
200–299 beds	77.1	77.4	67.1	63.1	65.0	67.7	66.6
300–399 beds	79.7	79.7	70.0	64.8	65.7	69.4	69.6
400–499 beds	81.1	81.2	73.5	68.1	69.1	71.7	70.2
500 beds or more	80.9	82.1	77.3	71.4	72.2	75.2	75.8

¹The category of nonfederal hospitals comprises psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See [Appendix II, Hospital](#).

²Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See [Appendix II, Hospital](#).

³Estimated percentage of staffed beds that are occupied. Occupancy rate is calculated as the average daily census (from the American Hospital Association) divided by the number of hospital beds. See [Appendix II, Occupancy rate](#).

SOURCES: American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1976, 1981, 1991–2009 editions. Chicago, IL. (Copyrights 1976, 1981, 1991–2009: Used with the permission of Health Forum LLC, an affiliate of the AHA.)

Table 116. Mental health organizations and beds for 24-hour hospital and residential treatment, by type of organization: United States, selected years 1986–2004

[Data are based on inventories of mental health organizations]

<i>Type of organization</i>	1986	1990	1994	1998	2000	2002	2004
Number of mental health organizations							
All organizations	3,512	3,942	3,853	3,741	3,211	3,044	2,891
State and county mental hospitals	285	278	270	237	229	227	237
Private psychiatric hospitals	314	464	432	347	271	255	264
Nonfederal general hospital psychiatric services	1,351	1,577	1,539	1,595	1,325	1,231	1,230
Department of Veterans Affairs medical centers ¹	139	131	136	124	134	132	---
Residential treatment centers for emotionally disturbed children	437	501	472	462	476	510	458
All other organizations ²	986	991	1,004	976	776	689	702
Number of beds							
All organizations	267,613	325,529	293,139	269,148	214,186	211,040	212,231
State and county mental hospitals	119,033	102,307	84,063	71,266	61,833	57,314	57,034
Private psychiatric hospitals	30,201	45,952	42,742	31,731	26,402	24,996	28,422
Nonfederal general hospital psychiatric services	45,808	53,576	53,455	54,775	40,410	40,520	41,403
Department of Veterans Affairs medical centers ¹	26,874	24,779	21,346	17,173	8,989	9,581	---
Residential treatment centers for emotionally disturbed children	24,547	35,170	32,691	32,040	33,508	39,407	33,835
All other organizations ²	21,150	63,745	58,842	62,163	43,044	39,222	51,536
Beds per 100,000 civilian population ³							
All organizations	111.7	128.5	110.9	94.0	74.8	72.2	71.2
State and county mental hospitals	49.7	40.4	31.8	24.9	21.6	19.6	19.1
Private psychiatric hospitals	12.6	18.1	16.2	11.1	9.2	8.6	9.5
Nonfederal general hospital psychiatric services	19.1	21.2	20.2	19.1	14.1	13.9	13.9
Department of Veterans Affairs medical centers ¹	11.2	9.9	8.1	6.0	3.1	3.3	---
Residential treatment centers for emotionally disturbed children	10.3	13.9	12.4	11.2	11.7	13.5	11.4
All other organizations ²	8.8	25.2	22.2	21.7	15.0	13.4	17.3

--- Data not available.

¹Department of Veterans Affairs medical centers (VA general hospital psychiatric services and VA psychiatric outpatient clinics) were dropped from the survey as of 2004.

²Includes freestanding psychiatric outpatient clinics, partial care organizations, and multiservice mental health organizations. See [Appendix I, Survey of Mental Health Organizations](#).

³Civilian population estimates for 2000 and beyond are based on the 2000 census as of July 1; population estimates for 1992–1998 are 1990 postcensal estimates.

NOTES: Data for 1990, 1992, 1994, 1998, 2000, and 2002 are revised final estimates and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (CMHS), Survey of Mental Health Organizations.

Table 117. Community hospital beds and average annual percent change, by state: United States, selected years 1960–2007

[Data are based on reporting by a census of hospitals]

State	1960	1970	1980	1990	2000	2007	1960–1970	1970–1980	1980–1990	1990–2000	2000–2007	
	Beds per 1,000 resident population ¹						Average annual percent change ²					
United States	3.6	4.3	4.5	3.7	2.9	2.7	1.8	0.5	-1.9	-2.4	-1.0	
Alabama	2.8	4.3	5.1	4.6	3.7	3.4	4.4	1.7	-1.0	-2.2	-1.2	
Alaska	2.4	2.3	2.7	2.3	2.3	2.3	-0.4	1.6	-1.6	-	-	
Arizona	3.0	4.1	3.6	2.7	2.1	1.9	3.2	-1.3	-2.8	-2.5	-1.4	
Arkansas	2.9	4.2	5.0	4.6	3.7	3.4	3.8	1.8	-0.8	-2.2	-1.2	
California	3.0	3.8	3.6	2.7	2.1	1.9	2.4	-0.5	-2.8	-2.5	-1.4	
Colorado	3.8	4.6	4.2	3.2	2.2	2.0	1.9	-0.9	-2.7	-3.7	-1.4	
Connecticut	3.4	3.4	3.5	2.9	2.3	2.1	-	0.3	-1.9	-2.3	-1.3	
Delaware	3.7	3.7	3.6	3.0	2.3	2.6	-	-0.3	-1.8	-2.6	1.8	
District of Columbia	5.9	7.4	7.3	7.6	5.8	5.8	2.3	-0.1	0.4	-2.7	-	
Florida	3.1	4.4	5.1	3.9	3.2	2.8	3.6	1.5	-2.6	-2.0	-1.9	
Georgia	2.8	3.8	4.6	4.0	2.9	2.7	3.1	1.9	-1.4	-3.2	-1.0	
Hawaii	3.7	3.4	3.1	2.7	2.5	2.3	-0.8	-0.9	-1.4	-0.8	-1.2	
Idaho	3.2	4.0	3.7	3.2	2.7	2.2	2.3	-0.8	-1.4	-1.7	-2.9	
Illinois	4.0	4.7	5.1	4.0	3.0	2.7	1.6	0.8	-2.4	-2.8	-1.5	
Indiana	3.1	4.0	4.5	3.9	3.2	2.7	2.6	1.2	-1.4	-2.0	-2.4	
Iowa	3.9	5.6	5.7	5.1	4.0	3.5	3.7	0.2	-1.1	-2.4	-1.9	
Kansas	4.2	5.4	5.8	4.8	4.0	3.6	2.5	0.7	-1.9	-1.8	-1.5	
Kentucky	3.0	4.0	4.5	4.3	3.7	3.4	2.9	1.2	-0.5	-1.5	-1.2	
Louisiana	3.9	4.2	4.8	4.6	3.9	3.6	0.7	1.3	-0.4	-1.6	-1.1	
Maine	3.4	4.7	4.7	3.7	2.9	2.7	3.3	-	-2.4	-2.4	-1.0	
Maryland	3.3	3.1	3.6	2.8	2.1	2.1	-0.6	1.5	-2.5	-2.8	-	
Massachusetts	4.2	4.4	4.4	3.6	2.6	2.6	0.5	-	-2.0	-3.2	-	
Michigan	3.3	4.3	4.4	3.7	2.6	2.5	2.7	0.2	-1.7	-3.5	-0.6	
Minnesota	4.8	6.1	5.7	4.4	3.4	3.0	2.4	-0.7	-2.6	-2.5	-1.8	
Mississippi	2.9	4.4	5.3	5.0	4.8	4.4	4.3	1.9	-0.6	-0.4	-1.2	
Missouri	3.9	5.1	5.7	4.8	3.6	3.1	2.7	1.1	-1.7	-2.8	-2.1	
Montana	5.1	5.8	5.9	5.8	4.7	4.2	1.3	0.2	-0.2	-2.1	-1.6	
Nebraska	4.4	6.2	6.0	5.5	4.8	4.2	3.5	-0.3	-0.9	-1.4	-1.9	
Nevada	3.9	4.2	4.2	2.8	1.9	2.0	0.7	-	-4.0	-3.8	0.7	
New Hampshire	4.4	4.0	3.9	3.1	2.3	2.2	-0.9	-0.3	-2.3	-2.9	-0.6	
New Jersey	3.1	3.6	4.2	3.7	3.0	2.5	1.5	1.6	-1.3	-2.1	-2.6	
New Mexico	2.9	3.5	3.1	2.8	1.9	1.9	1.9	-1.2	-1.0	-3.8	-	
New York	4.3	4.6	4.5	4.1	3.5	3.2	0.7	-0.2	-0.9	-1.6	-1.3	
North Carolina	3.4	3.8	4.2	3.3	2.9	2.6	1.1	1.0	-2.4	-1.3	-1.5	
North Dakota	5.2	6.8	7.4	7.0	6.0	5.5	2.7	0.8	-0.6	-1.5	-1.2	
Ohio	3.4	4.2	4.7	4.0	3.0	2.9	2.1	1.1	-1.6	-2.8	-0.5	
Oklahoma	3.2	4.5	4.6	4.0	3.2	3.0	3.5	0.2	-1.4	-2.2	-0.9	
Oregon	3.5	4.0	3.5	2.8	1.9	1.8	1.3	-1.3	-2.2	-3.8	-0.8	
Pennsylvania	4.1	4.7	4.8	4.4	3.4	3.2	1.4	0.2	-0.9	-2.5	-0.9	
Rhode Island	3.7	4.0	3.8	3.2	2.3	2.3	0.8	-0.5	-1.7	-3.2	-	
South Carolina	2.9	3.7	3.9	3.3	2.9	2.7	2.5	0.5	-1.7	-1.3	-1.0	
South Dakota	4.5	5.6	5.5	6.1	5.7	5.3	2.2	-0.2	1.0	-0.7	-1.0	
Tennessee	3.4	4.7	5.5	4.8	3.6	3.5	3.3	1.6	-1.4	-2.8	-0.4	
Texas	3.3	4.3	4.7	3.5	2.7	2.4	2.7	0.9	-2.9	-2.6	-1.7	
Utah	2.8	3.6	3.1	2.6	1.9	1.7	2.5	-1.5	-1.7	-3.1	-1.6	
Vermont	4.5	4.5	4.4	3.0	2.7	2.2	-	-0.2	-3.8	-1.0	-2.9	
Virginia	3.0	3.7	4.1	3.3	2.4	2.2	2.1	1.0	-2.1	-3.1	-1.2	
Washington	3.3	3.5	3.1	2.5	1.9	1.7	0.6	-1.2	-2.1	-2.7	-1.6	
West Virginia	4.1	5.4	5.5	4.7	4.4	4.1	2.8	0.2	-1.6	-0.7	-1.0	
Wisconsin	4.3	5.2	4.9	3.8	2.9	2.5	1.9	-0.6	-2.5	-2.7	-2.1	
Wyoming	4.6	5.5	3.6	4.8	3.9	4.0	1.8	-4.1	2.9	-2.1	0.4	

- Quantity zero.

¹Civilian population for 1997 and earlier years.

²See [Appendix II, Average annual rate of change \(percentage change\)](#).

NOTE: The types of facilities included in the category of community hospitals have changed over time. See [Appendix II, Hospital](#).

SOURCES: American Hospital Association (AHA): Hospitals. JAHA 35(15):383–430, 1961 (Copyright 1961: Used with permission of AHA); AHA Annual Survey of Hospitals for 1970 and 1980 unpublished; Hospital Statistics 1991–1992, 2001–2009 editions. Chicago, IL. (Copyrights 1971, 1981, 1991, 2001–2009: Used with permission of Health Forum LLC, an affiliate of the AHA.)

Table 118. Occupancy rates in community hospitals and average annual percent change, by state: United States, selected years 1960–2007

[Data are based on reporting by a census of hospitals]

State	1960	1970	1980	1990	2000	2007	1960–1970	1970–1980	1980–1990	1990–2000	2000–2007	
	Occupancy rate ¹						Average annual percent change ²					
United States	75	77	75	67	64	67	0.3	-0.3	-1.1	-0.5	0.7	
Alabama	71	80	73	63	60	62	1.2	-0.9	-1.5	-0.5	0.5	
Alaska	54	59	58	50	57	59	0.9	-0.2	-1.5	1.3	0.5	
Arizona	74	73	74	62	63	69	-0.1	0.1	-1.8	0.2	1.3	
Arkansas	70	74	70	62	59	55	0.6	-0.6	-1.2	-0.5	-1.0	
California	74	71	69	64	66	68	-0.4	-0.3	-0.7	0.3	0.4	
Colorado	81	74	72	64	58	61	-0.9	-0.3	-1.2	-1.0	0.7	
Connecticut	78	83	80	77	75	78	0.6	-0.4	-0.4	-0.3	0.6	
Delaware	70	79	82	77	75	80	1.2	0.4	-0.6	-0.3	0.9	
District of Columbia	81	78	83	75	74	73	-0.4	0.6	-1.0	-0.1	-0.2	
Florida	74	76	72	62	61	66	0.3	-0.5	-1.5	-0.2	1.1	
Georgia	72	77	70	66	63	68	0.7	-0.9	-0.6	-0.5	1.1	
Hawaii	62	76	75	85	76	75	2.1	-0.1	1.3	-1.1	-0.2	
Idaho	56	66	65	56	53	54	1.7	-0.2	-1.5	-0.5	0.3	
Illinois	76	79	75	66	60	64	0.4	-0.5	-1.3	-0.9	0.9	
Indiana	80	80	78	61	56	56	-	-0.3	-2.4	-0.9	-	
Iowa	73	72	69	62	58	59	-0.1	-0.4	-1.1	-0.7	0.2	
Kansas	69	71	69	56	53	55	0.3	-0.3	-2.1	-0.5	0.5	
Kentucky	73	80	77	62	62	61	0.9	-0.4	-2.1	-	-0.2	
Louisiana	68	74	70	57	56	61	0.8	-0.6	-2.0	-0.2	1.2	
Maine	73	73	75	72	64	66	-	0.3	-0.4	-1.2	0.4	
Maryland	74	79	84	79	73	76	0.7	0.6	-0.6	-0.8	0.6	
Massachusetts	76	80	82	74	71	73	0.5	0.2	-1.0	-0.4	0.4	
Michigan	81	81	78	66	65	68	-	-0.4	-1.7	-0.2	0.6	
Minnesota	72	74	74	67	67	68	0.3	-	-1.0	-	0.2	
Mississippi	63	74	71	59	59	58	1.6	-0.4	-1.8	-	-0.2	
Missouri	76	79	75	62	58	64	0.4	-0.5	-1.9	-0.7	1.4	
Montana	60	66	66	61	67	66	1.0	-	-0.8	0.9	-0.2	
Nebraska	66	70	67	58	59	59	0.6	-0.4	-1.4	0.2	-	
Nevada	71	73	69	60	71	69	0.3	-0.6	-1.4	1.7	-0.4	
New Hampshire	67	73	73	67	59	64	0.9	-	-0.9	-1.3	1.2	
New Jersey	78	83	83	80	69	71	0.6	-	-0.4	-1.5	0.4	
New Mexico	65	70	66	58	58	57	0.7	-0.6	-1.3	-	-0.2	
New York	79	83	86	86	79	81	0.5	0.4	-	-0.8	0.4	
North Carolina	74	79	78	73	70	72	0.7	-0.1	-0.7	-0.4	0.4	
North Dakota	71	67	69	64	60	61	-0.6	0.3	-0.7	-0.6	0.2	
Ohio	81	82	79	65	61	65	0.1	-0.4	-1.9	-0.6	0.9	
Oklahoma	71	73	68	58	56	60	0.3	-0.7	-1.6	-0.4	1.0	
Oregon	66	69	69	57	59	61	0.4	-	-1.9	0.3	0.5	
Pennsylvania	76	82	80	73	68	71	0.8	-0.2	-0.9	-0.7	0.6	
Rhode Island	76	83	86	79	72	75	0.9	0.4	-0.8	-0.9	0.6	
South Carolina	77	76	77	71	69	68	-0.1	0.1	-0.8	-0.3	-0.2	
South Dakota	66	66	61	62	65	65	-	-0.8	0.2	0.5	-	
Tennessee	76	78	76	64	56	68	0.3	-0.3	-1.7	-1.3	2.8	
Texas	68	73	70	57	59	60	0.7	-0.4	-2.0	0.3	0.2	
Utah	70	74	70	59	56	60	0.6	-0.6	-1.7	-0.5	1.0	
Vermont	69	76	74	67	67	68	1.0	-0.3	-1.0	-	0.2	
Virginia	78	81	78	67	68	71	0.4	-0.4	-1.5	0.1	0.6	
Washington	63	70	72	63	60	62	1.1	0.3	-1.3	-0.5	0.5	
West Virginia	75	79	76	63	61	61	0.5	-0.4	-1.9	-0.3	-	
Wisconsin	74	73	74	65	60	62	-0.1	0.1	-1.3	-0.8	0.5	
Wyoming	61	63	57	54	56	56	0.3	-1.0	-0.5	0.4	-	

- Quantity zero.

¹Estimated percent of staffed beds that are occupied. Occupancy rate is calculated as the average daily census (inpatient days divided by 365) divided by the number of hospital beds. See [Appendix II, Occupancy rate](#).

²See [Appendix II, Average annual rate of change \(percentage change\)](#).

NOTE: The types of facilities included in the category of community hospitals have changed over time. See [Appendix II, Hospital](#).

SOURCES: American Hospital Association (AHA); Hospitals. JAHA 35(15):383–430, 1961. (Copyright 1961: Used with permission of AHA); AHA Annual Survey of Hospitals, 1970 and 1980 unpublished; Hospital Statistics 1991–1992, 2001–2009 editions. Chicago, IL. (Copyrights 1971, 1981, 1991, 2001–2009: Used with permission of Health Forum LLC, an affiliate of the AHA.)

Table 119 (page 1 of 2). Nursing homes, beds, residents, and occupancy rates, by state: United States, selected years 1995–2008

[Data are based on a census of certified nursing facilities]

State	Nursing homes				Beds			
	1995	2000	2007	2008	1995	2000	2007	2008
United States	16,389	16,886	15,825	15,730	1,751,302	1,795,388	1,711,894	1,703,846
Alabama	221	225	231	232	23,353	25,248	26,632	26,824
Alaska	15	15	15	15	814	821	725	725
Arizona	152	150	134	133	16,162	17,458	16,246	16,033
Arkansas	256	255	236	232	29,952	25,715	24,566	24,477
California	1,382	1,369	1,274	1,255	140,203	131,762	124,745	122,554
Colorado	219	225	209	212	19,912	20,240	19,836	19,956
Connecticut	267	259	244	241	32,827	32,433	30,003	29,678
Delaware	42	43	44	45	4,739	4,906	4,799	4,870
District of Columbia	19	20	20	18	3,206	3,078	2,982	2,645
Florida	627	732	681	676	72,656	83,365	82,498	82,067
Georgia	352	363	362	359	38,097	39,817	40,189	39,762
Hawaii	34	45	46	48	2,513	4,006	4,140	4,256
Idaho	76	84	77	78	5,747	6,181	6,053	6,034
Illinois	827	869	796	791	103,230	110,766	102,750	101,790
Indiana	556	564	513	510	59,538	56,762	57,747	57,107
Iowa	419	467	453	451	39,959	37,034	34,140	33,658
Kansas	429	392	350	346	30,016	27,067	26,081	26,011
Kentucky	288	307	292	287	23,221	25,341	26,070	25,769
Louisiana	337	337	287	285	37,769	39,430	36,261	36,096
Maine	132	126	113	112	9,243	8,248	7,281	7,243
Maryland	218	255	234	230	28,394	31,495	29,173	29,231
Massachusetts	550	526	446	433	54,532	56,030	50,144	49,323
Michigan	432	439	422	425	49,473	50,696	47,206	47,323
Minnesota	432	433	393	390	43,865	42,149	34,976	34,117
Mississippi	183	190	203	203	16,059	17,068	18,391	18,346
Missouri	546	551	515	516	52,679	54,829	54,506	55,028
Montana	100	104	92	91	7,210	7,667	7,187	7,081
Nebraska	231	236	225	224	18,169	17,877	16,286	16,198
Nevada	42	51	48	48	3,998	5,547	5,675	5,675
New Hampshire	74	83	81	80	7,412	7,837	7,779	7,718
New Jersey	300	361	362	361	43,967	52,195	50,991	51,132
New Mexico	83	80	72	70	6,969	7,289	6,912	6,780
New York	624	665	657	652	107,750	120,514	120,961	120,336
North Carolina	391	410	422	422	38,322	41,376	43,929	43,770
North Dakota	87	88	83	83	7,125	6,954	6,437	6,395
Ohio	943	1,009	958	955	106,884	105,038	93,194	93,039
Oklahoma	405	392	327	323	33,918	33,903	30,038	29,786
Oregon	161	150	138	138	13,885	13,500	12,468	12,473
Pennsylvania	726	770	716	711	92,625	95,063	88,138	87,878
Rhode Island	94	99	86	86	9,612	10,271	8,780	8,868
South Carolina	166	178	173	175	16,682	18,102	18,500	18,798
South Dakota	114	114	110	110	8,296	7,844	6,553	6,591
Tennessee	322	349	323	319	37,074	38,593	37,339	36,943
Texas	1,266	1,215	1,144	1,145	123,056	125,052	125,535	126,732
Utah	91	93	93	93	7,101	7,651	7,904	7,967
Vermont	23	44	40	40	1,862	3,743	3,342	3,268
Virginia	271	278	278	281	30,070	30,595	31,664	31,908
Washington	285	277	242	238	28,464	25,905	22,300	22,314
West Virginia	129	139	131	130	10,903	11,413	10,940	10,895
Wisconsin	413	420	395	393	48,754	46,395	37,850	37,385
Wyoming	37	40	39	39	3,035	3,119	3,052	2,993

See footnotes at end of table.

Table 119 (page 2 of 2). Nursing homes, beds, residents, and occupancy rates, by state: United States, selected years 1995–2008

[Data are based on a census of certified nursing facilities]

State	Residents				Occupancy rate ¹			
	1995	2000	2007	2008	1995	2000	2007	2008
United States	1,479,550	1,480,076	1,424,824	1,412,540	84.5	82.4	83.2	82.9
Alabama	21,691	23,089	23,392	23,205	92.9	91.4	87.8	86.5
Alaska	634	595	628	616	77.9	72.5	86.6	85.0
Arizona	12,382	13,253	12,447	12,201	76.6	75.9	76.6	76.1
Arkansas	20,823	19,317	17,857	17,753	69.5	75.1	72.7	72.5
California	109,805	106,460	104,610	103,487	78.3	80.8	83.9	84.4
Colorado	17,055	17,045	16,608	16,464	85.7	84.2	83.7	82.5
Connecticut	29,948	29,657	27,257	26,819	91.2	91.4	90.8	90.4
Delaware	3,819	3,900	4,004	3,999	80.6	79.5	83.4	82.1
District of Columbia	2,576	2,858	2,804	2,437	80.3	92.9	94.0	92.1
Florida	61,845	69,050	72,326	71,833	85.1	82.8	87.7	87.5
Georgia	35,933	36,559	35,682	35,276	94.3	91.8	88.8	88.7
Hawaii	2,413	3,558	3,830	3,840	96.0	88.8	92.5	90.2
Idaho	4,697	4,640	4,513	4,522	81.7	75.1	74.6	74.9
Illinois	83,696	83,604	76,974	76,282	81.1	75.5	74.9	74.9
Indiana	44,328	42,328	39,986	39,536	74.5	74.6	69.2	69.2
Iowa	27,506	29,204	26,505	26,292	68.8	78.9	77.6	78.1
Kansas	25,140	22,230	19,701	19,301	83.8	82.1	75.5	74.2
Kentucky	20,696	22,730	23,393	23,233	89.1	89.7	89.7	90.2
Louisiana	32,493	30,735	26,556	25,875	86.0	77.9	73.2	71.7
Maine	8,587	7,298	6,598	6,591	92.9	88.5	90.6	91.0
Maryland	24,716	25,629	25,456	25,243	87.0	81.4	87.3	86.4
Massachusetts	49,765	49,805	44,746	43,684	91.3	88.9	89.2	88.6
Michigan	43,271	42,615	40,626	40,224	87.5	84.1	86.1	85.0
Minnesota	41,163	38,813	31,909	31,056	93.8	92.1	91.2	91.0
Mississippi	15,247	15,815	16,498	16,246	94.9	92.7	89.7	88.6
Missouri	39,891	38,586	37,794	37,510	75.7	70.4	69.3	68.2
Montana	6,415	5,973	5,204	5,137	89.0	77.9	72.4	72.5
Nebraska	16,166	14,989	13,176	12,899	89.0	83.8	80.9	79.6
Nevada	3,645	3,657	4,724	4,724	91.2	65.9	83.2	83.2
New Hampshire	6,877	7,158	6,978	6,953	92.8	91.3	89.7	90.1
New Jersey	40,397	45,837	45,551	45,946	91.9	87.8	89.3	89.9
New Mexico	6,051	6,503	5,981	5,695	86.8	89.2	86.5	84.0
New York	103,409	112,957	111,510	110,940	96.0	93.7	92.2	92.2
North Carolina	35,511	36,658	38,176	38,025	92.7	88.6	86.9	86.9
North Dakota	6,868	6,343	5,926	5,847	96.4	91.2	92.1	91.4
Ohio	79,026	81,946	81,146	81,395	73.9	78.0	87.1	87.5
Oklahoma	26,377	23,833	19,769	19,518	77.8	70.3	65.8	65.5
Oregon	11,673	9,990	8,134	8,113	84.1	74.0	65.2	65.0
Pennsylvania	84,843	83,880	80,266	79,710	91.6	88.2	91.1	90.7
Rhode Island	8,823	9,041	8,112	7,955	91.8	88.0	92.4	89.7
South Carolina	14,568	15,739	16,827	17,004	87.3	86.9	91.0	90.5
South Dakota	7,926	7,059	6,553	6,528	95.5	90.0	100.0	99.0
Tennessee	33,929	34,714	32,633	32,288	91.5	89.9	87.4	87.4
Texas	89,354	85,275	89,967	90,385	72.6	68.2	71.7	71.3
Utah	5,832	5,703	5,486	5,456	82.1	74.5	69.4	68.5
Vermont	1,792	3,349	3,051	2,992	96.2	89.5	91.3	91.6
Virginia	28,119	27,091	28,321	28,279	93.5	88.5	89.4	88.6
Washington	24,954	21,158	19,223	18,760	87.7	81.7	86.2	84.1
West Virginia	10,216	10,334	9,826	9,710	93.7	90.5	89.8	89.1
Wisconsin	43,998	38,911	33,139	32,325	90.2	83.9	87.6	86.5
Wyoming	2,661	2,605	2,445	2,431	87.7	83.5	80.1	81.2

¹Percentage of beds occupied (number of nursing home residents per 100 nursing home beds).

NOTES: See [Appendix I, Online Survey Certification and Reporting Database \(OSCAR\)](#). Annual numbers of nursing homes, beds, and residents are based on a 15-month OSCAR reporting cycle. Data for additional years are available. See [Appendix III](#).

SOURCES: Cowles CM ed., 2008 Nursing Home Statistical Yearbook. McMinnville, OR: Cowles Research Group, 2009 and previous editions; and Cowles Research Group, unpublished data. Based on data from the Centers for Medicare & Medicaid Services' Online Survey Certification and Reporting (OSCAR) database.

Table 120. Medicare-certified providers and suppliers: United States, selected years 1975–2007

[Data are compiled from various Centers for Medicare & Medicaid Services data systems]

<i>Providers or suppliers</i>	1975	1980	1985	1990	1996	1999	2001	2003	2005	2007
	Number of providers or suppliers									
Skilled nursing facilities	---	5,052	6,451	8,937	---	14,913	14,841	14,838	15,006	15,054
Home health agencies	2,242	2,924	5,679	5,730	8,437	7,857	7,099	6,928	8,090	9,024
Clinical Laboratory Improvement Act facilities	---	---	---	---	159,907	171,018	168,333	176,947	196,296	206,065
End-stage renal disease facilities	---	999	1,393	1,937	2,876	3,787	3,991	4,309	4,755	5,095
Outpatient physical therapy	117	419	854	1,195	2,302	2,867	2,874	2,961	2,962	2,915
Portable X-ray	132	216	308	443	555	666	675	641	553	550
Rural health clinics	---	391	428	551	2,775	3,453	3,334	3,306	3,661	3,781
Comprehensive outpatient rehabilitation facilities	---	---	72	186	307	522	518	587	634	539
Ambulatory surgical centers	---	---	336	1,197	2,112	2,894	3,147	3,597	4,445	4,964
Hospices	---	---	164	825	1,927	2,326	2,267	2,323	2,872	3,255

--- Data not available.

NOTES: Data for 1975–1990 are as of July 1. Data for 1996–1999 and 2004–2007 are as of December 31. Data for 2001, 2002, and 2003 are as of December 2000, December 2001, and December 2002, respectively. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services (CMS). 2008 CMS Statistics. Baltimore, MD: CMS; 2008 and previous editions. Available from: <http://www.cms.hhs.gov/DataCompendium/>.

Table 121. Number of magnetic resonance imaging (MRI) units and computed tomography (CT) scanners: Selected countries, selected years 1990–2006

[Data are based on reporting by countries]

Country	1990	1995	2000	2003	2004	2005	2006	1990	1995	2000	2003	2004	2005	2006
	Number of MRI units per million population							Number of CT scanners per million population						
Australia ¹	0.6	2.9	3.5	3.7	3.7	4.2	4.9	13.8	20.5	26.1	40.3	45.3	51.1	---
Austria	---	---	10.9	13.6	15.9	16.2	16.8	11.7	---	25.8	27.2	29.2	29.6	29.8
Belgium	2.0	3.3	6.0	6.8	7.0	7.0	7.1	16.1	---	21.8	30.6	31.6	38.7	39.8
Canada ²	0.7	1.4	2.5	4.7	4.9	5.7	6.2	7.1	8.0	---	10.3	10.7	11.5	12.0
Czech Republic ³	---	1.0	1.7	2.5	2.8	3.1	3.8	---	6.7	9.6	12.6	12.6	12.3	13.1
Denmark	2.5	---	5.4	9.1	10.2	---	---	4.3	7.3	11.4	14.5	14.6	13.8	15.8
Finland	1.8	4.3	9.9	13.0	14.0	14.7	15.2	9.8	11.7	13.5	14.0	14.2	14.7	14.8
France	0.8	2.1	2.6	2.8	3.1	4.7	5.3	6.7	9.2	9.5	8.3	7.4	9.8	10.0
Germany ⁴	---	2.3	4.9	6.2	6.6	7.1	7.7	---	9.0	12.7	14.7	15.4	16.2	16.7
Greece	0.4	---	---	---	---	13.2	---	6.5	---	---	---	---	25.8	---
Hungary ⁵	0.1	1.0	1.8	2.6	2.6	2.6	2.6	1.9	4.6	5.7	6.5	6.8	7.1	7.2
Iceland	3.9	7.5	10.7	17.3	20.5	20.3	19.7	11.8	18.7	21.3	20.7	17.1	23.7	26.3
Italy ⁶	1.3	---	7.7	11.9	14.1	15.0	---	6.0	---	21.0	23.9	26.3	27.7	---
Japan ⁷	6.1	---	---	---	---	40.1	---	55.2	---	---	---	---	---	---
South Korea	---	3.9	5.4	9.0	11.1	12.1	13.6	---	15.5	28.4	31.9	31.5	32.3	33.7
Mexico	---	---	---	1.4	1.3	1.4	1.4	---	---	---	3.0	3.2	3.5	3.6
New Zealand	---	---	---	3.7	---	---	---	3.6	---	8.8	11.5	12.1	---	---
Poland	---	---	---	1.0	1.9	2.0	1.9	---	---	4.4	6.3	6.9	7.9	9.2
Portugal ⁸	0.8	---	---	3.9	---	---	5.8	4.6	---	---	12.8	---	26.2	25.8
Spain ⁹	---	2.7	4.8	7.3	7.7	8.1	8.8	---	8.3	12.0	13.0	13.3	13.5	13.9
Sweden	1.5	6.8	---	---	---	---	---	10.5	---	---	---	---	---	---
Switzerland	---	---	12.9	14.2	14.3	14.4	14.0	---	---	18.5	18.0	17.9	18.2	18.7
Turkey	---	---	---	3.0	3.0	---	3.5	1.6	---	---	7.3	---	---	7.8
United Kingdom ¹⁰	---	---	4.7	4.4	5.0	5.4	5.6	---	---	4.5	6.7	7.0	7.5	7.6
United States ¹¹	---	12.3	---	21.9	26.6	---	26.5	---	---	---	29.2	32.2	---	33.9
	Number of MRI units							Number of CT scanners						
Australia ¹	11	52	67	73	75	86	100	235	370	500	800	910	1,040	---
Austria	---	---	88	110	130	133	139	90	---	209	221	239	244	247
Belgium	20	33	61	71	73	73	75	160	---	223	318	329	406	420
Canada ²	19	40	76	150	156	185	201	198	234	---	325	341	373	392
Czech Republic ³	---	10	17	25	29	32	39	---	69	99	129	129	126	134
Denmark	13	---	29	49	55	---	---	22	38	61	78	79	75	86
Finland	9	22	51	68	73	77	80	49	60	70	73	74	77	78
France	45	123	156	169	191	288	325	379	534	563	503	449	595	615
Germany ⁴	---	184	405	514	545	585	635	---	737	1,040	1,215	1,268	1,334	1,376
Greece	4	---	---	---	---	147	---	66	---	---	---	---	286	---
Hungary ⁵	1	10	18	26	26	26	26	20	47	58	66	69	72	73
Iceland	1	2	3	5	6	6	6	3	5	6	6	5	7	8
Italy ⁶	72	---	442	682	813	870	---	340	---	1,203	1,371	1,513	1,613	---
Japan	756	---	---	---	---	5,128	---	6,821	---	---	---	---	---	---
South Korea	---	174	254	430	531	584	657	---	699	1,334	1,526	1,515	1,557	1,629
Mexico	---	---	---	138	135	142	146	---	---	---	309	330	360	373
New Zealand	---	---	---	15	---	---	---	12	---	34	46	49	---	---
Poland	---	---	---	39	73	77	74	---	---	169	242	264	303	352
Portugal ⁸	8	---	---	41	---	---	61	45	---	---	134	---	277	273
Spain ⁹	---	107	194	306	328	350	386	---	327	483	544	566	587	611
Sweden	13	60	---	---	---	---	---	90	---	---	---	---	---	---
Switzerland	---	---	93	104	106	107	105	---	---	133	132	132	135	140
Turkey	---	---	---	211	212	---	254	89	---	---	516	---	---	566
United Kingdom ¹⁰	---	---	277	263	300	326	342	---	---	264	400	421	450	458
United States ¹¹	---	3,265	---	6,375	7,810	---	7,930	---	---	---	8,490	9,455	---	10,150

--- Data not available.

¹Starting with 2000 data, the number of MRI units include only those that are approved for billing to Medicare (Australia's national health program). In 1999, approved units represented approximately 60% of total units.

²The number of units in freestanding imaging facilities was imputed for years prior to 2003 based on data collected in the 2003 National Survey of Selected Medical Imaging Equipment, conducted by the Canadian Institute for Health Information. MRI units in Quebec are not included in 2000.

³Prior to 2000, the data include only equipment of Health Sector establishments.

⁴The data include equipment installed in acute care hospitals and prevention and rehabilitation homes.

⁵Equipment used in military hospitals and the health institutes of Hungarian State Railways are not included.

⁶1990 data include only equipment in public and private hospitals.

⁷Prior to 2000, the data include only equipment in hospitals.

⁸The data do not include equipment in all the private sectors.

⁹The data include equipment available in hospitals and do not include equipment in other health care facilities.

¹⁰The data include devices in public sector establishments only.

¹¹Data are from the MRI Census and are comparable to the OECD definition. The devices in U.S. territories are not included.

NOTE: Data for additional years are available. See [Appendix III](#).

SOURCES: Organisation for Economic Co-operation and Development (OECD); 2005 Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census. Benchmark Report: IMV, Limited, Medical Information Division.

Table 122. Total health expenditures as a percent of gross domestic product, and per capita health expenditures in dollars, by selected countries: Selected years 1960–2006

[Data compiled by the Organisation for Economic Co-operation and Development]

Country	1960	1970	1980	1990	1995	2000	2002	2003	2004	2005	2006 ¹
Health expenditures as a percent of gross domestic product											
Australia	3.8	---	6.3	6.9	7.4	8.3	8.6	8.6	8.8	8.8	8.7
Austria	4.3	5.2	7.5	8.4	9.7	9.9	10.1	10.2	10.3	10.3	10.1
Belgium	---	3.9	6.3	7.2	8.2	8.6	9.0	10.5	10.7	10.6	10.3
Canada	5.4	6.9	7.0	8.9	9.0	8.8	9.6	9.8	9.8	9.9	10.0
Czech Republic	---	---	---	4.7	7.0	6.5	7.1	7.4	7.2	7.1	6.8
Denmark	---	---	8.9	8.3	8.1	8.3	8.8	9.3	9.5	9.5	9.5
Finland	3.8	5.5	6.3	7.7	7.7	7.0	7.6	8.0	8.1	8.3	8.2
France	3.8	5.4	7.0	8.4	10.4	10.1	10.5	10.9	11.0	11.1	11.0
Germany	---	6.0	8.4	8.3	10.1	10.3	10.6	10.8	10.6	10.7	10.6
Greece	---	5.4	5.9	6.6	8.6	7.8	8.2	8.5	8.3	9.0	9.1
Hungary	---	---	---	---	7.3	6.9	7.6	8.4	8.2	8.5	8.3
Iceland	3.0	4.7	6.3	7.8	8.2	9.5	10.2	10.4	9.9	9.4	9.1
Ireland	3.7	5.1	8.3	6.1	6.7	6.3	7.1	7.3	7.5	8.2	7.5
Italy	---	---	---	7.7	7.3	8.1	8.3	8.3	8.7	8.9	9.0
Japan	3.0	4.6	6.5	6.0	6.9	7.7	8.0	8.1	8.0	8.2	8.1
Luxembourg	---	3.1	5.2	5.4	5.6	5.8	6.8	7.6	8.1	7.8	7.3
Mexico	---	---	---	4.8	5.6	5.6	6.2	6.3	6.5	6.4	6.6
Netherlands	---	---	7.4	8.0	8.3	8.0	8.9	9.4	9.5	---	---
New Zealand	---	5.2	5.9	6.9	7.2	7.7	8.2	8.0	---	---	---
Norway	2.9	4.4	7.0	7.6	7.9	8.4	9.8	10.0	9.7	9.1	8.7
Poland	---	---	---	4.8	5.5	5.5	6.3	6.2	6.2	6.2	6.2
Portugal	---	2.5	5.3	5.9	7.8	8.8	9.0	9.7	10.0	10.2	10.2
Slovak Republic	---	---	---	---	---	5.5	5.6	5.9	7.2	7.1	7.4
South Korea	---	---	3.4	4.0	3.9	4.5	5.1	5.4	5.4	5.9	6.4
Spain	1.5	3.5	5.3	6.5	7.4	7.2	7.3	8.1	8.2	8.3	8.4
Sweden	---	6.8	8.9	8.2	8.0	8.2	9.3	9.4	9.2	9.2	9.2
Switzerland	4.9	5.4	7.3	8.2	9.7	10.3	11.0	11.4	11.4	11.4	11.3
Turkey	---	---	3.3	3.6	3.4	4.9	5.9	6.0	5.9	5.7	---
United Kingdom	3.9	4.5	5.6	6.0	6.9	7.2	7.6	7.7	8.0	8.2	8.4
United States ²	5.1	7.0	8.7	11.9	13.3	13.2	14.7	15.1	15.2	15.2	15.3
Per capita health expenditures³											
Australia	\$ 90	---	\$ 643	\$ 1,200	\$ 1,611	\$ 2,265	\$ 2,566	\$ 2,686	\$ 2,885	\$ 2,999	\$ 3,141
Austria	77	196	784	1,631	2,259	2,859	3,068	3,206	3,397	3,507	3,606
Belgium	---	150	644	1,358	1,854	2,377	2,685	3,153	3,311	3,385	3,462
Canada	125	301	780	1,738	2,057	2,513	2,874	3,058	3,218	3,460	3,678
Czech Republic	---	---	---	560	899	980	1,195	1,340	1,388	1,447	1,509
Denmark	---	---	897	1,544	1,871	2,379	2,696	2,834	3,057	3,179	3,362
Finland	63	185	571	1,367	1,440	1,794	2,089	2,210	2,412	2,523	2,668
France	69	194	669	1,449	2,102	2,542	2,922	2,988	3,117	3,306	3,449
Germany	---	269	971	1,769	2,275	2,671	2,937	3,090	3,162	3,251	3,371
Greece	---	161	491	853	1,264	1,429	1,792	1,928	1,991	2,283	2,483
Hungary	---	---	---	---	660	852	1,114	1,302	1,327	1,440	1,504
Iceland	57	175	755	1,667	1,910	2,736	3,156	3,198	3,338	3,373	3,340
Ireland	43	117	516	792	1,204	1,801	2,360	2,515	2,724	3,126	3,082
Italy	---	---	---	1,359	1,538	2,053	2,223	2,272	2,401	2,496	2,614
Japan	30	151	585	1,125	1,551	1,967	2,237	2,224	2,337	2,474	2,578
Luxembourg	---	---	---	---	1,911	2,554	3,081	3,582	4,083	4,153	4,303
Mexico	---	---	---	296	386	508	584	628	679	724	794
Netherlands	---	---	741	1,416	1,799	2,337	2,833	2,988	3,156	---	---
New Zealand	---	216	508	990	1,244	1,604	1,846	1,856	---	---	---
Norway	49	144	668	1,370	1,863	3,039	3,629	3,840	4,082	4,328	4,520
Poland	---	---	---	290	411	583	733	749	808	843	910
Portugal	---	48	276	636	1,036	1,509	1,657	1,824	1,913	2,029	2,120
Slovak Republic	---	---	---	---	---	603	730	792	1,058	1,130	1,308
South Korea	---	---	90	330	504	747	945	1,026	1,110	1,263	1,464
Spain	16	95	363	873	1,193	1,536	1,745	2,019	2,128	2,260	2,458
Sweden	---	312	944	1,592	1,746	2,284	2,707	2,841	2,964	3,012	3,202
Switzerland	166	346	1,017	2,034	2,598	3,256	3,719	3,829	3,990	4,069	4,311
Turkey	---	---	70	156	173	432	483	502	576	591	---
United Kingdom	84	161	470	965	1,350	1,847	2,165	2,259	2,509	2,580	2,760
United States ²	147	351	1,065	2,738	3,656	4,570	5,305	5,682	6,014	6,347	6,714

--- Data not available.

¹For some countries, data are preliminary estimates. See <http://www.ecosante.org/oeed.htm> for more information.

²The Organisation for Economic Co-operation and Development (OECD) estimates for the United States differ from the National Health Expenditures estimates shown in Table 123 because of differences in methodology.

³Per capita health expenditures for each country have been adjusted to U.S. dollars using gross domestic product purchasing power parities for each year. See [Appendix II, Gross domestic product; Purchasing power parities](#).

NOTES: These data include revisions in health expenditures and differ from previous editions of *Health, United States*. Trends should be interpreted with caution due to data series breaks and changes in methodology. Data for additional years are available. Please see [Appendix III](#).

SOURCE: The Organisation for Economic Co-operation and Development Health Data File 2008, incorporating revisions to the annual update. Available from: <http://www.ecosante.org/oeed.htm>.

Table 123. Gross domestic product, federal, and state and local government expenditures, national health expenditures, and average annual percent change: United States, selected years 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Gross domestic product, government expenditures, and national health expenditures</i>	1960	1970	1980	1990	2000	2005	2006	2007
	Amount in billions							
Gross domestic product (GDP)	\$ 526	\$1,039	\$2,790	\$ 5,803	\$ 9,817	\$ 12,422	\$ 13,178	\$ 13,808
Implicit price deflator for GDP ¹	21.0	27.5	54.0	81.6	100.0	113.0	116.7	119.8
All federal government expenditures	\$ 86.7	\$201.1	\$585.7	\$1,253.5	\$1,864.4	\$2,558.6	\$2,711.6	\$2,880.5
All state and local government expenditures	40.2	113.0	329.4	730.5	1,269.5	1,684.9	1,765.3	1,892.4
National health expenditures	\$ 27.5	\$ 74.9	\$253.4	\$ 714.1	\$1,353.2	\$1,980.6	\$2,112.7	\$2,241.2
Private	20.7	46.8	147.0	427.4	756.4	1,081.6	1,139.7	1,205.5
Public	6.8	28.1	106.3	286.8	596.8	899.0	973.0	1,035.7
Federal government	2.9	17.7	71.6	193.9	417.7	640.3	707.6	754.4
State and local government	3.9	10.4	34.8	92.8	179.0	258.7	265.4	281.3
	Amount per capita							
National health expenditures	\$ 148	\$ 356	\$1,100	\$ 2,814	\$ 4,789	\$ 6,687	\$ 7,062	\$ 7,421
Private	111	222	638	1,684	2,677	3,652	3,810	3,991
Public	36	134	462	1,130	2,112	3,035	3,252	3,429
Federal government	15	84	311	764	1,479	2,162	2,365	2,498
State and local government	21	49	151	366	634	873	887	931
	Percent							
National health expenditures as percent of GDP	5.2	7.2	9.1	12.3	13.8	15.9	16.0	16.2
Health expenditures as a percent of total government expenditures								
All federal government	3.3	8.8	12.2	15.5	22.4	25.0	26.1	26.2
All state and local government	9.7	9.2	10.6	12.7	14.1	15.4	15.0	14.9
	Percent distribution							
National health expenditures	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	75.3	62.4	58.0	59.8	55.9	54.6	53.9	53.8
Public	24.7	37.6	42.0	40.2	44.1	45.4	46.1	46.2
Federal government	10.4	23.7	28.2	27.2	30.9	32.3	33.5	33.7
State and local government	14.3	13.9	13.7	13.0	13.2	13.1	12.6	12.6
	Average annual percent change from previous year shown ²							
GDP . . . . .	...	7.0	10.4	7.6	5.4	4.8	6.1	4.8
Federal government expenditures . . . . .	...	8.8	11.3	7.9	4.0	6.5	6.0	6.2
State and local government expenditures . . . . .	...	10.9	11.3	8.3	5.7	5.8	4.8	7.2
National health expenditures . . . . .	...	10.5	13.0	10.9	6.6	7.9	6.7	6.1
Private . . . . .	...	8.5	12.1	11.3	5.9	7.4	5.4	5.8
Public . . . . .	...	15.3	14.2	10.4	7.6	8.5	8.2	6.4
Federal government . . . . .	...	20.0	15.0	10.5	8.0	8.9	10.5	6.6
State and local government . . . . .	...	10.2	12.8	10.3	6.8	7.6	2.6	6.0
National health expenditures, per capita . . . . .	...	9.2	11.9	9.8	5.5	6.9	5.6	5.1
Private . . . . .	...	7.2	11.1	10.2	4.7	6.4	4.3	4.8
Public . . . . .	...	14.0	13.2	9.4	6.5	7.5	7.1	5.4
Federal government . . . . .	...	18.8	14.0	9.4	6.8	7.9	9.4	5.6
State and local government . . . . .	...	8.8	11.9	9.3	5.6	6.6	1.6	5.0

... Category not applicable.

¹Year 2000=100. Last revised December 23, 2008 by the Bureau of Economic Analysis.

²See [Appendix II, Average annual percent change](#).

NOTES: Dollar amounts shown are in current dollars. The data reflect U.S. Census Bureau resident population estimates as of July 2008, excluding the armed forces overseas. See [Appendix II, Gross domestic product \(GDP\); Health expenditures, national](#). Percents are calculated using unrounded data. Estimates may not add to totals because of rounding. Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2007. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>; U.S. Department of Commerce, Bureau of Economic Analysis, National Economic Accounts, National Income and Product Accounts Tables 1.1.9, 3.2, 3.3 accessed on January 13, 2009. Available from: <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N/>.

Table 124. Consumer Price Index and average annual percent change for all items, selected items, and medical care components: United States, selected years 1960–2008

[Data are based on reporting by samples of providers and other retail outlets]

<i>Items and medical care components</i>	1960	1970	1980	1990	1995	2000	2005	2007	2008
Consumer Price Index (CPI)									
All items	29.6	38.8	82.4	130.7	152.4	172.2	195.3	207.3	215.3
All items less medical care	30.2	39.2	82.8	128.8	148.6	167.3	188.7	200.1	207.8
Services	24.1	35.0	77.9	139.2	168.7	195.3	230.1	246.8	255.5
Food	30.0	39.2	86.8	132.4	148.4	167.8	190.7	202.9	214.1
Apparel	45.7	59.2	90.9	124.1	132.0	129.6	119.5	119.0	118.9
Housing	---	36.4	81.1	128.5	148.5	169.6	195.7	209.6	216.3
Energy	22.4	25.5	86.0	102.1	105.2	124.6	177.1	207.7	236.7
Medical care	22.3	34.0	74.9	162.8	220.5	260.8	323.2	351.1	364.1
Components of medical care									
Medical care services	19.5	32.3	74.8	162.7	224.2	266.0	336.7	369.3	384.9
Professional services	---	37.0	77.9	156.1	201.0	237.7	281.7	300.8	311.0
Physicians' services	21.9	34.5	76.5	160.8	208.8	244.7	287.5	303.2	311.3
Dental services	27.0	39.2	78.9	155.8	206.8	258.5	324.0	358.4	376.9
Eyeglasses and eye care ¹	---	---	---	117.3	137.0	149.7	163.2	171.6	174.1
Services by other medical professionals ¹	---	---	---	120.2	143.9	161.9	186.8	197.4	205.5
Hospital and related services	---	---	69.2	178.0	257.8	317.3	439.9	498.9	534.0
Hospital services ²	---	---	---	---	---	115.9	161.6	183.6	197.2
Inpatient hospital services ^{2,3}	---	---	---	---	---	113.8	156.6	178.1	190.8
Outpatient hospital services ^{1,3}	---	---	---	138.7	204.6	263.8	373.0	424.2	456.8
Hospital rooms	9.3	23.6	68.0	175.4	251.2	---	---	---	---
Other inpatient services ¹	---	---	---	142.7	206.8	---	---	---	---
Nursing homes and adult day care ²	---	---	---	---	---	117.0	145.0	159.6	165.3
Health insurance ⁴	---	---	---	---	---	---	---	113.5	114.2
Medical care commodities	46.9	46.5	75.4	163.4	204.5	238.1	276.0	290.0	296.0
Prescription drugs ⁵	54.0	47.4	72.5	181.7	235.0	285.4	349.0	369.2	378.3
Nonprescription drugs and medical supplies ¹	---	---	---	120.6	140.5	149.5	151.7	156.8	158.3
Internal and respiratory over-the-counter drugs	---	42.3	74.9	145.9	167.0	176.9	179.7	186.4	188.7
Nonprescription medical equipment and supplies	---	---	79.2	138.0	166.3	178.1	180.6	185.1	185.6
Average annual percent change from previous year shown									
All items . . . . .	...	2.7	7.8	4.7	3.1	2.5	2.5	3.0	3.8
All items excluding medical care . . . . .	...	2.6	7.8	4.5	2.9	2.4	2.4	3.0	3.8
All services . . . . .	...	3.8	8.3	6.0	3.9	3.0	3.3	3.6	3.5
Food . . . . .	...	2.7	8.3	4.3	2.3	2.5	2.6	3.1	5.5
Apparel . . . . .	...	2.6	4.4	3.2	1.2	-0.4	-1.6	-0.2	-0.1
Housing . . . . .	...	---	8.3	4.7	2.9	2.7	2.9	3.5	3.2
Energy . . . . .	...	1.3	12.9	1.7	0.6	3.4	7.3	8.3	13.9
Medical care . . . . .	...	4.3	8.2	8.1	6.3	3.4	4.4	4.2	3.7
Components of medical care									
Medical care services . . . . .	...	5.2	8.8	8.1	6.6	3.5	4.8	4.7	4.2
Professional services . . . . .	...	---	7.7	7.2	5.2	3.4	3.5	3.3	3.4
Physicians' services . . . . .	...	4.6	8.3	7.7	5.4	3.2	3.3	2.7	2.7
Dental services . . . . .	...	3.8	7.2	7.0	5.8	4.6	4.6	5.2	5.1
Eyeglasses and eye care ¹ . . . . .	...	---	---	---	3.2	1.8	1.7	2.5	1.4
Services by other medical professionals ¹ . . . . .	...	---	---	---	3.7	2.4	2.9	2.8	4.1
Hospital and related services . . . . .	...	---	---	9.9	7.7	4.2	6.8	6.5	7.0
Hospital services ² . . . . .	...	---	---	---	---	---	6.9	6.6	7.4
Inpatient hospital services ^{2,3} . . . . .	...	---	---	---	---	---	6.6	6.6	7.1
Outpatient hospital services ^{1,3} . . . . .	...	---	---	---	8.1	5.2	7.2	6.6	7.7
Hospital rooms . . . . .	...	9.8	11.2	9.9	7.4	---	---	---	---
Other inpatient services ¹ . . . . .	...	---	---	---	7.7	---	---	---	---
Nursing homes and adult day care ² . . . . .	...	---	---	---	---	---	4.4	4.9	3.6
Health insurance ⁴ . . . . .	...	---	---	---	---	---	---	---	0.6
Medical care commodities . . . . .	...	-0.1	5.0	8.0	4.6	3.1	3.0	2.5	2.1
Prescription drugs ⁵ . . . . .	...	-1.3	4.3	9.6	5.3	4.0	4.1	2.9	2.5
Nonprescription drugs and medical supplies ¹ . . . . .	...	---	---	---	3.1	1.2	0.3	1.7	0.9
Internal and respiratory over-the-counter drugs . . . . .	...	---	5.9	6.9	2.7	1.2	0.3	1.8	1.2
Nonprescription medical equipment and supplies . . . . .	...	---	---	5.7	3.8	1.4	0.3	1.2	0.3

--- Data not available. Category not applicable. ¹December 1986 = 100. ²December 1996 = 100.
³Special index based on a substantially smaller sample.
⁴December 2005 = 100.
⁵Prior to 2006 this category included medical supplies.

NOTES: CPI for all urban consumers (CPI-U) U.S. city average, detailed expenditure categories. 1982–1984 = 100, except where noted. Data are not seasonally adjusted. See [Appendix I, Consumer Price Index](#). See [Appendix II, Consumer Price Index](#).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index. Various releases. 2008 data available from: <http://www.bls.gov/cpi/cpid08av.pdf>.

Table 125. Growth in personal health care expenditures and percent distribution of factors affecting growth: United States, 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Period	Average annual percent increase	Factors affecting growth				
		All factors	Inflation ¹		Population	Intensity ²
			Economy-wide	Medical		
Percent distribution ³						
1960–2007	9.8	100	40	16	11	33
1960–1965	8.3	100	17	10	18	55
1965–1970	12.7	100	34	12	8	46
1970–1975	12.3	100	55	1	8	36
1975–1980	13.8	100	55	12	7	26
1980–1985	11.6	100	46	32	9	13
1985–1990	10.3	100	32	26	10	32
1990–1995	7.3	100	34	29	16	21
1995–2000	5.7	100	30	18	18	35
1995–1996	5.4	100	36	19	19	26
1996–1997	5.4	100	31	9	20	41
1997–1998	5.3	100	21	21	20	38
1998–1999	5.7	100	26	22	18	34
1999–2000	6.7	100	33	17	15	35
2000–2005	7.8	100	33	17	13	38
2000–2001	8.7	100	28	16	12	44
2001–2002	8.2	100	22	26	12	40
2002–2003	8.0	100	27	20	12	41
2003–2004	7.1	100	41	17	14	28
2004–2005	6.8	100	49	5	14	33
2005–2006	6.7	100	49	3	15	32
2006–2007	6.4	100	43	11	15	31

¹Total inflation is economy-wide, and medical inflation is the medical inflation above economy-wide inflation.

²Intensity is the residual percent of growth that cannot be attributed to inflation or population growth. It represents changes in the use or kinds of services and supplies.

³Percents may not sum to 100 due to rounding.

NOTES: These data include revisions in health expenditures for 1975 and subsequent years and revisions in population for 2000 and subsequent years. The implicit price deflator for Gross domestic product (GDP) is used to measure economy-wide inflation for all years 1960–2007. See [Appendix II, Health expenditures, national; Gross domestic product \(GDP\)](#). All indexes used to calculate the factors affecting growth were rebased in 2003 with base year 2000. Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2007. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>; unpublished data.

Table 126 (page 1 of 2). National health expenditures, average annual percent change, and percent distribution, by type of expenditure: United States, selected years 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of national health expenditure	1960	1970	1980	1990	2000	2005	2006	2007
Amount in billions								
National health expenditures	\$27.5	\$74.9	\$253.4	\$714.1	\$1,353.2	\$1,980.6	\$2,112.7	\$2,241.2
Health services and supplies	24.9	67.1	233.4	666.8	1,264.4	1,850.4	1,976.1	2,098.1
Personal health care.	23.3	62.9	214.8	607.6	1,139.2	1,655.1	1,765.5	1,878.3
Hospital care	9.2	27.6	101.0	251.6	416.9	607.5	649.3	696.5
Professional services.	8.3	20.6	67.3	216.8	426.8	621.5	661.4	702.1
Physician and clinical services	5.4	14.0	47.1	157.6	288.6	422.2	449.7	478.8
Other professional services	0.4	0.7	3.6	18.2	39.1	56.0	58.7	62.0
Dental services	2.0	4.7	13.3	31.5	62.0	86.4	90.5	95.2
Other personal health care	0.6	1.2	3.3	9.6	37.1	56.9	62.5	66.2
Nursing home and home health	0.9	4.3	20.9	65.2	125.8	168.7	178.4	190.4
Home health care ¹	0.1	0.2	2.4	12.6	30.5	48.1	53.0	59.0
Nursing home care ¹	0.8	4.0	18.5	52.6	95.3	120.6	125.4	131.3
Retail outlet sales of medical products	4.9	10.5	25.7	74.0	169.8	257.5	276.4	289.3
Prescription drugs	2.7	5.5	12.0	40.3	120.6	199.7	216.8	227.5
Other medical products.	2.3	5.0	13.6	33.7	49.2	57.8	59.6	61.8
Government administration and net cost of private health insurance.	1.2	2.8	12.2	39.2	81.8	138.7	150.4	155.7
Government public health activities ²	0.4	1.4	6.4	20.0	43.4	56.6	60.2	64.1
Investment	2.6	7.8	19.9	47.3	88.8	130.2	136.6	143.1
Research ³	0.7	2.0	5.4	12.7	25.6	40.2	41.3	42.4
Structures and equipment	1.9	5.8	14.5	34.7	63.2	90.0	95.2	100.7
Average annual percent change from previous year shown								
National health expenditures . . . . .	...	10.5	13.0	10.9	6.6	7.9	6.7	6.1
Health services and supplies . . . . .	...	10.4	13.3	11.1	6.6	7.9	6.8	6.2
Personal health care. . . . .	...	10.4	13.1	11.0	6.5	7.8	6.7	6.4
Hospital care . . . . .	...	11.6	13.9	9.6	5.2	7.8	6.9	7.3
Professional services. . . . .	...	9.5	12.5	12.4	7.0	7.8	6.4	6.2
Physician and clinical services . . . . .	...	10.1	12.9	12.8	6.2	7.9	6.5	6.5
Other professional services . . . . .	...	6.6	17.1	17.5	8.0	7.5	4.8	5.6
Dental services . . . . .	...	9.1	11.1	9.0	7.0	6.9	4.7	5.2
Other personal health care . . . . .	...	7.3	10.1	11.4	14.5	8.9	9.8	5.9
Nursing home and home health . . . . .	...	17.2	17.2	12.1	6.8	6.0	5.8	6.7
Home health care ¹ . . . . .	...	14.5	26.9	18.1	9.3	9.5	10.3	11.3
Nursing home care ¹ . . . . .	...	17.4	16.4	11.0	6.1	4.8	4.0	4.8
Retail outlet sales of medical products . . . . .	...	7.8	9.4	11.2	8.7	8.7	7.4	4.6
Prescription drugs . . . . .	...	7.5	8.2	12.8	11.6	10.6	8.6	4.9
Other medical products. . . . .	...	8.1	10.6	9.5	3.8	3.3	3.2	3.7
Government administration and net cost of private health insurance. . . . .	...	8.6	16.0	12.4	7.6	11.1	8.4	3.6
Government public health activities ². . . . .	...	12.8	16.5	12.0	8.1	5.4	6.5	6.4
Investment . . . . .	...	11.7	9.9	9.0	6.5	8.0	4.9	4.8
Research ³ . . . . .	...	10.9	10.8	8.9	7.3	9.5	2.7	2.7
Structures and equipment . . . . .	...	11.9	9.5	9.1	6.2	7.3	5.8	5.7

See footnotes at end of table.

Table 126 (page 2 of 2). National health expenditures, average annual percent change, and percent distribution, by type of expenditure: United States, selected years 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of national health expenditure	1960	1970	1980	1990	2000	2005	2006	2007
	Percent distribution							
National health expenditures	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health services and supplies	90.6	89.6	92.1	93.4	93.4	93.4	93.5	93.6
Personal health care	84.7	84.0	84.8	85.1	84.2	83.6	83.6	83.8
Hospital care	33.3	36.8	39.9	35.2	30.8	30.7	30.7	31.1
Professional services	30.2	27.6	26.5	30.4	31.5	31.4	31.3	31.3
Physician and clinical services	19.4	18.7	18.6	22.1	21.3	21.3	21.3	21.4
Other professional services	1.4	1.0	1.4	2.5	2.9	2.8	2.8	2.8
Dental services	7.1	6.2	5.3	4.4	4.6	4.4	4.3	4.2
Other personal health care	2.2	1.7	1.3	1.3	2.7	2.9	3.0	3.0
Nursing home and home health	3.2	5.7	8.2	9.1	9.3	8.5	8.4	8.5
Home health care ¹	0.2	0.3	0.9	1.8	2.3	2.4	2.5	2.6
Nursing home care ¹	2.9	5.4	7.3	7.4	7.0	6.1	5.9	5.9
Retail outlet sales of medical products	18.0	14.0	10.1	10.4	12.5	13.0	13.1	12.9
Prescription drugs	9.7	7.3	4.8	5.6	8.9	10.1	10.3	10.1
Other medical products	8.2	6.6	5.4	4.7	3.6	2.9	2.8	2.8
Government administration and net cost of private health insurance	4.4	3.7	4.8	5.5	6.0	7.0	7.1	6.9
Government public health activities ²	1.5	1.9	2.5	2.8	3.2	2.9	2.9	2.9
Investment	9.4	10.4	7.9	6.6	6.6	6.6	6.5	6.4
Research ³	2.5	2.6	2.1	1.8	1.9	2.0	2.0	1.9
Structures and equipment	6.9	7.8	5.7	4.9	4.7	4.5	4.5	4.5

. . . Category not applicable.

¹Freestanding facilities only. Additional services of this type are provided in hospital-based facilities and counted as hospital care.

²Includes personal care services delivered by government public health agencies.

³Research and development expenditures of drug companies and other manufacturers and providers of medical equipment and supplies are excluded. They are included in the expenditure class in which the product falls because these expenditures are covered by the payment received for that product. See [Appendix II, Health expenditures, national](#).

NOTES: Percents are calculated using unrounded data. Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2007. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

Table 127 (page 1 of 2). Personal health care expenditures, by source of funds and type of expenditure: United States, selected years 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Type of personal health care expenditures and source of funds</i>	1960	1970	1980	1990	2000	2005	2006	2007
	Amount							
Per capita	\$ 125	\$ 299	\$ 932	\$2,394	\$ 4,032	\$ 5,588	\$ 5,902	\$ 6,219
	Amount in billions							
All personal health care expenditures ¹	\$ 23.3	\$ 62.9	\$214.8	\$607.6	\$1,139.2	\$1,655.1	\$1,765.5	\$1,878.3
Personal health care implicit price deflator ²	11.0	16.1	34.3	70.3	100.0	120.5	124.6	128.8
	Percent distribution							
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	55.2	39.6	27.1	22.4	16.9	14.9	14.4	14.3
Private health insurance	21.4	22.3	28.5	33.7	35.4	36.2	36.1	36.2
Other private funds	2.0	2.8	4.3	5.0	5.0	4.2	4.2	4.2
Government ³	21.4	35.3	40.1	38.9	42.7	44.7	45.2	45.3
Medicare . . . . .	...	11.6	16.8	17.5	18.9	19.8	21.7	21.8
Medicaid . . . . .	...	8.0	11.5	11.5	16.4	17.4	16.2	16.2
CHIP ⁴ . . . . .	...	...	...	...	0.2	0.4	0.4	0.4
	Amount in billions							
Hospital care expenditures ⁵	\$ 9.2	\$ 27.6	\$101.0	\$251.6	\$ 416.9	\$ 607.5	\$ 649.3	\$ 696.5
	Percent distribution							
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	20.7	9.0	5.4	4.5	3.3	3.3	3.3	3.3
Private health insurance	35.8	32.5	36.6	38.9	34.6	35.5	36.4	36.9
Other private funds	1.2	3.2	5.0	4.1	5.3	4.5	4.6	4.6
Government ³	42.2	55.2	53.0	52.5	56.9	56.8	55.7	55.2
Medicare . . . . .	...	19.4	26.1	27.0	29.8	29.6	28.9	28.2
Medicaid . . . . .	...	9.6	9.1	10.6	17.0	17.3	17.0	17.2
CHIP ⁴ . . . . .	...	...	...	...	0.2	0.4	0.4	0.4
	Amount in billions							
Physician and clinical services expenditures	\$ 5.4	\$ 14.0	\$ 47.1	\$157.6	\$ 288.6	\$ 422.2	\$ 449.7	\$ 478.8
	Percent distribution							
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	61.7	46.2	30.4	19.2	11.1	10.3	10.3	10.4
Private health insurance	29.8	30.1	35.5	42.7	47.4	49.0	49.3	49.4
Other private funds	1.4	1.6	3.9	7.2	7.7	6.5	6.5	6.5
Government ³	7.2	22.1	30.2	30.9	33.8	34.2	33.9	33.7
Medicare . . . . .	...	11.8	17.0	18.6	20.2	20.5	20.4	20.1
Medicaid . . . . .	...	4.6	5.2	4.5	6.6	7.0	6.9	6.9
CHIP ⁴ . . . . .	...	...	...	...	0.3	0.4	0.4	0.5
	Amount in billions							
Nursing home expenditures ⁶	\$ 0.8	\$ 4.0	\$ 18.5	\$ 52.6	\$ 95.3	\$ 120.6	\$ 125.4	\$ 131.3
	Percent distribution							
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	77.3	52.0	35.7	36.1	30.1	26.1	26.1	26.9
Private health insurance	0.0	0.2	1.1	5.6	8.3	7.3	7.4	7.5
Other private funds	6.3	4.8	4.0	7.2	4.8	3.6	3.6	3.5
Government ³	16.4	43.0	59.2	51.1	56.8	62.9	62.9	62.1
Medicare . . . . .	...	3.5	1.7	3.2	10.6	15.8	16.8	17.7
Medicaid . . . . .	...	23.3	55.4	45.8	44.1	44.6	43.5	41.7
CHIP ⁴ . . . . .	...	...	...	...	0.0	0.0	0.0	0.0

See footnotes at end of table.

Table 127 (page 2 of 2). Personal health care expenditures, by source of funds and type of expenditure: United States, selected years 1960–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of personal health care expenditures and source of funds	1960	1970	1980	1990	2000	2005	2006	2007
Amount in billions								
Home health expenditures	\$ 0.1	\$ 0.2	\$ 2.4	\$ 12.6	\$ 30.5	\$ 48.1	\$ 53.0	\$ 59.0
Percent distribution								
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	12.5	9.4	15.2	17.9	17.9	11.5	10.9	10.1
Private health insurance	2.5	3.0	14.7	22.9	22.7	11.7	10.6	9.4
Other private funds	67.6	38.7	15.6	7.7	4.0	2.3	2.1	1.9
Government ³	17.4	48.8	54.5	51.6	55.4	74.5	76.4	78.6
Medicare . . . . .	...	26.7	26.8	26.0	28.0	37.9	39.4	40.4
Medicaid . . . . .	...	6.7	11.7	17.1	22.1	32.7	33.6	34.7
CHIP ⁴ . . . . .	...	...	...	...	0.0	0.0	0.0	0.0
Amount in billions								
Prescription drug expenditures	\$ 2.7	\$ 5.5	\$ 12.0	\$ 40.3	\$ 120.6	\$ 199.7	\$ 216.8	\$ 227.5
Percent distribution								
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	96.0	82.4	70.3	55.5	27.7	24.4	21.6	20.9
Private health insurance	1.3	8.8	14.8	26.4	49.3	48.0	44.4	43.6
Other private funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government ³	2.7	8.8	14.9	18.1	23.0	27.6	34.1	35.5
Medicare . . . . .	...	0.0	0.0	0.5	1.7	2.0	18.2	20.7
Medicaid . . . . .	...	7.6	11.7	12.6	16.7	18.6	8.8	8.2
CHIP ⁴ . . . . .	...	...	...	...	0.3	0.7	0.7	0.7
Amount in billions								
Dental services expenditures	\$ 2.0	\$ 4.7	\$ 13.3	\$ 31.5	\$ 62.0	\$ 86.4	\$ 90.5	\$ 95.2
Percent distribution								
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	97.2	91.0	66.4	48.5	44.6	44.3	44.3	44.2
Private health insurance	1.9	4.5	28.6	48.5	50.5	49.6	49.6	49.3
Other private funds	0.0	0.0	0.2	0.2	0.3	0.1	0.1	0.1
Government ³	0.9	4.5	4.8	2.8	4.6	6.0	6.0	6.4
Medicare . . . . .	...	0.0	0.0	0.0	0.1	0.1	0.1	0.2
Medicaid . . . . .	...	3.5	3.8	2.4	3.7	4.9	4.8	5.2
CHIP ⁴ . . . . .	...	...	...	...	0.4	0.6	0.7	0.6
Amount in billions								
All other personal health care expenditures ⁷	\$ 3.3	\$ 6.9	\$ 20.5	\$ 61.5	\$ 125.4	\$ 170.6	\$ 180.8	\$ 190.0
Percent distribution								
All sources of funds	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	78.1	73.0	69.2	58.1	41.1	35.1	34.2	34.1
Private health insurance	1.3	2.4	6.7	12.7	13.1	13.6	13.5	13.5
Other private funds	5.6	5.0	5.6	6.4	5.5	5.0	4.9	5.0
Government ³	15.0	19.6	18.5	22.7	40.2	46.2	47.3	47.4
Medicare . . . . .	...	1.0	3.5	6.9	9.9	11.8	12.0	12.1
Medicaid . . . . .	...	3.0	3.0	6.4	20.4	25.3	26.7	27.2
CHIP ⁴ . . . . .	...	...	...	...	0.2	0.4	0.4	0.4

... Category not applicable.

¹Includes all expenditures for specified health services and supplies other than expenses for program administration, net cost of private health insurance, and government public health activities.

²Constructed from the Producer Price Index for hospital care, Nursing Home Input Price Index for nursing home care, and Consumer Price Indices specific to each of the remaining personal health care components.

³Includes other government expenditures for these health care services, for example, care funded by the Department of Veterans Affairs, and state and locally financed subsidies to hospitals.

⁴Children's Health Insurance Program (CHIP). Medicaid CHIP expansions are included.

⁵Includes expenditures for hospital-based nursing home and home health agency care.

⁶Includes expenditures for care in freestanding nursing homes. Expenditures for care in hospital-based nursing homes are included with hospital care.

⁷Includes expenditures for other professional services, other non-durable medical products, durable medical equipment, and other personal health care, not shown separately. See [Appendix II, Health expenditures, national](#).

NOTES: Percents may not add to totals because of rounding. The Medicare and Medicaid programs began coverage in 1965. The Children's Health Insurance Program began coverage in 1997. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2007. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

Table 128 (page 1 of 2). Personal health care expenditures, by age: United States, selected years 1987–2004

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of personal health care expenditures and age	1987	1996	1999	2002	2004	1987	1996	1999	2002	2004
	Amount in billions					Amount per capita				
All personal health care expenditures¹										
Total	\$442.8	\$910.3	\$1,068.3	\$1,341.2	\$1,551.3	\$ 1,796	\$ 3,354	\$ 3,818	\$ 4,652	\$ 5,276
Under 19 years	59.0	121.0	143.0	184.2	206.0	868	1,623	1,872	2,385	2,650
19–44 years	126.0	239.1	276.1	337.6	368.7	1,223	2,216	2,550	3,094	3,370
45–54 years	42.0	106.3	136.1	179.7	217.2	1,781	3,197	3,703	4,487	5,210
55–64 years	58.2	106.4	133.6	174.7	227.8	2,636	4,878	5,581	6,533	7,787
65–74 years	69.7	133.7	146.6	173.0	197.1	3,998	7,174	8,042	9,562	10,778
75–84 years	56.3	127.5	144.9	182.6	208.9	5,984	11,199	12,054	14,578	16,389
85 years and over	31.6	76.3	88.0	109.4	125.4	10,562	19,577	20,992	23,985	25,691
Hospital care expenditures²										
Total	190.5	352.2	395.0	488.6	566.9	773	1,298	1,412	1,695	1,928
Under 19 years	22.7	43.1	49.2	67.3	77.8	335	578	645	872	1,000
19–44 years	55.5	93.8	103.6	129.0	143.4	538	869	957	1,182	1,311
45–54 years	17.6	36.7	44.2	56.8	71.1	744	1,103	1,204	1,417	1,706
55–64 years	27.7	44.3	51.8	62.1	80.5	1,254	2,028	2,165	2,322	2,752
65–74 years	32.7	59.1	60.1	68.2	76.6	1,879	3,171	3,297	3,772	4,191
75–84 years	24.2	52.6	58.5	70.4	78.8	2,575	4,619	4,867	5,619	6,178
85 years and over	10.1	22.7	27.5	34.9	38.7	3,368	5,838	6,548	7,645	7,916
Physician and clinical services expenditures										
Total	111.7	229.4	269.6	337.9	393.7	453	845	964	1,172	1,339
Under 19 years	18.6	39.3	44.6	55.6	58.5	274	527	585	719	753
19–44 years	36.3	71.5	79.6	97.7	105.0	352	663	735	896	960
45–54 years	10.8	30.1	38.2	47.5	61.0	456	906	1,039	1,186	1,463
55–64 years	14.0	28.6	35.0	44.8	60.6	634	1,312	1,461	1,676	2,070
65–74 years	18.3	31.4	36.4	43.2	49.7	1,053	1,686	1,996	2,386	2,716
75–84 years	10.8	21.7	27.1	37.2	44.1	1,148	1,907	2,257	2,969	3,463
85 years and over	2.9	6.8	8.7	11.9	14.8	970	1,740	2,082	2,616	3,037
Nursing home expenditures³										
Total	36.3	79.6	90.5	105.7	115.0	147	293	323	367	391
Under 19 years	0.4	1.0	1.2	1.3	1.4	6	14	16	16	18
19–44 years	3.7	7.2	7.0	7.7	7.9	36	67	64	70	72
45–54 years	1.4	3.2	4.3	5.9	7.0	59	96	116	147	168
55–64 years	1.5	3.5	4.8	6.6	8.0	69	160	201	248	272
65–74 years	3.9	10.3	11.4	13.5	14.8	226	550	624	743	809
75–84 years	10.8	23.7	26.7	30.9	33.4	1,145	2,079	2,224	2,469	2,623
85 years and over	14.6	30.7	35.2	39.9	42.5	4,882	7,888	8,392	8,746	8,706

See footnotes at end of table.

Table 128 (page 2 of 2). Personal health care expenditures, by age: United States, selected years 1987–2004

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of personal health care expenditures and age	1987	1996	1999	2002	2004	1987	1996	1999	2002	2004
	Amount in billions					Amount per capita				
Home health expenditures										
Total	\$ 6.7	\$ 33.6	\$ 31.5	\$ 34.2	\$ 42.7	\$ 27	\$ 124	\$ 113	\$ 119	\$ 145
Under 19 years	0.6	3.3	3.2	4.0	4.9	9	44	42	51	63
19–44 years	1.7	4.4	4.9	5.6	6.4	16	41	46	51	58
45–54 years	0.3	3.3	3.9	3.8	4.5	11	98	105	94	108
55–64 years	0.7	2.2	2.5	2.5	3.2	30	99	103	94	110
65–74 years	1.2	5.2	3.8	4.3	5.2	68	279	208	235	285
75–84 years	1.5	8.7	6.8	7.3	9.4	164	764	567	585	734
85 years and over	0.7	6.6	6.5	6.8	9.1	249	1,693	1,546	1,497	1,869
Prescription drug expenditures										
Total	26.9	68.5	104.7	157.9	189.7	109	253	374	548	645
Under 19 years	2.8	6.5	9.5	13.8	16.3	41	87	124	178	210
19–44 years	6.4	18.3	27.8	36.5	40.3	62	169	256	334	368
45–54 years	3.6	10.7	18.8	31.9	36.1	153	322	513	796	866
55–64 years	5.0	11.5	18.5	30.4	41.3	225	528	772	1,138	1,412
65–74 years	5.0	11.8	15.9	21.3	25.2	287	635	870	1,178	1,379
75–84 years	3.3	7.3	10.7	17.2	20.8	351	637	886	1,372	1,630
85 years and over	0.9	2.5	3.6	6.9	9.7	300	631	856	1,506	1,980
Dental services expenditures										
Total	25.3	46.8	57.1	73.3	81.5	102	172	204	254	277
Under 19 years	6.6	13.9	17.1	21.6	24.8	97	186	224	280	319
19–44 years	10.1	16.3	18.8	23.3	25.1	98	151	174	214	229
45–54 years	3.3	7.6	9.2	12.1	12.8	140	229	251	302	308
55–64 years	2.7	4.3	5.8	8.7	10.4	123	198	242	325	355
65–74 years	1.8	3.1	4.0	4.5	4.9	105	165	218	249	267
75–84 years	0.6	1.4	1.8	2.7	2.9	60	121	152	213	227
85 years and over	0.1	0.2	0.4	0.4	0.6	47	53	86	94	117
All other personal health care expenditures⁴										
Total	45.5	100.1	119.8	143.5	161.8	184	369	429	498	550
Under 19 years	7.3	14.0	18.1	20.7	22.3	108	187	237	269	288
19–44 years	12.4	27.5	34.4	37.9	40.7	121	256	317	347	372
45–54 years	5.1	14.7	17.5	21.8	24.6	218	443	475	544	591
55–64 years	6.6	12.1	15.2	19.5	23.8	300	553	636	731	815
65–74 years	6.6	12.8	15.1	18.1	20.7	380	686	831	998	1,131
75–84 years	5.1	12.2	13.2	16.9	19.5	540	1,073	1,101	1,351	1,533
85 years and over	2.2	6.8	6.2	8.6	10.1	747	1,733	1,483	1,881	2,065

¹Includes all expenditures for specified health services and supplies other than expenses for government administration, net cost of private health insurance, and government public health activities.

²Includes expenditures for hospital-based nursing home and home health agency care.

³Includes expenditures for care in freestanding nursing homes. Expenditures for care in hospital-based nursing homes are included in hospital care expenditures.

⁴Includes expenditures for other professional services, other non-durable medical products, durable medical equipment, and other personal health care, not shown separately. See [Appendix II, Health expenditures, national](#).

NOTES: Estimates of personal health care expenditures presented in this table are based on National Health Expenditures 2005 vintage estimates, and therefore may not match National Health Expenditures 2007 vintage estimates for total personal health care and other services that are published elsewhere in *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2004. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

Table 129. National health expenditures for mental health services, average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003

[Data are compiled from various sources by the Substance Abuse and Mental Health Services Administration]

Type of expenditure	1986	1990	1995	2000	2002	2003
Amount in millions						
Total expenditures	\$33,125	\$46,456	\$61,763	\$79,203	\$93,135	\$100,321
Total all service providers	29,355	40,636	52,163	57,740	65,790	69,918
General non-specialty hospitals	5,469	7,613	11,125	12,069	14,729	15,927
General hospital specialty units	3,038	5,729	7,953	6,445	6,455	6,568
General hospital non-specialty units	2,432	1,885	3,171	5,624	8,274	9,359
Specialty hospitals	8,251	11,069	11,473	11,005	11,328	11,673
All physicians	3,753	5,827	8,261	10,445	12,541	13,748
Psychiatrists	2,681	4,276	5,924	7,569	8,678	9,802
Non-psychiatric physicians	1,072	1,551	2,337	2,876	3,863	3,946
Other professionals	3,099	4,261	5,191	6,251	7,567	8,370
Freestanding nursing homes	4,754	5,496	5,261	5,310	5,964	6,234
Freestanding home health	113	221	592	612	749	823
Multi-service mental health organizations	3,916	6,148	10,260	12,048	12,913	13,143
Retail prescription drug	2,191	3,340	5,754	16,417	20,949	23,259
Insurance administration	1,579	2,480	3,847	5,046	6,395	7,145
Amount in inflation-adjusted millions						
Total expenditures, inflation-adjusted dollars	\$46,491	\$56,938	\$67,057	\$79,203	\$89,392	\$ 94,284
Deflator (2000=1.00)						
GDP implicit price deflator ¹	0.71	0.82	0.92	1.00	1.04	1.06
Average annual percent change from previous year shown						
Total expenditures . . . . .	...	8.8	5.9	5.1	8.4	7.7
Total all service providers . . . . .	...	8.5	5.1	2.1	6.7	6.3
General non-specialty hospitals . . . . .	...	8.6	7.9	1.6	10.5	8.1
General hospital specialty units . . . . .	...	17.2	6.8	-4.1	0.1	1.8
General hospital non-specialty units . . . . .	...	-6.2	11.0	12.1	21.3	13.1
Specialty hospitals . . . . .	...	7.6	0.7	-0.8	1.5	3.0
All physicians . . . . .	...	11.6	7.2	4.8	9.6	9.6
Psychiatrists . . . . .	...	12.4	6.7	5.0	7.1	13.0
Non-psychiatric physicians . . . . .	...	9.7	8.6	4.2	15.9	2.1
Other professionals . . . . .	...	8.3	4.0	3.8	10.0	10.6
Freestanding nursing homes . . . . .	...	3.7	-0.9	0.2	6.0	4.5
Freestanding home health . . . . .	...	18.4	21.7	0.7	10.7	9.9
Multi-service mental health organizations . . . . .	...	11.9	10.8	3.3	3.5	1.8
Retail prescription drug . . . . .	...	11.1	11.5	23.3	13.0	11.0
Insurance administration . . . . .	...	11.9	9.2	5.6	12.6	11.7
Percent distribution						
Total expenditures	100.0	100.0	100.0	100.0	100.0	100.0
Total all service providers	88.6	87.5	84.5	72.9	70.6	69.7
General non-specialty hospitals	16.5	16.4	18.0	15.2	15.8	15.9
General hospital specialty units	9.2	12.3	12.9	8.1	6.9	6.5
General hospital non-specialty units	7.3	4.1	5.1	7.1	8.9	9.3
Specialty hospitals	24.9	23.8	18.6	13.9	12.2	11.6
All physicians	11.3	12.5	13.4	13.2	13.5	13.7
Psychiatrists	8.1	9.2	9.6	9.6	9.3	9.8
Non-psychiatric physicians	3.2	3.3	3.8	3.6	4.1	3.9
Other professionals	9.4	9.2	8.4	7.9	8.1	8.3
Freestanding nursing homes	14.4	11.8	8.5	6.7	6.4	6.2
Freestanding home health	0.3	0.5	1.0	0.8	0.8	0.8
Multi-service mental health organizations	11.8	13.2	16.6	15.2	13.9	13.1
Retail prescription drug	6.6	7.2	9.3	20.7	22.5	23.2
Insurance administration	4.8	5.3	6.2	6.4	6.9	7.1

--- Data not available.

... Category not applicable.

¹Gross domestic product implicit price deflator developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Table 1.1.9 Implicit price deflator for Gross domestic product is available from: <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp>, accessed on September 13, 2006.

NOTES: Additional data on specialty and non-specialty providers are available in the Internet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Specialty providers include general hospital specialty units, specialty hospitals, psychiatrists, other professionals, multi-service mental health organizations, and specialty substance abuse centers. Non-specialty providers include general hospital non-specialty units, non-psychiatric physicians, freestanding nursing homes, and freestanding home health providers. Data for additional years are available. See [Appendix III](#).

SOURCES: Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, et al. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003. SAMHSA Publication No. SMA 07–4227. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2007 and unpublished data.

Table 130. National health expenditures for substance abuse treatment, average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003

[Data are compiled from various sources by the Substance Abuse and Mental Health Services Administration]

Type of expenditure	1986	1990	1995	2000	2002	2003
Amount in millions						
Total expenditures	\$ 9,302	\$12,075	\$15,561	\$17,545	\$19,867	\$20,740
Total all service providers	8,777	11,378	14,590	16,473	18,558	19,335
General non-specialty hospitals	2,995	3,167	3,764	3,649	4,132	4,359
General hospital specialty units	2,240	2,089	3,320	2,739	2,859	2,890
General hospital non-specialty units	755	1,078	444	911	1,272	1,470
Specialty hospitals	1,453	1,346	1,315	736	738	676
All physicians	685	904	1,048	1,413	1,554	1,672
Psychiatrists	237	328	410	510	428	540
Non-psychiatric physicians	448	577	638	902	1,127	1,131
Other professionals	1,451	1,685	1,652	2,076	2,372	2,636
Freestanding nursing homes	106	126	179	254	292	301
Freestanding home health	2	3	16	10	3	4
Multi-service mental health organizations	325	657	1,012	1,492	1,312	1,246
Specialty substance abuse centers	1,761	3,490	5,605	6,845	8,156	8,441
Retail prescription drug	14	19	33	67	89	98
Insurance administration	512	679	937	1,005	1,220	1,307
Amount in inflation-adjusted millions						
Total expenditures, inflation-adjusted dollars	\$13,056	\$14,800	\$16,895	\$17,545	\$19,068	\$19,492
Deflator (2000=1.00)						
GDP implicit price deflator ¹	0.71	0.82	0.92	1.00	1.04	1.06
Average annual percent change from previous year shown						
Total expenditures . . . . .	...	6.7	5.2	2.4	6.4	4.4
Total all service providers . . . . .	...	6.7	5.1	2.5	6.1	4.2
General non-specialty hospitals . . . . .	...	1.4	3.5	-0.6	6.4	5.5
General hospital specialty units . . . . .	...	-1.7	9.7	-3.8	2.2	1.1
General hospital non-specialty units . . . . .	...	9.3	-16.3	15.4	18.2	15.5
Specialty hospitals . . . . .	...	-1.9	-0.5	-11.0	0.1	-8.4
All physicians . . . . .	...	7.2	3.0	6.2	4.9	7.5
Psychiatrists . . . . .	...	8.4	4.6	4.5	-8.4	26.2
Non-psychiatric physicians . . . . .	...	6.5	2.0	7.2	11.7	0.4
Other professionals . . . . .	...	3.8	-17.6	26.6	6.9	11.2
Freestanding nursing homes . . . . .	...	4.3	7.3	7.3	7.3	3.2
Freestanding home health . . . . .	...	15.9	36.6	-9.2	-43.1	11.9
Multi-service mental health organizations . . . . .	...	19.3	9.0	8.1	-6.2	-5.0
Specialty substance abuse centers . . . . .	...	18.7	9.9	4.1	9.2	3.5
Retail prescription drug . . . . .	...	9.0	11.6	15.0	15.0	11.3
Insurance administration . . . . .	...	7.3	6.7	1.4	10.1	7.2
Percent distribution						
Total expenditures	100.0	100.0	100.0	100.0	100.0	100.0
Total all service providers	94.4	94.2	93.8	93.9	93.4	93.2
General non-specialty hospitals	32.2	26.2	24.2	20.8	20.8	21.0
General hospital specialty units	24.1	17.3	21.3	15.6	14.4	13.9
General hospital non-specialty units	8.1	8.9	2.9	5.2	6.4	7.1
Specialty hospitals	15.6	11.1	8.5	4.2	3.7	3.3
All physicians	7.4	7.5	6.7	8.1	7.8	8.1
Psychiatrists	2.6	2.7	2.6	2.9	2.2	2.6
Non-psychiatric physicians	4.8	4.8	4.1	5.1	5.7	5.5
Other professionals	15.6	14.0	4.1	11.8	11.9	12.7
Freestanding nursing homes	1.1	1.0	1.1	1.4	1.5	1.5
Freestanding home health	0.0	0.0	0.1	0.1	0.0	0.0
Multi-service mental health organizations	3.5	5.4	6.5	8.5	6.6	6.0
Specialty substance abuse centers	18.9	28.9	36.0	39.0	41.1	40.7
Retail prescription drug	0.1	0.2	0.2	0.4	0.4	0.5
Insurance administration	5.5	5.6	6.0	5.7	6.1	6.3

0.0 Quantity is greater than zero but less than 0.05.

--- Data not available.

... Category not applicable.

¹Gross domestic product implicit price deflator developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Table 1.1.9 Implicit price deflator for Gross domestic product is available from: <http://www.bea.gov/bea/dn/nipaweb/SelectTable.asp>, accessed on September 13, 2006.

NOTES: Additional data on specialty and non-specialty providers are available in the internet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Specialty providers include general hospital specialty units, specialty hospitals, psychiatrists, other professionals, multi-service mental health organizations, and specialty substance abuse centers. Non-specialty providers include general hospital non-specialty units, non-psychiatric physicians, freestanding nursing homes, and freestanding home health providers. Data for additional years are available. See Appendix III.

SOURCES: Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, et al. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003. SAMHSA Publication No. SMA 07–4227. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2007 and unpublished data.

Table 131 (page 1 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Total expenses ¹										
	Population in millions ²			Percent of persons with expense				Mean annual expense per person with expense ³			
	1997	2000	2006	1987	1997	2000	2006	1987	1997	2000	2006
All ages	271.3	278.4	299.3	84.5	84.1	83.5	84.6	\$2,772	\$3,045	\$3,161	\$4,078
Under 65 years:											
Total	237.1	243.6	261.3	83.2	82.5	81.8	82.9	2,158	2,309	2,490	3,231
Under 6 years	23.8	24.1	24.4	88.9	88.0	86.7	89.2	1,833	1,078	1,316	1,602
6–17 years	48.1	48.4	49.7	80.2	81.7	80.0	83.6	1,209	1,210	1,308	1,538
18–44 years	108.9	109.0	111.1	81.5	78.3	77.7	76.9	1,897	2,093	2,230	2,703
45–64 years	56.3	62.1	76.1	87.0	89.2	88.5	89.2	3,674	4,052	4,170	5,455
Sex											
Male	118.0	120.9	130.6	78.8	77.6	76.6	77.8	2,036	2,086	2,384	2,939
Female	119.1	122.7	130.7	87.5	87.4	87.0	88.0	2,263	2,505	2,583	3,489
Hispanic origin and race ⁴											
Hispanic or Latino	29.4	32.0	42.6	71.0	69.5	69.0	69.5	1,721	1,922	1,696	2,220
Not Hispanic or Latino:											
White	166.2	169.2	166.6	86.9	87.2	86.6	88.1	2,165	2,477	2,605	3,458
Black or African American	31.3	32.1	33.1	72.2	72.1	71.3	77.3	2,611	1,851	2,645	3,301
Other	10.2	10.2	19.1	72.8	75.8	76.0	77.1	1,432	1,535	2,123	2,875
Insurance status ⁵											
Any private insurance	174.0	181.6	180.7	86.5	86.5	85.9	88.2	2,069	2,353	2,372	3,344
Public insurance only	29.8	29.7	43.2	82.4	83.3	83.6	84.2	3,471	2,806	3,780	3,626
Uninsured all year	33.3	32.3	37.4	61.8	61.1	57.3	55.9	1,349	1,379	1,756	1,679
65 years and over:											
Total	34.2	34.8	38.0	93.7	95.2	95.5	96.7	6,847	7,470	7,188	9,080
Sex											
Male	14.6	15.0	16.3	92.0	94.5	93.4	96.3	7,006	8,394	7,708	9,058
Female	19.6	19.8	21.7	94.9	95.7	97.1	96.9	6,735	6,789	6,810	9,096
Hispanic origin and race ⁴											
Hispanic or Latino	1.7	1.9	2.6	82.5	94.2	92.5	90.9	6,520	7,817	6,451	9,275
Not Hispanic or Latino:											
White	28.8	28.9	30.5	94.9	95.9	95.9	97.5	6,740	7,508	7,297	9,002
Black or African American	2.8	2.9	3.2	88.5	92.2	94.0	94.5	8,252	7,357	6,913	9,946
Other	*	*	1.7	*	*	*	94.8	*	*	*	8,591
Insurance status ⁶											
Medicare only	8.8	12.0	11.9	85.9	92.1	94.8	95.6	5,393	6,882	6,172	8,199
Medicare and private insurance	21.7	19.2	20.2	95.4	97.0	96.0	98.5	6,774	7,285	7,371	9,258
Medicare and other public coverage	3.2	3.2	5.3	94.4	93.2	96.3	95.3	10,520	10,528	9,863	10,534

See footnotes at end of table.

Table 131 (page 2 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Prescribed medicine expenses ⁷							
	Percent of persons with expense				Mean annual out-of-pocket expense per person with out-of-pocket expense ³			
	1987	1997	2000	2006	1987	1997	2000	2006
All ages	57.3	62.1	62.3	62.6	\$163	\$254	\$321	\$416
Under 65 years:								
Total	54.0	58.7	58.5	58.4	121	180	233	341
Under 6 years	61.8	61.3	56.9	54.4	43	44	43	52
6–17 years	44.3	48.2	46.2	46.1	80	68	82	143
18–44 years	51.3	55.9	56.0	54.1	94	153	177	273
45–64 years	65.3	71.8	73.3	74.1	229	334	439	562
Sex								
Male	46.5	51.5	51.3	51.6	112	160	205	290
Female	61.4	65.8	65.6	65.2	128	195	255	381
Hispanic origin and race ⁴								
Hispanic or Latino	41.6	47.7	45.0	44.7	87	119	171	241
Not Hispanic or Latino:								
White	57.7	63.1	63.8	64.6	126	195	251	364
Black or African American	44.1	50.0	47.6	51.7	106	144	192	279
Other	41.1	44.8	47.8	47.1	89	156	164	*
Insurance status ⁵								
Any private insurance	56.5	61.6	61.6	62.7	124	171	200	331
Public insurance only	56.5	62.0	62.4	59.1	83	177	334	278
Uninsured all year	35.1	40.2	37.6	36.8	133	259	386	540
65 years and over:								
Total	81.6	86.0	88.3	91.7	376	607	729	743
Sex								
Male	78.0	82.8	83.9	89.9	350	546	547	652
Female	84.0	88.3	91.5	93.0	392	648	856	810
Hispanic origin and race ⁴								
Hispanic or Latino	74.7	87.5	83.9	85.7	*497	495	615	693
Not Hispanic or Latino:								
White	82.3	86.7	89.0	92.5	383	627	756	768
Black or African American	79.5	85.3	85.3	89.9	295	504	623	647
Other	*	*	*	88.9	*	*	*	530
Insurance status ⁶								
Medicare only	70.6	82.1	87.7	90.3	415	701	871	831
Medicare and private insurance	83.4	88.1	89.0	93.7	390	615	674	759
Medicare and other public coverage	88.2	85.0	88.5	91.2	142	339	577	500

See footnotes at end of table.

Table 131 (page 3 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

* Estimates are considered unreliable. Estimates based on fewer than 100 sample cases or with a relative standard error of 30% or higher are not shown.

¹Includes expenses for inpatient hospital and physician services, ambulatory physician and nonphysician services, prescribed medicines, home health services, dental services, and other medical equipment, supplies, and services that were purchased or rented during the year. Excludes expenses for over-the-counter medications, phone contacts with health providers, and premiums for health insurance.

²Includes persons in the civilian noninstitutionalized population for all or part of the year. Expenditures for persons in this population for only part of the year are restricted to those incurred during periods of eligibility (e.g., expenses incurred during periods of institutionalization and military service are not included in estimates).

³Estimates of expenses were converted to 2006 dollars using the Consumer Price Index (all items) and differ from previous editions of *Health, United States*. See [Appendix II, Consumer Price Index \(CPI\)](#).

⁴Persons of Hispanic origin may be of any race. Starting with 2002 data, MEPS respondents were allowed to report multiple races and these persons are included in the Other category. As a result, there is a slight increase in percentage of persons classified in the Other category in 2002 compared with prior years. Other includes Asian and American Indian race in addition to multiple race.

⁵Any private insurance includes individuals with insurance that provided coverage for hospital and physician care at any time during the year, other than Medicare, Medicaid, or other public coverage for hospital or physician services. Public insurance only includes individuals who were not covered by private insurance at any time during the year but were covered by Medicare, Medicaid, other public coverage for hospital or physician services, and/or CHAMPUS/CHAMPVA (TRICARE) at any point during the year. Uninsured includes persons not covered by either private or public insurance throughout the entire year or period of eligibility for the survey. Individuals with Indian Health Service coverage only are considered uninsured.

⁶Populations do not add to total because uninsured persons and persons with unknown insurance status were excluded.

⁷Includes expenses for all prescribed medications that were purchased or refilled during the survey year.

NOTES: 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends. 1987 National Medical Expenditure Survey and 1996–2006 Medical Expenditure Panel Surveys.

Table 132 (page 1 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	All sources	Source of payment for health care							
		Out of pocket				Private insurance ¹			
		1987	1997	2000	2006	1987	1997	2000	2006
Percent distribution									
All ages	100.0	24.8	19.4	19.4	19.0	36.6	40.3	40.3	40.8
Under 65 years:									
Total	100.0	26.2	21.1	20.3	20.7	46.6	53.1	52.5	54.2
Under 6 years	100.0	18.5	14.2	10.3	10.1	39.5	49.3	51.2	48.3
6–17 years	100.0	35.7	29.0	27.7	26.1	47.3	53.2	48.8	50.9
18–44 years	100.0	27.4	21.1	19.9	21.3	46.8	52.9	51.2	54.0
45–64 years	100.0	24.0	20.1	20.2	20.5	47.8	53.6	54.5	55.4
Sex									
Male	100.0	24.5	21.3	18.1	20.2	44.6	50.3	52.2	52.2
Female	100.0	27.5	21.0	22.1	21.2	48.1	55.1	52.7	55.6
Hispanic origin and race ²									
Hispanic or Latino	100.0	22.0	18.8	20.5	17.6	36.1	42.3	45.8	38.1
Not Hispanic or Latino:									
White	100.0	28.2	21.8	21.7	22.4	50.1	55.8	55.1	58.3
Black or African American	100.0	15.5	17.1	11.8	13.5	30.0	42.3	40.5	41.3
Other	100.0	27.2	21.2	17.0	20.5	46.7	45.2	51.2	54.8
Insurance status									
Any private insurance ³	100.0	29.0	21.6	21.2	21.4	60.0	67.6	70.2	70.9
Public insurance only ⁴	100.0	8.9	10.6	9.8	10.1	...	...	...	...
Uninsured all year ⁵	100.0	40.6	41.3	40.4	51.0	...	...	...	...
65 years and over	100.0	22.0	16.3	17.5	15.2	15.8	16.5	14.9	12.7
Sex									
Male	100.0	21.7	14.2	14.2	13.7	17.6	20.1	16.8	14.7
Female	100.0	22.2	18.1	20.2	16.3	14.4	13.2	13.3	11.3
Hispanic origin and race ²									
Hispanic or Latino	100.0	*13.5	13.6	13.9	14.5	*4.7	5.9	8.4	*7.2
Not Hispanic or Latino:									
White	100.0	23.7	17.0	18.3	16.2	16.7	17.9	15.2	13.3
Black or African American	100.0	11.2	11.4	13.6	9.3	*11.9	8.8	9.3	10.5
Other	100.0	*	*	*	10.0	*	*	*	*15.0
Insurance status									
Medicare only	100.0	29.8	19.8	22.2	17.3	...	...	...	...
Medicare and private insurance	100.0	23.4	17.3	17.0	16.3	18.9	25.7	25.3	21.4
Medicare and other public coverage	100.0	*6.2	5.2	9.1	7.7	...	...	...	...

See footnotes at end of table.

Table 132 (page 2 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Source of payment for health care							
	Public sources ⁶				Other ⁷			
	1987	1997	2000	2006	1987	1997	2000	2006
	Percent distribution							
All ages	34.1	34.4	35.4	36.7	4.5	5.9	5.0	3.5
Under 65 years:								
Total	21.3	18.1	21.3	21.0	6.0	7.7	6.0	4.1
Under 6 years	35.8	25.4	33.6	37.2	6.2	11.2	4.9	4.4
6–17 years	11.8	14.1	20.1	21.0	5.2	3.7	3.4	1.9
18–44 years	19.4	15.7	21.1	19.4	6.4	10.3	7.8	5.3
45–64 years	22.4	20.3	20.2	20.5	5.8	6.0	5.2	3.7
Sex								
Male	23.9	19.5	23.5	23.2	7.1	8.9	6.3	4.4
Female	19.2	17.0	19.5	19.4	5.2	6.8	5.7	3.9
Hispanic origin and race ²								
Hispanic or Latino	35.8	28.9	27.5	37.6	6.0	10.0	6.2	6.8
Not Hispanic or Latino:								
White	15.9	15.3	18.0	15.5	5.8	7.1	5.2	3.7
Black or African American	47.2	30.7	38.8	40.1	7.3	9.9	8.8	5.0
Other	21.0	23.7	19.0	22.3	5.1	9.9	*12.8	*2.4
Insurance status								
Any private insurance ³	6.2	6.6	5.3	5.8	4.8	4.2	3.3	1.9
Public insurance only ⁴	87.2	80.7	84.4	85.2	3.9	8.7	5.8	4.8
Uninsured all year ⁵	28.6	7.5	*21.2	10.1	30.9	51.1	38.4	38.8
65 years and over	60.8	64.8	64.7	69.8	1.5	2.5	2.9	2.2
Sex								
Male	58.8	63.4	66.9	69.2	*1.9	2.3	2.2	2.4
Female	62.3	65.9	63.0	70.3	1.1	2.7	3.5	2.1
Hispanic origin and race ²								
Hispanic or Latino	80.2	77.8	75.6	77.1	*1.6	*2.7	*2.2	1.2
Not Hispanic or Latino:								
White	58.0	62.6	64.1	68.1	1.6	2.5	2.4	2.4
Black or African American	76.3	77.6	68.3	78.1	0.6	2.2	*8.9	2.0
Other	*	*	*	73.5	*	*	*	*1.5
Insurance status								
Medicare only	68.8	72.4	72.2	75.9	1.4	7.7	5.7	6.7
Medicare and private insurance	56.1	56.3	57.1	61.8	1.6	0.6	*0.6	*0.5
Medicare and other public coverage	92.9	92.7	87.3	90.7	1.0	*2.1	*3.6	0.5

See footnotes at end of table.

Table 132 (page 3 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2006

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

. . . Category not applicable.

* Estimates are considered unreliable. Estimates based on fewer than 100 sample cases or with a relative standard error of 30% or higher are not shown.

¹Private insurance includes any type of private insurance payments reported for people with private health insurance coverage during the year.

²Persons of Hispanic origin may be of any race. Starting with 2002 data, MEPS respondents were allowed to report multiple races and these persons are included in the Other category. As a result, there is a slight increase in the percent of persons classified in the Other category in 2002 compared with prior years.

³Includes individuals with insurance that provided coverage for hospital and physician care at any time during the year, other than Medicare, Medicaid, or other public coverage for hospital or physician services.

⁴Includes individuals who were not covered by private insurance at any time during the year but were covered by Medicare, Medicaid, other public coverage for hospital or physician services, and/or CHAMPUS/CHAMPVA (TRICARE) at any point during the year.

⁵Includes individuals not covered by either private or public insurance throughout the entire year or period of eligibility for the survey. However, some expenses for the uninsured were paid by sources that were not defined as health insurance coverage, such as the Department of Veterans Affairs, community and neighborhood clinics, the Indian Health Service, state and local health departments, state programs other than Medicaid, Workers' Compensation, and other unclassified sources (e.g., automobile, homeowners', or liability insurance). Individuals with Indian Health Service coverage only are considered uninsured.

⁶Public sources include payments made by Medicare, Medicaid, the Department of Veterans Affairs, other federal sources (e.g., Indian Health Service, military treatment facilities, and other care provided by the federal government), CHAMPUS/CHAMPVA (TRICARE), and various state and local sources (e.g., community and neighborhood clinics, state and local health departments, and state programs other than Medicaid).

⁷Other sources includes Workers' Compensation, unclassified sources (automobile, home, or liability insurance, and other miscellaneous or unknown sources), Medicaid payments reported for people who were not enrolled in the program at any time during the year, and any type of private insurance payments reported for people without private health insurance coverage during the year.

NOTES: 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. Percents sum to 100 across sources within years. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends. 1987 National Medical Expenditure Survey and 1996–2006 Medical Expenditure Panel Surveys.

Table 133. Out-of-pocket health care expenses among persons with medical expenses, by age: United States, selected years 1987–2006

[Data are based on household interviews for a sample of the noninstitutionalized population and a sample of medical providers]

Age and year	Percent of persons with expenses	Total	Amount paid out of pocket among persons with expenses ¹					
			\$0	\$1–99	\$100–499	\$500–999	\$1,000–1,999	\$2,000+
All ages			Percent distribution					
1987	84.5	100.0	10.4	21.1	37.2	14.7	9.5	7.2
2000	83.5	100.0	6.9	27.7	34.9	14.1	9.3	7.1
2003	85.6	100.0	7.6	23.1	32.5	15.7	11.6	9.5
2004	84.7	100.0	8.8	23.1	31.7	14.8	11.5	10.1
2005	84.7	100.0	8.7	22.2	32.1	15.5	11.8	9.8
2006	84.6	100.0	8.7	22.3	32.3	15.6	11.9	9.3
Under 6 years								
1987	88.9	100.0	19.2	29.2	39.6	7.7	2.5	1.7
2000	86.7	100.0	16.7	52.8	25.3	3.5	1.3	0.5
2003	91.3	100.0	20.6	44.5	28.2	4.8	1.3	0.6
2004	90.0	100.0	26.0	41.8	25.7	4.1	1.9	0.5
2005	88.9	100.0	27.2	37.7	27.1	5.5	1.7	0.7
2006	89.2	100.0	27.1	40.5	25.6	4.4	1.3	1.0
6–17 years								
1987	80.2	100.0	15.5	28.4	37.4	8.9	5.1	4.7
2000	80.0	100.0	14.7	38.4	32.4	6.4	3.8	4.3
2003	84.1	100.0	16.1	34.3	32.4	8.7	5.0	3.5
2004	83.9	100.0	18.7	35.2	29.6	8.2	4.2	4.1
2005	83.0	100.0	18.6	34.0	30.6	8.6	4.4	3.7
2006	83.6	100.0	19.2	34.0	29.8	8.1	3.8	5.1
18–44 years								
1987	81.5	100.0	10.1	23.6	39.5	14.1	7.8	4.9
2000	77.7	100.0	5.8	30.4	40.4	13.1	6.3	4.0
2003	79.0	100.0	6.4	25.8	39.2	14.9	8.6	5.0
2004	77.0	100.0	7.2	26.1	38.2	14.1	8.8	5.6
2005	77.1	100.0	7.0	26.0	38.3	14.5	8.6	5.6
2006	76.9	100.0	6.8	25.2	39.2	14.5	8.6	5.7
45–64 years								
1987	87.0	100.0	5.7	13.4	37.2	19.9	14.1	9.7
2000	88.5	100.0	2.6	16.7	36.2	20.0	14.7	9.8
2003	89.6	100.0	2.4	13.7	30.6	21.5	17.2	14.5
2004	88.9	100.0	2.7	13.9	31.7	21.5	16.4	13.8
2005	89.7	100.0	2.4	13.7	30.8	21.3	18.5	13.3
2006	89.2	100.0	2.7	13.6	31.5	21.2	17.3	13.6
65–74 years								
1987	92.8	100.0	5.3	10.5	29.0	22.0	18.1	15.0
2000	94.7	100.0	1.5	10.5	29.0	22.0	20.4	16.7
2003	95.3	100.0	1.7	6.8	22.6	24.5	22.4	21.9
2004	96.6	100.0	1.5	8.7	24.1	19.1	21.7	24.9
2005	95.9	100.0	1.7	6.8	25.6	21.9	21.5	22.5
2006	95.7	100.0	1.7	7.9	24.6	23.2	24.7	18.0
75 years and over								
1987	95.1	100.0	5.6	8.0	25.9	20.3	19.4	20.8
2000	96.5	100.0	2.6	10.4	25.9	22.7	19.0	19.4
2003	97.5	100.0	1.9	6.7	20.2	19.8	24.0	27.4
2004	97.7	100.0	1.8	6.4	20.1	18.3	24.5	28.9
2005	97.4	100.0	1.6	6.8	22.5	19.7	20.7	28.7
2006	97.6	100.0	1.7	7.0	23.9	22.6	24.7	20.1

¹Estimates of expenses were converted to 2006 dollars using the Consumer Price Index (all items) and differ from previous editions of *Health, United States*. See [Appendix II, Consumer Price Index \(CPI\)](#).

NOTES: Includes persons in the civilian noninstitutionalized population for all or part of the year. Expenses for persons in this population for only part of the year are restricted to those incurred during periods of eligibility (e.g., expenses incurred during periods of institutionalization and military service are not included in estimates). Out-of-pocket expenses include expenditures for inpatient hospital and physician services, ambulatory physician and nonphysician services, prescribed medicines, home health services, dental services, and various other medical equipment, supplies, and services that were purchased or rented during the year. Out-of-pocket expenses for over-the-counter medications, phone contacts with health providers, and premiums for health insurance policies are not included in these estimates. 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Agency for Healthcare Research and Quality, Center for Cost and Financing Studies. 1987 National Medical Expenditure Survey and 1998–2006 Medical Expenditure Panel Surveys.

Table 134 (page 1 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected years 1987–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of payer	1987	1990	1995	2000	2003	2004	2005	2006	2007
Amount in billions									
Total ¹	\$477.8	\$666.8	\$952.5	\$1,264.4	\$1,623.1	\$1,733.1	\$1,850.4	\$1,976.1	\$2,098.1
Private	333.4	457.0	602.4	821.1	993.5	1,050.6	1,114.9	1,183.2	1,252.3
Private business	122.1	177.3	243.4	342.3	418.1	443.5	472.2	490.4	518.0
Employer contribution to private health insurance premiums	84.2	128.6	175.8	250.9	319.2	338.5	362.1	375.4	398.4
Private employer contribution to Medicare hospital insurance trust fund ²	24.6	29.4	43.1	62.3	64.6	68.6	72.7	77.4	81.6
Workers compensation and temporary disability insurance and industrial inplant health services	13.3	19.3	24.5	29.1	34.3	36.4	37.4	37.6	38.0
Household	188.9	250.9	317.5	425.1	515.3	546.1	577.9	623.4	660.3
Employee contribution to private health insurance premiums and individual policy premiums	43.9	69.0	99.0	133.6	182.7	195.2	205.2	224.5	238.6
Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance trust fund ²	29.5	35.6	56.0	82.6	86.3	91.4	96.7	107.2	113.0
Premiums paid by individuals to Medicare supplementary medical insurance trust fund	6.2	10.1	16.4	16.3	21.7	24.6	29.0	36.7	40.2
Out-of-pocket health spending	109.2	136.2	146.1	192.6	224.6	234.9	247.0	255.0	268.6
Other private revenues	22.4	28.8	41.5	53.8	60.1	61.0	64.8	69.4	74.1
Public	144.4	209.8	350.1	443.3	629.6	682.5	735.5	792.9	845.8
Federal government	73.9	110.7	197.3	235.8	353.7	387.0	412.6	454.3	485.9
Employer contributions to private health insurance premiums	4.9	9.9	11.4	14.3	19.7	21.6	23.1	24.3	25.5
Medicaid ³	28.1	43.2	88.1	119.7	163.8	175.1	182.8	180.5	192.2
Other ⁴	40.9	57.6	97.8	101.9	170.1	190.3	206.6	249.5	268.2
State and local government	70.5	99.0	152.8	207.5	276.0	295.5	322.9	338.6	359.9
Employer contributions to private health insurance premiums	16.0	26.2	38.8	55.9	82.1	90.6	99.5	103.3	108.5
Medicaid ³	22.8	31.6	60.1	85.1	112.2	122.1	137.2	138.5	147.6
Other ⁵	31.7	41.3	53.9	66.5	81.8	82.9	86.2	96.8	103.7
Percent distribution									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	69.8	68.5	63.2	64.9	61.2	60.6	60.3	59.9	59.7
Private business	25.6	26.6	25.6	27.1	25.8	25.6	25.5	24.8	24.7
Employer contribution to private health insurance premiums	17.6	19.3	18.5	19.8	19.7	19.5	19.6	19.0	19.0
Private employer contribution to Medicare hospital insurance trust fund ²	5.1	4.4	4.5	4.9	4.0	4.0	3.9	3.9	3.9
Workers compensation and temporary disability insurance and industrial inplant health services	2.8	2.9	2.6	2.3	2.1	2.1	2.0	1.9	1.8
Household	39.5	37.6	33.3	33.6	31.7	31.5	31.2	31.5	31.5
Employee contribution to private health insurance premiums and individual policy premiums	9.2	10.3	10.4	10.6	11.3	11.3	11.1	11.4	11.4
Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance trust fund ²	6.2	5.3	5.9	6.5	5.3	5.3	5.2	5.4	5.4
Premiums paid by individuals to Medicare supplementary medical insurance trust fund	1.3	1.5	1.7	1.3	1.3	1.4	1.6	1.9	1.9
Out-of-pocket health spending	22.9	20.4	15.3	15.2	13.8	13.6	13.3	12.9	12.8
Other private revenues	4.7	4.3	4.4	4.3	3.7	3.5	3.5	3.5	3.5

See footnotes at end of table.

Table 134 (page 2 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected years 1987–2007

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of payer	1987	1990	1995	2000	2003	2004	2005	2006	2007
	Percent distribution								
Public	30.2	31.5	36.8	35.1	38.8	39.4	39.7	40.1	40.3
Federal government	15.5	16.6	20.7	18.6	21.8	22.3	22.3	23.0	23.2
Employer contributions to private health insurance premiums	1.0	1.5	1.2	1.1	1.2	1.2	1.2	1.2	1.2
Medicaid ³	5.9	6.5	9.2	9.5	10.1	10.1	9.9	9.1	9.2
Other ⁴	8.6	8.6	10.3	8.1	10.5	11.0	11.2	12.6	12.8
State and local government	14.8	14.8	16.0	16.4	17.0	17.1	17.5	17.1	17.2
Employer contributions to private health insurance premiums	3.3	3.9	4.1	4.4	5.1	5.2	5.4	5.2	5.2
Medicaid ³	4.8	4.7	6.3	6.7	6.9	7.0	7.4	7.0	7.0
Other ⁵	6.6	6.2	5.7	5.3	5.0	4.8	4.7	4.9	4.9

¹Excludes research and construction.

²Includes one-half of self-employment contribution to Medicare hospital insurance trust fund.

³Includes Medicaid buy-in premiums for Medicare.

⁴Includes expenditures for Medicare (with adjustments for contributions by employers and individuals and premiums paid to the Medicare insurance trust fund), maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, Indian Health Service, federal workers' compensation, other miscellaneous general hospital and medical programs, public health activities, Department of Defense, Department of Veterans Affairs, and Children's Health Insurance Program (CHIP).

⁵Includes other public and general assistance, maternal and child health, vocational rehabilitation, public health activities, hospital subsidies, and employer contributions to Medicare hospital insurance trust fund.

NOTES: This table disaggregates health expenditures according to four classes of payers: businesses, households (individuals), federal government, and state and local governments, with a small amount of revenue coming from nonpatient revenue sources such as philanthropy. Where businesses or households pay dedicated funds into government health programs (for example, Medicare) or employers and employees share in the cost of health premiums, these costs are assigned to businesses or households accordingly. This results in a lower share of expenditures being assigned to the federal government than for tabulations of expenditures by source of funds. Estimates of national health expenditure by source of funds aim to track government-sponsored health programs over time and do not delineate the role of business employers in paying for health care. Estimates may not sum to totals because of rounding. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. *Businesses, Households, and Governments, 1987–2007*. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

Table 135 (page 1 of 2). Employers' costs per employee-hour worked for total compensation, wages and salaries, and health insurance, by selected characteristics: United States, selected years 1991–2009

[Data are based on surveys of a sample of employers]

<i>Characteristic</i>	<i>1991</i>	<i>1994</i>	<i>1996</i>	<i>2000</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Total compensation per employee-hour worked									
State and local government	\$22.31	\$25.27	\$25.73	\$29.05	\$35.50	\$36.96	\$38.66	\$37.84	\$39.51
Total private industry	15.40	17.08	17.49	19.85	24.17	25.09	25.91	26.76	27.46
Industry:									
Goods producing	18.48	20.85	21.27	23.55	28.48	29.36	30.12	31.38	32.29
Service providing	14.31	15.82	16.28	18.72	23.11	24.05	24.84	25.63	26.37
Occupational group: ¹									
White collar	18.15	20.26	21.10	24.19	---	---	---	---	---
Blue collar	15.15	16.92	17.04	18.73	---	---	---	---	---
Service	7.82	8.38	8.61	9.72	---	---	---	---	---
Management, professional, and related	---	---	---	---	42.09	44.32	46.05	47.55	48.82
Sales and office	---	---	---	---	19.30	19.93	20.55	21.15	21.40
Service	---	---	---	---	12.07	12.3	12.87	13.27	13.53
Natural resources, construction, and maintenance	---	---	---	---	27.26	28.07	28.96	30.13	30.97
Production, transportation, and material moving	---	---	---	---	20.82	21.19	22.22	23.07	23.28
Census region:									
Northeast	17.56	20.03	20.57	22.67	27.09	28.75	29.56	30.56	31.73
Midwest	15.05	16.26	16.30	19.22	24.23	24.65	25.16	25.98	26.44
South	13.68	15.05	15.62	17.81	21.36	22.35	23.17	23.90	24.45
West	15.97	18.08	18.78	20.88	25.98	26.56	27.77	28.70	29.53
Union status:									
Union	19.76	23.26	23.31	25.88	33.17	34.07	35.27	36.28	36.59
Nonunion	14.54	16.04	16.61	19.07	23.09	24.03	24.82	25.64	26.39
Establishment employment size:									
1–99 employees	13.38	14.58	14.85	17.16	20.22	20.43	21.29	22.23	22.56
100 or more	17.34	19.45	20.09	22.81	28.94	30.34	30.86	31.68	32.83
100–499	14.31	15.88	16.61	19.30	24.44	25.91	26.31	26.80	28.19
500 or more	20.60	23.35	24.03	26.93	34.59	35.94	36.48	37.60	38.71
Wages and salaries as a percent of total compensation									
State and local government	69.6	69.5	69.8	70.8	68.3	67.6	67.0	65.9	65.7
Total private industry	72.3	71.1	71.9	73.0	71.0	70.7	70.8	70.6	70.8
Industry:									
Goods producing	68.7	66.5	67.6	69.0	65.5	66.2	66.8	66.7	66.9
Service providing	73.9	73.1	73.8	74.5	72.6	72.0	72.0	71.8	71.9
Occupational group: ¹									
White collar	73.8	72.7	73.2	74.0	---	---	---	---	---
Blue collar	68.4	66.8	68.1	69.4	---	---	---	---	---
Service	76.2	75.5	75.8	77.9	---	---	---	---	---
Management, professional, and related	---	---	---	---	71.5	70.9	71.1	71.0	71.1
Sales and office	---	---	---	---	72.6	72.2	72.1	72.0	71.8
Service	---	---	---	---	75.7	75.3	75.0	74.8	75.3
Natural resources, construction, and maintenance	---	---	---	---	68.0	68.0	68.3	68.3	68.2
Production, transportation, and material moving	---	---	---	---	66.2	66.7	66.8	66.6	67.0
Census region:									
Northeast	72.0	70.5	70.9	72.2	70.4	70.0	69.7	69.8	69.6
Midwest	71.1	69.7	71.1	72.4	70.1	69.4	69.9	69.8	70.3
South	73.3	72.1	72.7	73.5	72.1	72.1	72.0	71.8	71.9
West	72.8	72.0	73.1	74.0	70.9	71.0	71.0	70.8	71.1
Union status:									
Union	65.9	63.5	64.0	65.2	62.6	62.3	62.2	61.9	62.2
Nonunion	74.1	72.9	73.6	74.4	72.4	72.1	72.2	72.1	72.2
Establishment employment size:									
1–99 employees	74.7	73.5	74.7	75.5	73.9	73.7	73.8	73.8	74.0
100 or more	70.5	69.3	69.9	71.0	68.5	68.4	68.5	68.2	68.4
100–499	72.1	71.6	71.6	72.8	70.2	70.0	70.1	69.8	70.0
500 or more	69.3	67.6	68.6	69.4	67.0	66.9	67.1	66.9	67.0

See footnotes at end of table.

Table 135 (page 2 of 2). Employers' costs per employee-hour worked for total compensation, wages and salaries, and health insurance, by selected characteristics: United States, selected years 1991–2009

[Data are based on surveys of a sample of employers]

<i>Characteristic</i>	<i>1991</i>	<i>1994</i>	<i>1996</i>	<i>2000</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Health insurance as a percent of total compensation									
State and local government	6.9	8.2	7.7	7.8	10.2	10.6	10.9	11.0	10.9
Total private industry	6.0	6.7	5.9	5.5	6.8	6.9	7.1	7.2	7.3
Industry:									
Goods producing	6.9	8.1	7.2	6.9	8.0	8.4	8.4	8.5	8.7
Service providing	5.5	6.0	5.4	4.9	6.4	6.4	6.7	6.8	6.9
Occupational group: ¹									
White collar	5.6	6.2	5.5	5.0	---	---	---	---	---
Blue collar	7.0	8.0	7.2	6.8	---	---	---	---	---
Service	4.6	5.4	4.8	4.3	---	---	---	---	---
Management, professional, and related	---	---	---	---	5.5	5.6	5.8	5.8	6.0
Sales and office	---	---	---	---	7.5	7.5	7.8	7.9	8.3
Service	---	---	---	---	6.1	6.2	6.7	6.8	6.7
Natural resources, construction, and maintenance	---	---	---	---	7.5	7.7	7.6	7.6	7.9
Production, transportation, and material moving	---	---	---	---	8.9	9.0	9.3	9.6	9.7
Census region:									
Northeast	6.2	6.9	6.2	5.6	6.8	6.7	6.9	6.9	7.2
Midwest	6.3	7.3	6.3	5.8	7.3	7.6	7.8	7.9	8.1
South	5.5	6.3	5.9	5.4	6.6	6.7	6.9	6.9	7.0
West	5.8	6.1	5.2	5.0	6.3	6.4	6.7	6.9	6.9
Union status:									
Union	8.2	9.8	8.8	8.4	10.3	10.3	10.8	10.9	11.4
Nonunion	5.4	5.9	5.3	5.0	6.2	6.3	6.4	6.5	6.6
Establishment employment size:									
1–99 employees	5.1	5.7	5.0	4.8	5.9	6.0	6.1	6.1	6.3
100 or more	6.6	7.3	6.6	6.0	7.5	7.5	7.8	8.0	8.1
100–499	6.3	6.5	6.3	5.6	7.5	7.4	7.7	7.9	7.9
500 or more	6.8	7.9	6.9	6.4	7.6	7.6	7.9	8.0	8.2

--- Data not available.

¹Starting with 2004 data, sample establishments were classified by industry categories based on the North American Industry Classification (NAICS) system, as defined by the U.S. Office of Management and Budget. Within a sample establishment, specific job categories were selected and classified into about 800 occupational classifications according to the 2000 Standard Occupational Classification (SOC) system. Individual occupations were combined to represent one of five higher-level aggregations, such as management, professional, and related occupations. NAICS and SOC have replaced the 1987 Standard Industrial Classification System (SIC) and the Occupational Classification System (OCS). For more detailed information on NAICS and SOC, including background and definitions, see [Appendix I, National Compensation Survey](#) and <http://www.bls.gov/soc/home.htm>.

NOTES: Costs are calculated annually from March survey data. Total compensation includes wages and salaries and benefits. See [Appendix II, Employer costs for employee compensation; Industry of Employment](#). Data for additional years are available. See [Appendix III](#).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Compensation Survey, Employer Costs for Employee Compensation—March 2009 and previous editions; Pub no 09–0634, June 10, 2009. Washington, DC. Available from: <http://www.bls.gov/ncs/ect/home.htm>.

Table 136. Hospital expenses, by type of ownership and size of hospital: United States, selected years 1980–2007

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1980	1990	1995	2000	2006	2007	1980–1990	1990–1995	1995–2000	2000–2007
Total expenses	Amount in billions						Average annual percent change ¹			
All hospitals	\$ 91.9	\$234.9	\$320.3	\$395.4	\$ 607.4	\$ 641.1	9.8	6.4	4.3	7.1
Federal	7.9	15.2	20.2	23.9	37.6	38.8	6.8	5.9	3.4	7.2
Nonfederal ²	84.0	219.6	300.0	371.5	569.8	599.7	10.1	6.4	4.4	7.1
Community ³	76.9	203.7	285.6	356.6	551.8	583.3	10.2	7.0	4.5	7.3
Nonprofit	55.8	150.7	209.6	267.1	412.9	436.3	10.4	6.8	5.0	7.3
For profit	5.8	18.8	26.7	35.0	55.0	56.4	12.5	7.3	5.6	7.1
State-local government	15.2	34.2	49.3	54.5	84.0	90.5	8.4	7.6	2.0	7.5
6–24 beds	0.2	0.5	1.1	1.5	3.6	3.9	9.6	17.1	6.4	14.6
25–49 beds	1.7	4.0	7.2	10.4	20.0	21.2	8.9	12.5	7.6	10.7
50–99 beds	5.4	12.6	17.8	22.3	33.0	35.1	8.8	7.2	4.6	6.7
100–199 beds	12.5	33.3	50.7	63.4	90.7	92.4	10.3	8.8	4.6	5.5
200–299 beds	13.4	38.7	55.8	67.1	98.3	103.3	11.2	7.6	3.8	6.4
300–399 beds	11.5	33.1	43.3	54.3	83.7	86.0	11.2	5.5	4.6	6.8
400–499 beds	10.5	25.3	33.7	41.3	65.1	70.8	9.2	5.9	4.2	8.0
500 beds or more	21.6	56.2	76.1	96.3	157.4	170.5	10.0	6.3	4.8	8.5
Expenses per inpatient day	Amount									
Community ³	\$ 245	\$ 687	\$ 968	\$1,149	\$ 1,612	\$ 1,696	10.9	7.1	3.5	5.7
Nonprofit	246	692	994	1,182	1,686	1,776	10.9	7.5	3.5	6.0
For profit	257	752	947	1,057	1,472	1,536	11.3	4.7	2.2	5.5
State-local government	239	634	878	1,064	1,400	1,472	10.2	6.7	3.9	4.7
6–24 beds	203	526	678	896	1,240	1,364	10.0	5.2	5.7	6.2
25–49 beds	197	489	696	891	1,209	1,234	9.5	7.3	5.1	4.8
50–99 beds	191	493	647	745	1,019	1,063	9.9	5.6	2.9	5.2
100–199 beds	215	585	796	925	1,278	1,343	10.5	6.4	3.0	5.5
200–299 beds	239	665	943	1,122	1,608	1,677	10.8	7.2	3.5	5.9
300–399 beds	248	731	1,070	1,277	1,703	1,788	11.4	7.9	3.6	4.9
400–499 beds	215	756	1,135	1,353	1,977	2,061	13.4	8.5	3.6	6.2
500 beds or more	239	825	1,212	1,468	2,064	2,188	13.2	8.0	3.9	5.9
Expenses per inpatient stay										
Community ³	\$1,851	\$4,947	\$6,216	\$6,649	\$ 8,970	\$ 9,377	10.3	4.7	1.4	5.0
Nonprofit	1,902	5,001	6,279	6,717	9,190	9,593	10.2	4.7	1.4	5.2
For profit	1,676	4,727	5,425	5,642	7,421	7,823	10.9	2.8	0.8	4.8
State-local government	1,750	4,838	6,445	7,106	9,147	9,523	10.7	5.9	2.0	4.3
6–24 beds	1,072	2,701	3,578	3,652	4,615	5,197	9.7	5.8	0.4	5.2
25–49 beds	1,138	2,967	3,797	4,381	5,791	6,005	10.1	5.1	2.9	4.6
50–99 beds	1,271	3,461	4,427	4,760	6,466	6,709	10.5	5.0	1.5	5.0
100–199 beds	1,512	4,109	5,103	5,305	7,233	7,598	10.5	4.4	0.8	5.3
200–299 beds	1,767	4,618	5,851	6,392	8,485	8,775	10.1	4.8	1.8	4.6
300–399 beds	1,881	5,096	6,512	6,988	9,194	9,521	10.5	5.0	1.4	4.5
400–499 beds	2,090	5,500	7,164	7,629	10,662	11,041	10.2	5.4	1.3	5.4
500 beds or more	2,517	6,667	8,531	9,149	12,261	12,819	10.2	5.1	1.4	4.9

¹Average annual percent change. See Appendix II, Average annual rate of change (percentage change).

²The category of nonfederal hospitals includes psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See Appendix II, Hospital.

³Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See Appendix II, Hospital.

NOTE: In 2007, employee payroll and benefit expenses comprised 52% of expenses in community hospitals and 58% in federal hospitals.

SOURCES: American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1981, 1991–2009 editions. Chicago, IL. (Copyrights 1981, 1991–2009: Used with the permission of Health Forum LLC, an affiliate of the AHA.)

Table 137 (page 1 of 2). Private health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private health insurance ¹									
	1984 ²	1989 ²	1995 ²	1997	2000 ³	2003	2004	2005	2006	2007
	Number in millions									
Total ⁴	157.5	162.7	164.2	165.8	174.0	173.6	174.5	174.7	171.2	174.1
	Percent of population									
Total ⁴	76.8	75.9	71.3	70.7	71.5	68.9	68.8	68.2	66.3	66.8
Age										
Under 18 years	72.6	71.8	65.2	66.1	66.6	63.0	63.2	62.1	59.4	59.8
Under 6 years	68.1	67.9	59.5	61.3	62.7	58.2	58.1	56.6	54.7	54.1
6–17 years	74.9	74.0	68.3	68.5	68.5	65.3	65.6	64.7	61.7	62.6
18–44 years	76.5	75.5	70.9	69.4	70.5	67.7	67.3	66.6	65.0	65.5
18–24 years	67.4	64.5	60.8	59.3	60.3	58.8	58.2	58.0	57.0	59.0
25–34 years	77.4	75.9	70.1	68.1	70.1	65.6	65.5	65.1	63.0	63.5
35–44 years	83.9	82.7	77.7	76.4	77.0	75.1	74.8	73.7	72.0	71.7
45–64 years	83.3	82.5	80.1	79.0	78.7	77.3	77.1	76.9	75.2	75.5
45–54 years	83.3	83.4	80.9	80.4	80.0	77.9	77.8	77.4	75.1	75.4
55–64 years	83.3	81.6	79.0	76.9	76.7	76.5	76.1	76.2	75.4	75.5
Sex										
Male	77.3	76.1	71.6	70.9	71.6	69.0	68.7	68.0	65.9	66.4
Female	76.2	75.7	70.9	70.5	71.3	68.9	68.9	68.4	66.7	67.1
Sex and marital status ⁵										
Male:										
Married	85.0	84.2	80.2	81.6	81.5	79.8	80.0	79.6	78.1	78.1
Divorced, separated, widowed	65.5	64.6	62.4	59.9	62.2	59.4	59.0	56.7	55.4	55.8
Never married	71.3	68.3	65.4	63.3	63.8	60.8	60.4	60.2	57.8	59.8
Female:										
Married	83.8	83.5	79.3	81.0	81.0	79.6	79.7	79.3	78.6	78.4
Divorced, separated, widowed	63.1	63.6	61.7	59.1	63.2	58.4	58.6	59.9	56.3	57.0
Never married	72.2	70.0	66.2	63.8	64.2	62.6	62.2	61.5	59.0	60.8
Race ⁶										
White only	79.9	79.1	74.5	74.2	75.7	71.5	71.4	70.9	69.1	69.7
Black or African American only	58.1	57.7	53.0	54.7	55.9	54.9	53.9	52.9	51.3	51.8
American Indian or Alaska Native only	49.1	45.5	45.3	39.4	43.7	45.0	44.7	43.0	36.3	36.4
Asian only	69.9	71.9	68.4	68.0	72.1	71.4	71.6	72.2	72.1	73.2
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*	*
2 or more races	---	---	---	---	61.4	56.3	62.0	57.6	54.0	52.7
Hispanic origin and race ⁶										
Hispanic or Latino	55.7	51.5	46.4	46.4	47.8	41.9	41.7	42.4	40.0	41.7
Mexican	53.3	46.8	42.6	42.3	45.4	39.3	39.1	39.7	36.5	37.9
Puerto Rican	48.4	45.6	47.6	47.0	51.1	48.6	47.3	48.5	46.1	54.2
Cuban	72.5	70.3	63.6	71.0	63.9	55.9	57.9	58.1	63.4	64.8
Other Hispanic or Latino	61.6	61.0	51.4	49.9	50.7	45.3	45.1	45.6	44.3	44.3
Not Hispanic or Latino	78.7	78.5	74.4	74.0	75.2	73.7	73.7	73.0	71.3	71.7
White only	82.4	82.5	78.6	78.1	79.5	77.8	77.9	77.3	75.6	76.2
Black or African American only	58.2	57.7	53.4	54.9	56.0	55.5	54.6	53.1	52.2	52.3
Age and percent of poverty level ⁷										
Under 65 years:										
Below 100%	32.2	27.0	22.6	23.3	25.2	23.9	21.8	21.4	21.4	21.4
100%–less than 150%	62.2	55.1	47.8	43.6	41.7	37.5	39.0	38.1	35.5	32.7
150%–less than 200%	77.2	71.0	65.1	62.9	58.5	52.2	52.5	51.3	50.3	47.5
200% or more	91.5	90.8	88.3	86.4	85.7	84.6	84.2	83.7	83.1	83.1
Under 18 years:										
Below 100%	28.5	22.3	16.9	18.3	19.5	15.9	14.2	14.2	14.0	12.7
100%–less than 150%	66.2	59.6	48.5	43.5	39.8	33.9	35.9	35.0	30.4	28.3
150%–less than 200%	80.9	75.9	67.4	65.7	59.7	50.9	51.7	48.4	47.8	43.8
200% or more	92.3	92.5	89.5	87.8	86.7	85.1	85.2	84.2	84.1	84.1

See footnotes at end of table.

Table 137 (page 2 of 2). Private health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private health insurance ¹									
	1984 ²	1989 ²	1995 ²	1997	2000 ³	2003	2004	2005	2006	2007
Disability measure ⁸										
Percent of population										
Any basic actions difficulty or complex activity limitation	---	---	---	61.6	63.2	59.6	58.9	58.1	56.4	56.4
No disability	---	---	---	77.3	77.3	74.4	74.4	73.6	72.4	72.9
Geographic region										
Northeast	80.5	82.0	75.4	74.2	76.3	74.7	74.0	74.0	70.8	72.2
Midwest	80.6	81.5	77.3	77.1	78.8	75.9	76.3	74.6	71.7	72.0
South	74.3	71.4	66.9	67.3	66.8	64.0	64.1	62.5	61.8	62.6
West	71.9	71.2	67.5	65.4	66.5	64.7	64.1	65.6	64.6	64.0
Location of residence										
Within MSA ⁹	77.5	76.5	72.1	71.2	72.3	70.2	69.6	69.0	67.5	67.8
Outside MSA ⁹	75.2	73.8	67.9	68.4	67.8	63.7	65.5	64.6	60.3	61.0

* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

¹Any private health insurance coverage (both individual and insurance obtained through the workplace) at the time of interview; includes those who also had another type of coverage.

²Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey and Appendix II, Health insurance coverage](#).

³Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates.

⁴Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

⁵Includes persons 14–64 years of age.

⁶The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category including Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2007. See [Appendix II, Family income; Poverty](#).

⁸Any basic actions difficulty or complex activity limitation is defined as having one or more of the following limitations or difficulties: movement difficulty, emotional difficulty, sensory (seeing or hearing) difficulty, cognitive difficulty, self-care (ADL or IADL) limitation, social limitation, or work limitation. For more information, see [Appendix II, Basic actions difficulty; Complex activity limitation](#). Starting with 2007 data, the hearing question, a component of the basic actions difficulty measure, was revised. Consequently, data prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

⁹MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Private health insurance coverage is at the time of interview. The number of persons with private coverage was calculated by multiplying the percent with private coverage by the number of persons under age 65 in the civilian non-institutionalized U.S. population. Percents were calculated with unknown values excluded from denominators. See [Appendix II, Health insurance coverage](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire. Basic actions difficulty or complex activity limitation data are from the sample adult file.

Table 138 (page 1 of 2). Private health insurance coverage obtained through the workplace among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private insurance obtained through workplace ¹									
	1984 ²	1989 ²	1995 ²	1997	2000 ³	2003	2004	2005	2006	2007
	Number in millions									
Total ⁴	141.8	146.3	150.7	153.6	160.8	157.5	159.5	160.1	155.8	157.9
	Percent of population									
Total ⁴	69.1	68.3	65.4	66.4	67.1	64.4	64.0	63.6	61.5	61.6
Age										
Under 18 years	66.5	65.8	60.4	62.8	63.0	59.4	59.6	58.6	55.5	55.8
Under 6 years	62.1	62.3	55.1	58.3	58.9	54.6	54.8	53.4	50.8	50.8
6–17 years	68.7	67.7	63.3	65.1	65.0	61.7	61.9	61.1	57.8	58.3
18–44 years	69.6	68.4	65.3	65.7	66.5	63.2	62.6	62.2	60.6	60.3
18–24 years	58.7	55.3	53.5	54.9	55.5	53.3	52.2	52.1	51.7	52.3
25–34 years	71.2	69.5	65.0	64.6	66.4	61.3	61.0	61.1	59.3	59.0
35–44 years	77.4	76.2	72.7	72.7	73.2	71.3	70.7	69.9	67.5	67.0
45–64 years	71.8	71.6	72.2	72.8	72.9	71.7	70.8	70.9	68.9	69.2
45–54 years	74.6	74.4	74.7	75.6	75.6	73.2	72.4	72.6	70.2	70.4
55–64 years	69.0	68.3	68.4	68.4	68.6	69.5	68.5	68.6	67.2	67.7
Sex										
Male	69.8	68.7	65.9	66.7	67.3	64.4	64.1	63.6	61.2	61.3
Female	68.4	67.9	64.9	66.2	66.9	64.4	63.9	63.6	61.8	61.9
Sex and marital status ⁵										
Male:										
Married	77.9	76.9	74.9	77.4	77.5	75.6	75.3	75.3	73.3	73.3
Divorced, separated, widowed	58.0	57.3	56.4	55.2	57.4	54.7	53.8	51.9	51.0	50.8
Never married	61.5	58.8	58.2	58.4	58.8	55.1	54.9	54.9	52.6	53.5
Female:										
Married	76.1	75.5	73.2	76.4	76.3	75.0	74.5	74.2	73.1	72.7
Divorced, separated, widowed	51.9	54.9	54.6	53.8	57.8	53.2	53.2	54.3	51.5	51.3
Never married	63.5	60.9	59.2	59.6	60.1	57.9	56.7	56.3	54.2	55.1
Race ⁶										
White only	72.0	71.2	68.4	69.7	71.0	66.8	66.2	66.1	64.0	64.2
Black or African American only	52.4	52.8	49.3	52.6	53.4	52.5	51.4	50.6	48.5	49.1
American Indian or Alaska Native only	45.8	40.9	40.2	37.2	41.7	41.6	42.2	39.9	33.7	35.1
Asian only	59.0	61.1	59.6	61.7	65.8	63.5	65.6	64.4	64.5	64.6
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*	*
2 or more races	---	---	---	---	59.8	53.5	58.2	54.8	50.6	49.7
Hispanic origin and race ⁶										
Hispanic or Latino										
Mexican	50.5	44.2	40.9	40.8	43.6	37.0	37.2	37.6	34.9	35.7
Puerto Rican	45.9	42.3	44.5	45.1	49.4	45.5	44.3	46.2	43.5	51.2
Cuban	57.4	56.5	54.0	58.4	53.6	51.8	51.2	53.5	56.9	54.7
Other Hispanic or Latino	57.4	54.7	46.7	47.0	47.3	42.0	41.7	42.6	40.9	40.8
Not Hispanic or Latino										
White only	74.0	74.1	72.1	73.3	74.5	72.7	72.1	71.9	69.9	70.2
Black or African American only	52.5	52.8	49.8	52.9	53.6	53.0	52.2	50.9	49.5	49.5
Age and percent of poverty level ⁷										
Under 65 years:										
Below 100%	24.1	19.9	17.5	20.0	21.0	20.2	18.2	17.8	17.6	17.4
100%–less than 150%	52.4	46.4	42.1	38.8	37.3	32.2	34.9	33.8	32.0	28.5
150%–less than 200%	69.5	63.1	58.8	58.4	53.6	47.3	47.6	46.4	44.9	42.5
200% or more	85.0	83.7	82.3	82.1	81.4	80.2	79.1	78.9	78.0	77.6
Under 18 years:										
Below 100%	23.0	17.5	13.6	16.2	16.6	14.0	12.8	12.5	11.8	11.2
100%–less than 150%	58.3	52.5	43.6	39.7	36.4	30.4	33.7	31.9	28.5	25.8
150%–less than 200%	75.8	70.1	61.8	62.7	55.8	47.4	48.1	45.1	43.7	40.4
200% or more	86.9	86.6	84.4	84.2	82.9	81.2	80.7	80.1	79.2	79.1

See footnotes at end of table.

Table 138 (page 2 of 2). Private health insurance coverage obtained through the workplace among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private insurance obtained through workplace ¹									
	1984 ²	1989 ²	1995 ²	1997	2000 ³	2003	2004	2005	2006	2007
Disability measure ⁸										
Percent of population										
Any basic actions difficulty or complex activity limitation	---	---	---	57.3	58.6	55.6	54.1	53.3	52.0	51.5
No disability	---	---	---	72.4	72.7	69.5	68.9	68.4	67.3	67.1
Geographic region										
Northeast	74.0	75.0	69.8	71.0	72.5	71.0	70.1	70.6	67.5	68.2
Midwest	72.0	73.3	71.2	72.6	74.9	71.6	71.9	70.1	67.0	68.0
South	66.2	63.6	61.8	62.9	62.5	59.8	59.6	58.0	57.2	57.2
West	64.7	63.9	60.4	60.7	61.1	58.4	57.5	59.7	58.1	57.3
Location of residence										
Within MSA ⁹	70.9	69.6	66.6	67.3	68.2	65.8	64.9	64.5	62.7	62.7
Outside MSA ⁹	65.3	63.5	60.7	62.8	62.6	58.7	60.1	59.6	55.4	55.7

* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

¹Any private insurance at the time of interview that was originally obtained through a present or former employer or union, or, starting with 1997 data, through the workplace, self-employment, or a professional association; includes those who also had another type of coverage.

²Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey and Appendix II, Health insurance coverage](#).

³Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates.

⁴Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

⁵Includes persons 14–64 years of age.

⁶The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2007. See [Appendix II, Family income; Poverty](#).

⁸Any basic actions difficulty or complex activity limitation is defined as having one or more of the following limitations or difficulties: movement difficulty, emotional difficulty, sensory (seeing or hearing) difficulty, cognitive difficulty, self-care (ADL or IADL) limitation, social limitation, or work limitation. For more information, see [Appendix II, Basic actions difficulty; Complex activity limitation](#). Starting with 2007 data, the hearing question, a component of the basic actions difficulty measure, was revised. Consequently, data prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

⁹MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Private coverage through the workplace is at the time of interview. The number of persons with private coverage through the workplace was calculated by multiplying the percent with private coverage through the workplace by the number of persons under age 65 in the civilian non-institutionalized U.S. population. Percents were calculated with unknown values excluded from denominators. See [Appendix II, Health insurance coverage](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire. Basic actions difficulty or complex activity limitation data are from the sample adult file.

Table 139 (page 1 of 2). Medicaid coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1984¹</i>	<i>1989¹</i>	<i>1995¹</i>	<i>1997</i>	<i>2000²</i>	<i>2004(1)³</i>	<i>2004(2)³</i>	<i>2005³</i>	<i>2006³</i>	<i>2007³</i>
	Number in millions									
Total ⁴	14.0	15.4	26.6	22.9	23.2	31.1	31.6	33.2	36.2	36.2
	Percent of population									
Total ⁴	6.8	7.2	11.5	9.7	9.5	12.3	12.5	12.9	14.0	13.9
Age										
Under 18 years	11.9	12.6	21.5	18.4	19.6	25.9	26.4	27.2	29.9	29.8
Under 6 years	15.5	15.7	29.3	24.7	24.7	31.8	32.4	34.0	36.6	36.6
6–17 years	10.1	10.9	17.4	15.2	17.2	23.1	23.4	23.9	26.7	26.4
18–44 years	5.1	5.2	7.8	6.6	5.6	7.5	7.7	8.3	8.6	8.7
18–24 years	6.4	6.8	10.4	8.8	8.1	10.3	10.4	11.3	11.4	11.4
25–34 years	5.3	5.2	8.2	6.8	5.5	7.6	7.8	8.0	8.3	8.5
35–44 years	3.5	4.0	5.9	5.2	4.3	5.7	5.8	6.6	7.1	7.0
45–64 years	3.4	4.3	5.6	4.6	4.5	5.4	5.5	5.5	6.3	5.9
45–54 years	3.2	3.8	5.1	4.0	4.2	5.4	5.5	5.2	6.4	6.0
55–64 years	3.6	4.9	6.4	5.6	4.9	5.4	5.5	5.8	6.1	5.7
Sex										
Male	5.4	5.7	9.6	8.4	8.2	10.8	11.0	11.6	12.6	12.5
Female	8.1	8.6	13.4	11.1	10.8	13.7	13.9	14.3	15.5	15.2
Sex and marital status ⁵										
Male:										
Married	1.9	1.8	2.9	2.5	2.2	2.9	3.0	3.5	3.7	3.5
Divorced, separated, widowed	4.9	5.4	7.7	5.7	6.1	6.7	6.8	7.0	7.9	7.8
Never married	4.8	5.6	8.1	7.0	7.2	10.2	10.4	10.4	11.6	11.3
Female:										
Married	2.6	3.0	5.2	3.5	3.1	4.2	4.3	4.7	4.6	4.7
Divorced, separated, widowed	16.0	16.1	19.0	14.7	12.7	14.9	15.2	14.6	16.2	16.3
Never married	10.7	11.9	16.5	14.2	13.2	16.9	17.1	17.3	19.0	18.1
Race ⁶										
White only	4.6	5.1	8.9	7.4	7.1	10.2	10.4	11.0	11.8	11.4
Black or African American only	20.5	19.0	28.5	22.4	21.2	24.5	24.9	24.9	26.6	27.7
American Indian or Alaska Native only	*28.2	29.7	19.0	19.6	15.1	18.0	18.4	24.2	24.3	21.2
Asian only	*8.7	*8.8	10.5	9.6	7.5	9.6	9.8	8.2	9.7	8.7
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*	*
2 or more races	---	---	---	---	19.1	19.0	19.3	22.0	24.0	27.9
Hispanic origin and race ⁶										
Hispanic or Latino	13.3	13.5	21.9	17.6	15.5	21.9	22.5	22.9	23.1	24.7
Mexican	12.2	12.4	21.6	17.2	14.0	21.9	22.4	23.0	23.0	25.9
Puerto Rican	31.5	27.3	33.4	31.0	29.4	28.5	29.1	31.9	35.7	28.0
Cuban	*4.8	*7.7	13.4	7.3	9.2	17.9	17.9	17.7	*11.3	13.3
Other Hispanic or Latino	7.9	11.1	18.2	15.3	14.5	19.9	20.8	19.7	20.2	21.4
Not Hispanic or Latino	6.2	6.5	10.2	8.7	8.5	10.5	10.7	11.1	12.3	11.7
White only	3.7	4.1	7.1	6.1	6.1	7.8	7.9	8.5	9.5	8.5
Black or African American only	20.7	19.0	28.1	22.1	21.0	24.1	24.6	24.8	26.2	27.3
Age and percent of poverty level ⁷										
Under 65 years:										
Below 100%	33.0	37.6	48.4	40.5	38.4	44.2	45.0	45.7	45.8	47.6
100%–less than 150%	7.7	10.9	19.1	17.9	20.7	26.5	27.1	28.7	29.4	31.8
150%–less than 200%	3.2	5.1	8.3	8.3	11.5	16.6	16.9	18.1	18.0	20.3
200% or more	0.6	1.1	1.7	1.8	2.3	3.5	3.5	3.7	4.1	3.8
Under 18 years:										
Below 100%	43.2	47.9	66.0	58.0	58.5	69.2	70.7	71.2	72.0	75.0
100%–less than 150%	9.0	12.3	27.2	28.7	35.0	46.6	47.6	49.0	52.1	55.4
150%–less than 200%	4.4	6.1	13.1	13.0	21.3	31.9	32.4	35.3	35.8	39.9
200% or more	0.8	1.8	3.3	3.1	5.1	8.0	8.0	8.3	8.9	8.5

See footnotes at end of table.

Table 139 (page 2 of 2). Medicaid coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 ¹	1989 ¹	1995 ¹	1997	2000 ²	2004(1) ³	2004(2) ³	2005 ³	2006 ³	2007 ³
Disability measure ⁸ Percent of population										
Any basic actions difficulty or complex activity limitation	---	---	---	13.2	12.8	14.7	14.9	16.4	16.2	16.5
No disability	---	---	---	3.5	3.0	4.6	4.7	4.9	5.2	5.1
Geographic region										
Northeast	8.6	6.6	11.7	11.3	10.6	12.8	13.0	13.3	16.8	15.4
Midwest	7.4	7.6	10.5	8.4	8.0	10.2	10.4	12.3	13.9	13.7
South	5.1	6.5	11.3	8.7	9.4	12.2	12.4	12.7	12.9	12.9
West	7.0	8.5	12.9	11.7	10.4	14.2	14.4	13.8	13.8	14.5
Location of residence										
Within MSA ⁹	7.1	7.0	11.3	9.7	8.9	11.7	11.9	12.4	13.3	13.3
Outside MSA ⁹	6.1	7.9	12.3	10.1	11.9	14.8	15.0	15.5	17.7	17.1

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey and Appendix II, Health insurance coverage](#).

²Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates.

³Beginning in quarter 3 of the 2004 NHIS, persons under 65 years with no reported coverage were asked explicitly about Medicaid coverage. Estimates were calculated without and with the additional information from this question in the columns labeled 2004(1) and 2004(2), respectively, and estimates were calculated with the additional information starting with 2005 data.

⁴Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

⁵Includes persons 14–64 years of age.

⁶The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2007. See [Appendix II, Family income; Poverty](#).

⁸Any basic actions difficulty or complex activity limitation is defined as having one or more of the following limitations or difficulties: movement difficulty, emotional difficulty, sensory (seeing or hearing) difficulty, cognitive difficulty, self-care (ADL or IADL) limitation, social limitation, or work limitation. For more information, see [Appendix II, Basic actions difficulty; Complex activity limitation](#). Starting with 2007 data, the hearing question, a component of the basic actions difficulty measure, was revised. Consequently, data prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

⁹MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: The category, Medicaid coverage, includes persons who had any of the following at the time of interview: Medicaid, other public assistance through 1996, state-sponsored health plan starting in 1997, or Children’s Health Insurance Program (CHIP) starting in 1999; it includes those who also had another type of coverage in addition to one of these. In 2007, 11.2% of persons under 65 years of age reported being covered by Medicaid, 1.2% by state-sponsored health plans, and 1.5% by CHIP. The number of persons with Medicaid coverage was calculated by multiplying the percent with Medicaid coverage by the number of persons under age 65 in the civilian non-institutionalized U.S. population. Percents were calculated with unknown values excluded from denominators. See [Appendix II, Health insurance coverage](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire. Basic actions difficulty or complex activity limitation data are from the sample adult file.

Table 140 (page 1 of 2). No health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	1984 ¹	1989 ¹	1995 ¹	1997	2000 ²	2004(1) ³	2004(2) ³	2005 ³	2006 ³	2007 ³
	Number in millions									
Total ⁴	29.8	33.4	37.1	41.0	41.4	42.1	41.6	42.1	43.9	43.3
	Percent of population									
Total ⁴	14.5	15.6	16.1	17.5	17.0	16.6	16.4	16.4	17.0	16.6
Age										
Under 18 years	13.9	14.7	13.4	14.0	12.6	9.7	9.2	9.3	9.5	9.0
Under 6 years	14.9	15.1	11.8	12.5	11.8	8.9	8.2	7.7	7.5	7.3
6–17 years	13.4	14.5	14.3	14.7	13.0	10.0	9.7	10.1	10.5	9.9
18–44 years	17.1	18.4	20.4	22.4	22.4	23.6	23.5	23.5	24.6	23.9
18–24 years	25.0	27.1	28.0	30.1	30.4	30.1	30.0	29.1	29.9	27.9
25–34 years	16.2	18.3	21.1	23.8	23.3	25.7	25.5	25.6	27.2	26.1
35–44 years	11.2	12.3	15.1	16.7	16.9	17.6	17.5	17.9	18.8	19.1
45–64 years	9.6	10.5	10.9	12.4	12.6	12.9	12.8	12.9	13.2	13.5
45–54 years	10.5	11.0	11.6	12.8	12.8	13.7	13.6	14.2	15.0	14.9
55–64 years	8.7	10.0	9.9	11.8	12.4	11.7	11.6	11.1	10.8	11.6
Sex										
Male	15.3	16.8	17.4	18.7	18.1	18.1	17.9	17.9	18.8	18.2
Female	13.8	14.4	14.8	16.3	15.9	15.2	14.9	15.0	15.3	15.1
Sex and marital status ⁵										
Male:										
Married	11.1	12.5	15.0	13.9	14.1	14.5	14.4	14.4	15.3	15.3
Divorced, separated, widowed	24.9	25.0	24.0	28.8	25.8	27.1	27.0	28.6	29.1	28.1
Never married	22.4	25.0	25.6	27.9	27.2	27.6	27.5	27.6	28.6	27.0
Female:										
Married	11.2	11.8	13.6	13.0	13.3	13.2	13.1	13.0	13.5	13.5
Divorced, separated, widowed	19.2	19.1	18.1	23.2	21.3	23.3	23.0	22.1	23.0	22.6
Never married	16.3	18.0	17.5	20.5	21.1	19.6	19.3	20.0	20.4	19.5
Race ⁶										
White only	13.6	14.5	15.5	16.4	15.4	16.3	16.1	15.9	16.7	16.3
Black or African American only	19.9	21.6	18.0	20.1	19.5	18.1	17.6	18.4	18.1	17.0
American Indian or Alaska Native only	22.5	28.4	34.3	38.1	38.4	35.0	34.6	32.2	38.0	38.8
Asian only	18.5	16.9	18.6	19.5	17.6	16.7	16.5	17.1	15.0	15.4
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*	*
2 or more races	---	---	---	---	16.8	12.6	12.3	16.5	18.4	15.0
Hispanic origin and race ⁶										
Hispanic or Latino	29.5	33.7	31.4	34.5	35.6	35.1	34.4	33.0	35.0	31.8
Mexican	33.8	39.9	35.6	39.4	39.9	38.1	37.6	36.0	38.6	34.7
Puerto Rican	18.3	24.7	17.6	19.0	16.4	21.0	20.4	16.3	16.8	12.8
Cuban	21.6	20.6	22.3	21.1	25.4	22.8	22.8	23.2	22.8	20.7
Other Hispanic or Latino	27.4	25.8	30.2	33.0	33.4	33.3	32.3	32.6	33.2	32.7
Not Hispanic or Latino	13.2	13.7	14.2	15.2	14.0	13.3	13.2	13.4	13.6	13.7
White only	11.9	12.1	13.0	13.8	12.5	12.1	12.0	12.0	12.5	12.6
Black or African American only	19.7	21.5	17.9	20.0	19.5	17.8	17.3	18.3	17.5	16.8
Age and percent of poverty level ⁷										
Under 65 years:										
Below 100%	33.9	35.0	29.6	33.7	34.2	31.8	31.0	30.6	30.2	28.4
100%–less than 150%	27.2	31.1	31.6	35.1	34.9	31.3	30.8	29.9	31.2	31.5
150%–less than 200%	17.3	21.7	24.0	26.3	27.0	27.4	27.2	27.3	28.0	28.5
200% or more	6.0	7.1	8.7	10.1	10.1	10.2	10.2	10.4	10.5	10.6
Under 18 years:										
Below 100%	29.0	31.4	20.0	23.2	22.0	16.5	15.0	14.3	13.9	11.9
100%–less than 150%	22.8	26.1	24.8	26.5	25.4	17.0	16.0	15.1	16.7	16.1
150%–less than 200%	12.7	15.8	18.0	19.9	17.7	14.5	14.1	15.0	15.2	15.3
200% or more	4.2	4.5	6.4	7.1	6.5	5.3	5.2	5.6	5.4	5.4

See footnotes at end of table.

Table 140 (page 2 of 2). No health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 ¹	1989 ¹	1995 ¹	1997	2000 ²	2004(1) ³	2004(2) ³	2005 ³	2006 ³	2007 ³
Disability measure ⁸ Percent of population										
Any basic actions difficulty or complex activity limitation	---	---	---	20.1	17.6	19.8	19.6	19.6	20.0	19.5
No disability	---	---	---	17.6	18.3	19.4	19.3	19.6	20.5	19.9
Geographic region										
Northeast	10.2	10.9	13.3	13.5	12.2	11.9	11.8	11.3	11.2	11.0
Midwest	11.3	10.7	12.2	13.2	12.3	12.6	12.4	11.9	13.4	13.0
South	17.7	19.7	19.4	20.9	20.5	20.2	19.9	21.0	21.1	20.1
West	18.2	18.8	17.9	20.6	20.7	19.1	18.9	18.4	18.8	18.9
Location of residence										
Within MSA ⁹	13.6	15.2	15.5	16.9	16.6	16.4	16.2	16.1	16.6	16.1
Outside MSA ⁹	16.6	17.0	18.6	19.8	18.6	17.4	17.2	17.8	19.3	19.4

* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

¹Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#) and [Appendix II, Health insurance coverage](#).

²Estimates for 2000–2002 were calculated using 2000-based sample weights and may differ from estimates in other reports that used 1990-based sample weights for 2000–2002 estimates.

³Beginning in quarter 3 of the 2004 NHIS, persons under 65 years with no reported coverage were asked explicitly about Medicaid coverage. Estimates were calculated without and with the additional information from this question in the columns labeled 2004(1) and 2004(2), respectively, and estimates were calculated with the additional information starting with 2005 data.

⁴Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

⁵Includes persons 14–64 years of age.

⁶The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

⁷Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2007. See [Appendix II, Family income; Poverty](#).

⁸Any basic actions difficulty or complex activity limitation is defined as having one or more of the following limitations or difficulties: movement difficulty, emotional difficulty, sensory (seeing or hearing) difficulty, cognitive difficulty, self-care (ADL or IADL) limitation, social limitation, or work limitation. For more information, see [Appendix II, Basic actions difficulty; Complex activity limitation](#). Starting with 2007 data, the hearing question, a component of the basic actions difficulty measure, was revised. Consequently, data prior to 2007 are not comparable with 2007 data. For more information on the impact of the revised hearing question, see [Appendix II, Hearing trouble](#).

⁹MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Persons not covered by private insurance, Medicaid, Children’s Health Insurance Program (CHIP), public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. Health insurance coverage is at the time of interview. The number of persons with no health insurance coverage was calculated by multiplying the percent with no coverage by the number of persons under age 65 in the civilian non-institutionalized U.S. population. Percents were calculated with unknown values excluded from denominators. See [Appendix II, Health insurance coverage](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire. Basic actions difficulty or complex activity limitation data are from the sample adult file.

Table 141 (page 1 of 2). Health insurance coverage of Medicare beneficiaries 65 years of age and over, by type of coverage and selected characteristics: United States, selected years 1992–2007

[Data are based on household interviews of a sample of noninstitutionalized Medicare beneficiaries]

Characteristic	Medicare Health Maintenance Organization ¹					Medicaid ²				
	1992	1995	2000	2006	2007	1992	1995	2000	2006	2007
Age										
Number in millions										
65 years and over	1.1	2.6	5.9	6.7	7.3	2.7	2.8	2.7	3.3	3.3
Percent of population										
65 years and over	3.9	8.9	19.3	19.2	20.4	9.4	9.6	9.0	9.4	9.2
65–74 years	4.2	9.5	20.6	19.1	21.0	7.9	8.8	8.5	9.2	8.8
75–84 years	3.7	8.3	18.5	19.7	20.8	10.6	9.6	8.9	9.1	9.3
85 years and over	*	7.3	16.3	17.7	17.0	16.6	13.6	11.2	10.9	11.4
Sex										
Male	4.6	9.2	19.3	18.6	21.9	6.3	6.2	6.3	6.7	6.6
Female	3.4	8.6	19.3	19.6	19.2	11.6	12.0	10.9	11.5	11.4
Race and Hispanic origin										
White, not Hispanic or Latino . . .	3.6	8.4	18.4	17.2	18.5	5.6	5.4	5.1	5.9	5.7
Black, not Hispanic or Latino . . .	*	7.9	20.7	24.1	27.9	28.5	30.3	23.6	21.8	18.8
Hispanic	*	15.5	27.5	37.0	36.7	39.0	40.5	28.7	23.4	24.4
Percent of poverty level ³										
Below 100%	3.6	7.7	18.4	---	---	22.3	17.2	15.9	---	---
100%–less than 200%	3.7	9.5	23.4	---	---	6.7	6.3	8.4	---	---
200% or more	4.2	10.1	18.0	---	---	*	*	*	---	---
Marital status										
Married	4.6	9.5	18.7	18.9	22.2	4.0	4.3	4.3	4.5	4.1
Widowed	2.3	7.7	19.4	17.9	15.8	14.9	15.0	13.6	14.4	14.3
Divorced	*	9.7	24.4	23.5	24.5	23.4	24.5	20.2	17.7	18.0
Never married	*	*	15.8	21.4	21.1	19.2	19.0	17.0	21.6	22.1
Employer-sponsored plan ⁴										
Medigap ⁵										
Characteristic	1992	1995	2000	2006	2007	1992	1995	2000	2006	2007
Age										
Number in millions										
65 years and over	12.5	11.3	10.7	11.9	12.1	9.9	9.5	7.6	8.2	7.9
Percent of population										
65 years and over	42.8	38.6	35.2	34.1	33.8	33.9	32.5	25.0	23.5	22.0
65–74 years	46.9	41.1	36.6	35.6	35.1	31.4	29.9	21.7	21.3	20.4
75–84 years	38.2	37.1	35.0	33.3	33.1	37.5	35.2	27.8	24.8	22.9
85 years and over	31.6	30.2	29.4	30.0	30.2	38.3	37.6	31.1	28.9	26.2
Sex										
Male	46.3	42.1	37.7	36.8	36.5	30.6	30.0	23.4	21.9	20.2
Female	40.4	36.0	33.4	31.9	31.6	36.2	34.4	26.2	24.8	23.4
Race and Hispanic origin										
White, not Hispanic or Latino . . .	45.9	41.3	38.6	37.1	36.8	37.2	36.2	28.3	26.7	25.3
Black, not Hispanic or Latino . . .	25.9	26.7	22.0	23.7	25.8	13.6	10.2	7.5	8.8	7.3
Hispanic	20.7	16.9	15.8	17.1	16.2	15.8	10.1	11.3	8.9	7.7
Percent of poverty level ³										
Below 100%	29.0	32.1	28.1	---	---	30.8	29.8	22.6	---	---
100%–less than 200%	37.5	32.0	27.0	---	---	39.3	39.1	28.4	---	---
200% or more	58.4	52.8	49.0	---	---	32.8	32.2	26.2	---	---
Marital status										
Married	49.9	44.6	41.0	39.7	39.1	33.0	32.6	25.6	24.0	22.1
Widowed	34.1	30.3	28.7	28.4	28.7	37.5	35.2	26.7	25.1	24.3
Divorced	27.3	26.6	22.4	22.8	22.3	27.9	24.1	16.9	18.1	16.1
Never married	38.0	35.1	28.5	25.8	28.1	29.1	26.2	21.9	17.1	17.4

See footnotes at end of table.

Table 141 (page 2 of 2). Health insurance coverage of Medicare beneficiaries 65 years of age and over, by type of coverage and selected characteristics: United States, selected years 1992–2007

[Data are based on household interviews of a sample of noninstitutionalized Medicare beneficiaries]

Characteristic	Medicare fee-for-service only or Other ⁶				
	1992	1995	2000	2006	2007
Age					
Number in millions					
65 years and over	2.9	3.1	3.5	4.9	5.2
Percent of population					
65 years and over	9.9	10.5	11.5	13.9	14.6
65–74 years	9.7	10.7	12.6	14.8	14.8
75–84 years	10.1	9.9	9.9	13.1	14.0
85 years and over	10.8	11.3	12.1	12.5	15.2
Sex					
Male	12.2	12.6	13.3	16.0	14.8
Female	8.3	8.9	10.2	12.2	14.4
Race and Hispanic origin					
White, not Hispanic or Latino . . .	7.7	8.7	9.6	13.1	13.7
Black, not Hispanic or Latino . . .	26.7	25.0	26.1	21.6	20.2
Hispanic	18.3	17.1	16.7	13.6	15.0
Percent of poverty level ³					
Below 100%	14.3	13.3	15.1	---	---
100%–less than 200%	12.9	13.1	12.7	---	---
200% or more	4.0	4.5	6.3	---	---
Marital status					
Married	8.5	9.0	10.5	12.9	12.6
Widowed	11.2	11.9	11.6	14.3	16.8
Divorced	15.7	15.1	16.1	17.9	19.1
Never married	*	13.1	16.8	14.1	11.4

* Estimates are considered unreliable if the sample cell size is 50 or fewer.

--- Data not available.

¹Enrollee has Medicare Health Maintenance Organization (HMO) regardless of other insurance. See [Appendix II, Managed care](#).

²Enrolled in Medicaid and not enrolled in a Medicare risk HMO. See [Appendix II, Managed care](#).

³Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See [Appendix II, Family income; Poverty](#).

⁴Private insurance plans purchased through employers (own, current, or former employer, family business, union, or former employer or union of spouse) and not enrolled in a Medicare risk HMO or Medicaid.

⁵Supplemental insurance purchased privately or through organizations such as AARP or professional organizations, and not enrolled in a Medicare risk HMO, Medicaid, or employer-sponsored plan.

⁶Medicare fee-for-service only or other public plans (except Medicaid).

NOTES: Data for noninstitutionalized Medicare beneficiaries. Insurance categories are mutually exclusive. Persons with more than one type of coverage are categorized according to the order in which the health insurance categories appear. See [Appendix I, Medicare Current Beneficiary Survey \(MCBS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Access to Care file.

Table 142 (page 1 of 2). Medicare enrollees and expenditures and percent distribution, by Medicare program and type of service: United States and other areas, selected years 1970–2008

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Medicare program and type of service</i>	1970	1980	1990	1995	2000	2003	2004	2005	2006	2007	2008 ¹
Enrollees											
Number in millions											
Total Medicare ²	20.4	28.4	34.3	37.6	39.7	41.2	41.9	42.6	43.4	44.3	45.2
Hospital insurance	20.1	28.0	33.7	37.2	39.3	40.7	41.5	42.2	43.1	43.9	44.9
Supplementary medical insurance (SMI) ³	19.5	27.3	32.6	35.6	37.3	38.6	---	---	---	---	---
Part B	19.5	27.3	32.6	35.6	37.3	38.6	39.1	39.8	40.4	41.1	41.7
Part D ⁴	---	---	---	---	---	---	1.2	1.8	27.0	30.8	32.1
Expenditures											
Amount in billions											
Total Medicare	\$ 7.5	\$ 36.8	\$ 111.0	\$ 184.2	\$ 221.8	\$ 280.8	\$ 308.9	\$ 336.4	\$ 408.3	\$ 431.7	\$ 468.1
Total hospital insurance (HI)	5.3	25.6	67.0	117.6	131.1	154.6	170.6	182.9	191.9	203.1	235.6
HI payments to managed care organizations ⁵	---	0.0	2.7	6.7	21.4	19.5	20.8	24.9	32.9	39.0	50.6
HI payments for fee-for-service utilization	5.1	25.0	63.4	109.5	105.1	134.5	146.5	156.6	159.6	163.4	172.8
Inpatient hospital	4.8	24.1	56.9	82.3	87.1	109.1	117.0	123.2	124.1	124.2	130.5
Skilled nursing facility	0.2	0.4	2.5	9.1	11.1	14.8	17.2	19.4	20.3	22.5	24.2
Home health agency	0.1	0.5	3.7	16.2	4.0	4.9	5.4	6.0	5.9	6.2	6.6
Hospice	---	---	0.3	1.9	2.9	5.7	6.8	8.0	9.3	10.5	11.7
Home health agency transfer ⁶	---	---	---	---	1.7	-2.2	---	---	---	---	---
Medicare Advantage premiums ⁷	---	---	---	---	---	---	---	---	0.0	0.1	0.9
Accounting error (CY 2005–2008) ⁸	---	---	---	---	---	---	---	-1.9	-3.9	-2.7	8.5
Administrative expenses ⁹	0.2	0.5	0.9	1.4	2.9	2.8	3.3	3.3	3.3	3.2	3.6
Total supplementary medical insurance (SMI) ³	2.2	11.2	44.0	66.6	90.7	126.1	138.3	153.5	216.4	228.6	232.6
Total Part B	2.2	11.2	44.0	66.6	90.7	126.1	137.9	152.4	169.0	178.9	183.3
Part B payments to managed care organizations ⁵	0.0	0.2	2.8	6.6	18.4	17.3	18.7	22.0	31.5	38.9	47.6
Part B payments for fee-for-service utilization ¹⁰	1.9	10.4	39.6	58.4	72.2	104.3	116.2	125.0	130.2	134.6	141.0
Physician/supplies ¹¹	1.8	8.2	29.6	---	---	---	---	---	---	---	---
Outpatient hospital ¹²	0.1	1.9	8.5	---	---	---	---	---	---	---	---
Independent laboratory ¹³	0.0	0.1	1.5	---	---	---	---	---	---	---	---
Physician fee schedule	---	---	---	31.7	37.0	48.3	54.1	57.7	58.2	58.9	60.8
Durable medical equipment	---	---	---	3.7	4.7	7.5	7.7	8.0	8.3	8.1	8.9
Laboratory ¹⁴	---	---	---	4.3	4.0	5.5	6.1	6.3	6.7	7.1	7.3
Other ¹⁵	---	---	---	9.9	13.6	22.6	25.0	26.7	28.0	28.9	30.2
Hospital ¹⁶	---	---	---	8.7	8.4	15.3	17.4	19.2	21.3	22.4	23.8
Home health agency	0.0	0.2	0.1	0.2	4.5	5.1	5.9	7.1	7.8	9.2	10.0
Home health agency transfer ⁶	---	---	---	---	-1.7	2.2	---	---	---	---	---
Medicare Advantage premiums ⁷	---	---	---	---	---	---	---	---	0.0	0.1	0.1
Accounting error (CY 2005–2008) ⁸	---	---	---	---	---	---	---	1.9	3.9	2.7	-8.5
Administrative expenses ⁹	0.2	0.6	1.5	1.6	1.8	2.4	2.8	2.6	2.9	2.5	3.0
Part D start-up costs ¹⁷	---	---	---	---	---	---	0.2	0.7	0.2	0.0	0.0
Total Part D ⁴	---	---	---	---	---	---	0.4	1.1	47.4	49.7	49.3
Percent distribution of expenditures											
Total hospital insurance (HI)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HI payments to managed care organizations ⁵	---	0.0	4.0	5.7	16.3	12.6	12.2	13.6	17.2	19.2	21.5
HI payments for fee-for-service utilization	97.0	97.9	94.6	93.1	80.2	87.0	85.9	85.6	83.2	80.5	73.4
Inpatient hospital	91.4	94.3	85.0	70.0	66.4	70.6	68.6	67.4	64.6	61.2	55.4
Skilled nursing facility	4.7	1.5	3.7	7.8	8.5	9.6	10.1	10.6	10.6	11.1	10.3
Home health agency	1.0	2.1	5.5	13.8	3.1	3.1	3.2	3.3	3.1	3.1	2.8
Hospice	---	---	0.5	1.6	2.2	3.7	4.0	4.4	4.9	5.2	5.0
Home health agency transfer ⁶	---	---	---	---	1.3	-1.4	---	---	---	---	---
Medicare Advantage premiums ⁷	---	---	---	---	---	---	---	---	0.0	0.0	0.4
Accounting error (CY 2005–2008) ⁸	---	---	---	---	---	---	---	-1.0	-2.0	-1.3	3.6
Administrative expenses ⁹	3.0	2.1	1.4	1.2	2.2	1.8	2.0	1.8	1.7	1.6	1.5

See footnotes at end of table.

Table 142 (page 2 of 2). Medicare enrollees and expenditures and percent distribution, by Medicare program and type of service: United States and other areas, selected years 1970–2008

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Medicare program and type of service	1970	1980	1990	1995	2000	2003	2004	2005	2006	2007	2008 ¹
Percent distribution of expenditures											
Total supplementary medical insurance (SMI) ³	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Part B	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.3	78.1	78.3	78.8
Part B payments to managed care organizations ⁵	1.2	1.8	6.4	9.9	20.2	13.7	13.5	14.3	14.5	17.0	20.5
Part B payments for fee-for-service utilization ¹⁰	88.1	92.8	90.1	87.6	79.6	82.7	84.0	81.5	60.2	58.9	60.6
Physician/supplies ¹¹	80.9	72.8	67.3	---	---	---	---	---	---	---	---
Outpatient hospital ¹²	5.2	16.9	19.3	---	---	---	---	---	---	---	---
Independent laboratory ¹³	0.5	1.0	3.4	---	---	---	---	---	---	---	---
Physician fee schedule	---	---	---	47.5	40.8	38.3	39.1	37.6	26.9	25.7	26.1
Durable medical equipment	---	---	---	5.5	5.2	6.0	5.6	5.2	3.8	3.5	3.8
Laboratory ¹⁴	---	---	---	6.4	4.4	4.3	4.4	4.1	3.1	3.1	3.2
Other ¹⁵	---	---	---	14.8	15.0	17.9	18.1	17.4	13.0	12.7	13.0
Hospital ¹⁶	---	---	---	13.0	9.3	12.1	12.6	12.5	9.8	9.8	10.2
Home health agency	1.5	2.1	0.2	0.3	4.9	4.0	4.2	4.6	3.6	4.0	4.3
Home health agency transfer ⁶	---	---	---	---	-1.9	1.7	---	---	---	---	---
Medicare Advantage premiums ⁷	---	---	---	---	---	---	---	---	0.0	0.0	0.0
Accounting error (CY 2005–2008) ⁸	---	---	---	---	---	---	---	---	1.8	1.2	-3.6
Administrative expenses ⁹	10.7	5.4	3.5	2.4	2.0	1.9	2.0	1.7	1.3	1.1	1.3
Part D start-up costs ¹⁷	---	---	---	---	---	---	0.1	0.4	0.1	0.0	0.0
Total Part D ⁴	---	---	---	---	---	---	0.3	0.7	21.9	21.7	21.2

--- Category not applicable or data not available.

0.0 Quantity greater than 0 but less than 0.05.

¹Preliminary estimates.

²Average number enrolled in the hospital insurance (HI) and/or supplementary medical insurance (SMI) programs for the period. See [Appendix II, Medicare](#).

³Starting with 2004 data, the SMI trust fund consists of two separate accounts: Part B (which pays for a portion of the costs of physicians' services, outpatient hospital services, and other related medical and health services for voluntarily enrolled individuals) and Part D (Medicare Prescription Drug Account, which pays private plans to provide prescription drug coverage).

⁴The Medicare Modernization Act, enacted on December 8, 2003, established within SMI two Part D accounts related to prescription drug benefits: the Medicare Prescription Drug Account and the Transitional Assistance Account. The Medicare Prescription Drug Account is used in conjunction with the broad, voluntary prescription drug benefits that began in 2006. The Transitional Assistance Account was used to provide transitional assistance benefits, beginning in 2004 and extending through 2005, for certain low-income beneficiaries prior to the start of the new prescription drug benefit. The amounts shown for Total Part D expenditures—and thus for total SMI expenditures and total Medicare expenditures—for 2006 and later years include estimated amounts for premiums paid directly from Part D beneficiaries to Part D prescription drug plans.

⁵Medicare-approved managed care organizations.

⁶For 1998 to 2003 data, reflects annual home health HI to SMI transfer amounts.

⁷When a beneficiary chooses a Medicare Advantage plan whose monthly premium exceeds the benchmark amount, the additional premiums (that is, amounts beyond those paid by Medicare to the plan) are the responsibility of the beneficiary. Beneficiaries subject to such premiums may choose to either reimburse the plans directly or have the additional premiums deducted from their Social Security checks. The amounts shown here are only those additional premiums deducted from Social Security checks. These amounts are transferred to the HI trust and SMI trust funds and then transferred from the trust funds to the plans.

⁸Represents misallocation of benefit payments between the HI trust fund and the Part B account of the SMI trust fund from May 2005 to September 2007, and the transfer made in June 2008 to correct the misallocation.

⁹Includes expenditures for research, experiments and demonstration projects, peer review activity (performed by Peer Review Organizations from 1983 to 2001 and by Quality Review Organizations from 2002 to present), and to combat and prevent fraud and abuse.

¹⁰Type-of-service reporting categories for fee-for-service reimbursement differ before and after 1991.

¹¹Includes payment for physicians, practitioners, durable medical equipment, and all suppliers other than independent laboratory through 1990. Starting with 1991 data, physician services subject to the physician fee schedule are shown. Payments for laboratory services paid under the laboratory fee schedule and performed in a physician office are included under Laboratory beginning in 1991. Payments for durable medical equipment are shown separately beginning in 1991. The remaining services from the Physician/supplies category are included in Other.

¹²Includes payments for hospital outpatient department services, skilled nursing facility outpatient services, Part B services received as an inpatient in a hospital or skilled nursing facility setting, and other types of outpatient facilities. Starting with 1991 data, payments for hospital outpatient department services, except for laboratory services, are listed under Hospital. Hospital outpatient laboratory services are included in the Laboratory line.

¹³Starting with 1991 data, those independent laboratory services that were paid under the laboratory fee schedule (most of the independent lab category) are included in the Laboratory line; the remaining services are included in the Physician fee schedule and Other lines.

¹⁴Payments for laboratory services paid under the laboratory fee schedule performed in a physician office, independent lab, or in a hospital outpatient department.

¹⁵Includes payments for physician-administered drugs; freestanding ambulatory surgical center facility services; ambulance services; supplies; freestanding end-stage renal disease (ESRD) dialysis facility services; rural health clinics; outpatient rehabilitation facilities; psychiatric hospitals; and federally qualified health centers.

¹⁶Includes the hospital facility costs for Medicare Part B services that are predominantly in the outpatient department, with the exception of hospital outpatient laboratory services, which are included on the Laboratory line. Physician reimbursement is included on the Physician fee schedule line.

¹⁷Part D start-up costs were funded through the SMI Part B account in 2004–2008.

NOTES: All data shown are estimates and are subject to revision. Percents may not sum to totals because of rounding. Estimates for Medicare-covered services furnished to Medicare enrollees residing in the United States, Puerto Rico, Virgin Islands, Guam, other outlying areas, foreign countries, and unknown residence. Estimates in this table have been revised and differ from previous editions of *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, Medicare and Medicaid Cost Estimates Group. Estimates are based on unpublished data from CMS, the Office of the Actuary, and Treasury Department financial statements. Estimates are subject to change as more recent data become available.

Table 143. Medicare enrollees and program payments among fee-for-service Medicare beneficiaries, by sex and age: United States and other areas, selected years 1994–2007

[Data are compiled from administrative data by the Centers for Medicare & Medicaid Services]

<i>Sex and age</i>	1994	1995	1999	2000	2002	2004	2005	2006	2007
Fee-for-service enrollees in thousands									
Total	34,076	34,062	32,179	32,740	34,977	36,345	36,685	35,847	35,490
Sex									
Male	14,533	14,563	13,872	14,195	15,314	16,040	16,251	15,958	15,879
Female	19,543	19,499	18,307	18,545	19,664	20,305	20,433	19,890	19,611
Age									
Under 65 years	4,031	4,239	4,742	4,907	5,448	6,036	6,286	6,225	6,318
65–74 years	16,713	16,373	14,072	14,230	15,107	15,528	15,587	15,179	15,041
75–84 years	9,845	9,911	9,748	9,919	10,533	10,755	10,689	10,298	9,947
85 years and over	3,486	3,540	3,618	3,684	3,889	4,026	4,123	4,146	4,184
Fee-for-service program payments in billions									
Total	\$ 146.6	\$ 159.0	\$ 166.7	\$ 174.3	\$ 215.4	\$ 255.3	\$ 274.1	\$ 280.7	\$ 288.5
Sex									
Male	63.9	68.8	73.2	76.2	94.3	111.8	121.0	123.6	126.5
Female	82.6	90.2	93.5	98.0	121.1	143.5	153.2	157.0	162.1
Age									
Under 65 years	18.8	21.0	24.3	25.8	33.2	42.3	46.7	48.4	50.9
65–74 years	55.1	58.1	56.0	57.5	70.0	81.6	86.6	87.4	89.1
75–84 years	50.7	55.3	59.5	62.7	77.1	89.9	95.2	96.2	96.4
85 years and over	21.8	24.6	26.9	28.3	35.1	41.5	45.6	48.7	52.1
Percent distribution of fee-for-service program payments									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex									
Male	43.6	43.2	43.9	43.7	43.8	43.8	44.1	44.0	43.8
Female	56.4	56.8	56.1	56.3	56.2	56.2	55.9	56.0	56.2
Age									
Under 65 years	12.9	13.2	14.6	14.8	15.4	16.6	17.0	17.2	17.6
65–74 years	37.6	36.5	33.6	33.0	32.5	32.0	31.6	31.1	30.9
75–84 years	34.6	34.8	35.7	36.0	35.8	35.2	34.7	34.3	33.4
85 years and over	14.9	15.5	16.1	16.2	16.3	16.3	16.6	17.3	18.0
Average fee-for-service payment per enrollee									
Total	\$ 4,301	\$ 4,667	\$ 5,180	\$ 5,323	\$ 6,159	\$ 7,025	\$ 7,473	\$ 7,830	\$ 8,129
Sex									
Male	4,397	4,721	5,275	5,370	6,157	6,972	7,443	7,747	7,964
Female	4,229	4,627	5,108	5,286	6,159	7,067	7,497	7,896	8,263
Age									
Under 65 years	4,673	4,960	5,117	5,252	6,102	7,001	7,435	7,774	8,058
65–74 years	3,300	3,548	3,982	4,040	4,635	5,257	5,558	5,756	5,924
75–84 years	5,152	5,576	6,106	6,320	7,317	8,358	8,904	9,345	9,696
85 years and over	6,267	6,950	7,428	7,684	9,019	10,318	11,061	11,742	12,440

NOTES: Table includes data for Medicare enrollees residing in Puerto Rico, U.S. Virgin Islands, Guam, other outlying areas, foreign countries, and unknown residence. Prior to 2004, number of fee-for-service enrollees, fee-for-service program payments, and fee-for-service billing reimbursement were based on a 5% annual Denominator File derived from the Centers for Medicare & Medicaid Services' (CMS') Enrollment Database and the fee-for-service claims for a 5% sample of beneficiaries as recorded in CMS' National Claims History File. Starting with 2004 data, the 100% Denominator File was used. See [Appendix I, Medicare Administrative Data](#); [Appendix II, Medicare](#). Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of Research, Development, and Information. Health Care Financing Review: Medicare and Medicaid Statistical Supplements for publication years 1996 to 2008. Available from: <http://www.cms.hhs.gov/MedicareMedicaidStatSupp/LT/list.asp>.

Table 144 (page 1 of 2). Medicare beneficiaries, by race, Hispanic origin, and selected characteristics: United States, 1992, 2005, and 2006

[Data are based on household interviews of a sample of Medicare beneficiaries and Medicare administrative records]

Characteristic	Not Hispanic or Latino											
	All			White			Black or African American			Hispanic or Latino		
	1992	2005	2006	1992	2005	2006	1992	2005	2006	1992	2005	2006
	Number of beneficiaries in millions											
All Medicare beneficiaries	36.8	43.4	43.8	30.9	34.0	34.4	3.3	4.1	4.0	1.9	3.3	3.4
	Percent distribution of beneficiaries											
All Medicare beneficiaries	100.0	100.0	100.0	84.2	78.4	78.4	8.9	9.4	9.1	5.2	7.5	7.8
	Percent of beneficiaries with at least one service											
Medical care use												
All Medicare beneficiaries:												
Long-term care facility stay	7.7	8.5	8.9	8.0	9.1	9.6	6.2	8.6	8.8	4.2	4.8	5.1
Community-only residents:												
Inpatient hospital	17.9	17.4	16.7	18.1	17.2	16.2	18.4	19.6	20.0	16.6	17.9	17.1
Outpatient hospital	57.9	74.7	74.7	57.8	75.1	74.9	61.1	73.3	76.8	53.1	72.7	71.4
Physician/supplier ¹	92.4	96.4	97.0	93.0	96.8	97.3	89.1	94.8	96.3	87.9	94.5	95.4
Dental	40.4	45.1	45.6	43.1	49.2	50.0	23.5	22.6	25.2	29.1	33.6	33.1
Prescription medicine	85.2	93.4	94.0	85.5	93.6	94.2	83.1	91.9	92.6	84.6	92.8	94.2
Expenditures												
Expenditures per beneficiary												
All Medicare beneficiaries:												
Total health care ²	\$6,716	\$14,246	\$15,622	\$6,816	\$14,166	\$15,587	\$7,043	\$16,668	\$17,865	\$5,784	\$13,432	\$13,503
Long-term care facility ³	1,581	2,440	2,566	1,674	2,578	2,729	1,255	2,797	3,035	*758	1,209	986
Community-only residents:												
Total personal health care	5,054	10,597	11,756	4,988	10,499	11,483	5,530	11,373	13,370	4,938	10,938	11,814
Inpatient hospital	2,098	2,566	2,504	2,058	2,534	2,410	2,493	3,136	3,299	1,999	2,103	2,764
Outpatient hospital	504	1,364	1,233	478	1,300	1,172	668	1,578	1,577	511	1,762	1,482
Physician/supplier ¹	1,524	3,125	3,375	1,525	3,128	3,289	1,398	3,155	3,601	1,587	3,430	2,927
Dental	142	327	355	153	354	391	70	203	164	97	214	285
Prescription medicine	468	2,277	3,002	481	2,341	3,014	417	2,118	2,896	389	1,914	2,999
Long-term care facility residents only:												
Long-term care facility ⁴	23,054	38,277	39,361	23,177	37,597	38,681	21,272	45,594	43,841	*25,026	*36,913	*49,417
Sex												
Percent distribution of beneficiaries												
Both sexes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	42.9	44.3	44.4	42.7	44.3	44.5	42.0	41.6	40.2	46.7	46.1	46.9
Female	57.1	55.7	55.6	57.3	55.7	55.5	58.0	58.4	59.8	53.3	53.9	53.1
Eligibility criteria and age												
All Medicare beneficiaries ⁵	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Disabled	10.2	15.6	16.0	8.6	13.1	13.7	19.1	29.3	29.5	16.5	22.6	21.7
Under 45 years	3.5	3.8	3.8	2.9	3.0	3.1	7.6	8.2	7.9	6.9	5.6	4.9
45–64 years	6.5	11.8	12.2	5.8	10.1	10.6	11.5	21.1	21.6	9.6	17.0	16.8
Aged	89.8	84.4	84.1	91.4	86.9	86.2	81.0	70.7	70.5	83.5	77.5	78.4
65–74 years	51.5	43.4	43.2	52.0	43.2	42.6	48.0	40.5	40.2	49.4	46.5	47.7
75–84 years	28.8	29.8	29.4	29.5	31.6	31.2	24.0	22.0	21.3	27.1	23.4	23.0
85 years and over	9.7	11.2	11.5	9.9	12.1	12.4	9.0	8.2	9.0	6.9	7.6	7.7
Living arrangement												
All living arrangements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alone	27.0	28.5	28.4	27.5	29.3	29.0	27.7	31.8	32.4	20.2	21.2	22.8
With spouse	51.2	48.9	49.1	53.3	51.6	51.8	33.3	26.3	27.6	50.4	46.0	44.3
With children	9.1	10.4	10.0	7.7	8.1	7.8	16.8	20.3	19.0	16.6	19.3	17.5
With others	7.6	7.8	8.0	6.2	6.2	6.6	18.1	17.0	15.5	10.8	11.4	13.1
Long-term care facility	5.1	4.4	4.5	5.3	4.8	4.8	4.0	4.5	5.4	*2.0	*2.1	*2.2

See footnotes at end of table.

Table 144 (page 2 of 2). Medicare beneficiaries, by race, Hispanic origin, and selected characteristics: United States, 1992, 2005, and 2006

[Data are based on household interviews of a sample of Medicare beneficiaries and Medicare administrative records]

Characteristic	Not Hispanic or Latino											
	All			White			Black or African American			Hispanic or Latino		
	1992	2005	2006	1992	2005	2006	1992	2005	2006	1992	2005	2006
Age and limitation of activity ⁶	Percent distribution of beneficiaries											
Disabled, under age 65	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	22.7	29.1	30.5	21.8	28.7	30.2	26.2	35.6	37.4	21.2	22.8	25.0
IADL only	39.0	36.3	36.6	38.9	35.9	36.2	35.8	39.6	37.0	46.1	38.8	37.1
1 or 2 ADL	21.2	21.2	19.6	21.5	21.2	20.3	21.2	*15.8	16.3	*20.9	*22.5	*19.2
3-5 ADL	17.2	13.4	13.3	17.9	14.2	13.4	*16.8	*9.0	*9.3	*11.9	*16.0	*18.7
65-74 years	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	67.0	72.2	72.2	68.7	73.6	74.1	55.1	65.8	66.5	59.2	66.0	64.6
IADL only	17.8	14.7	14.9	17.0	14.1	14.6	22.9	15.7	16.0	*20.9	18.7	13.8
1 or 2 ADL	10.4	9.1	8.6	9.6	8.7	8.0	14.4	13.3	*11.3	*15.7	*8.4	*11.4
3-5 ADL	4.8	4.0	4.2	4.6	3.6	3.3	*7.6	*5.2	*6.2	*4.2	*6.8	*10.2
75-84 years	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	46.6	55.6	55.0	47.5	56.7	55.9	42.0	46.2	51.0	44.3	53.6	51.5
IADL only	23.9	21.6	21.8	23.6	21.0	22.0	26.7	25.5	17.0	*27.8	21.6	21.8
1 or 2 ADL	16.5	13.5	13.4	16.8	13.8	13.1	15.3	*10.0	*14.7	*14.9	*12.6	*13.6
3-5 ADL	13.0	9.4	9.8	12.2	8.5	9.0	*15.9	18.3	*17.3	*13.0	*12.2	*13.1
85 years and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	19.9	28.1	29.5	20.2	29.1	30.7	*19.6	*23.4	*25.1	*19.7	*26.5	*20.8
IADL only	20.9	25.0	24.4	20.2	25.2	23.8	*22.1	*26.0	*32.2	*24.7	*20.9	*23.7
1 or 2 ADL	23.5	20.2	20.2	23.5	20.2	20.6	*24.3	*15.3	*12.1	*23.7	*22.2	*22.8
3-5 ADL	35.8	26.7	25.8	36.1	25.5	24.9	*34.0	35.3	*30.7	*31.8	*30.4	*32.7

--- Data not available.

* Estimates are based on 50 persons or fewer or with a relative standard error of 30% or higher and are considered unreliable.

¹Physician/supplier services include medical and osteopathic doctor and health practitioner visits; diagnostic laboratory and radiology services; medical and surgical services; and durable medical equipment and nondurable medical supplies.

²Total health care expenditures by Medicare beneficiaries, including expenses paid by Medicare and all other sources of payment for the following services: inpatient hospital, outpatient hospital, physician/supplier, dental, prescription medicine, home health, and hospice and long-term care facility care. Does not include health insurance premiums.

³Expenditures for long-term care in facilities for all beneficiaries include facility room and board expenses for beneficiaries who resided in a facility for the full year, for beneficiaries who resided in a facility for part of the year and in the community for part of the year, and expenditures for short-term facility stays for full-year or part-year community residents. See [Appendix II, Long-term care facility](#).

⁴Expenditures for facility-based long-term care for facility-based beneficiaries include facility room and board expenses for beneficiaries who resided in a facility for the full year and for beneficiaries who resided in a facility for part of the year and in the community for part of the year. It does not include expenditures for short-term facility stays for full-year community residents. See [Appendix II, Long-term care facility](#).

⁵Medicare beneficiaries with end-stage renal disease (ESRD) are included within the subgroups Aged and Disabled. In 2006, less than 1% of Medicare beneficiaries qualified because of ESRD.

⁶Includes data for both community and long-term care facility residents. See [Appendix II for definitions of Activities of Daily Living \(ADL\) and Instrumental Activities of Daily Living \(IADL\)](#).

NOTES: Percents and percent distributions are calculated using unrounded numbers. Expenditures include expenses for Medicare beneficiaries paid by Medicare and all other sources of payment. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Cost and Use file, Health and Health Care of the Medicare Population. Available from: <http://www.cms.hhs.gov/mcbs>, and unpublished data.

Table 145. Medicaid beneficiaries and payments, by basis of eligibility, and race and Hispanic origin: United States, selected fiscal years 1972–2006

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

<i>Basis of eligibility and race and Hispanic origin</i>	1972	1980	1990	1995	2000	2003	2004	2005	2006
Beneficiaries ¹									
Number in millions									
All beneficiaries	17.6	21.6	25.3	36.3	42.8	52.0	55.6	57.3	57.5
Percent of beneficiaries									
Basis of eligibility: ²									
Aged (65 years and over)	18.8	15.9	12.7	11.4	8.7	7.8	7.8	7.6	7.6
Blind and disabled	9.8	13.5	14.7	16.1	16.1	14.8	14.6	14.2	14.4
Adults in families with dependent children ³	17.8	22.6	23.8	21.0	20.5	22.2	22.2	21.4	21.5
Children under age 21 ⁴	44.5	43.2	44.4	47.3	46.1	47.8	47.8	47.2	48.0
Other Title XIX ⁵	9.0	6.9	3.9	1.7	8.6	7.5	7.6	9.4	8.5
Race and Hispanic origin: ⁶									
White	---	---	42.8	45.5	---	41.2	41.1	39.1	38.9
Black or African American	---	---	25.1	24.7	---	22.4	22.1	21.6	21.9
American Indian or Alaska Native	---	---	1.0	0.8	---	1.4	1.3	1.2	1.2
Asian or Pacific Islander	---	---	2.0	2.2	---	3.3	3.3	3.5	3.5
Hispanic or Latino	---	---	15.2	17.2	---	19.3	19.4	20.7	21.1
Multiple race or unknown	---	---	14.0	9.6	---	12.5	12.7	13.9	13.3
Payments ⁷									
Amount in billions									
All payments	\$ 6.3	\$ 23.3	\$ 64.9	\$120.1	\$ 168.3	\$ 233.2	\$ 257.7	\$ 273.2	\$ 267.4
Percent distribution									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basis of eligibility: ²									
Aged (65 years and over)	30.6	37.5	33.2	30.4	26.4	23.7	23.1	23.0	21.6
Blind and disabled	22.2	32.7	37.6	41.1	43.2	43.7	43.3	43.4	43.3
Adults in families with dependent children ³	15.3	13.9	13.2	11.2	10.6	11.4	11.8	11.7	12.2
Children under age 21 ⁴	18.1	13.4	14.0	15.0	15.9	17.1	17.2	17.1	18.8
Other Title XIX ⁵	13.9	2.6	1.6	1.2	3.9	4.1	4.7	4.7	4.1
Race and Hispanic origin: ⁶									
White	---	---	53.4	54.3	---	53.8	53.4	52.7	51.9
Black or African American	---	---	18.3	19.2	---	19.7	19.8	20.0	20.5
American Indian or Alaska Native	---	---	0.6	0.5	---	1.2	1.2	1.2	1.2
Asian or Pacific Islander	---	---	1.0	1.2	---	2.4	2.5	2.7	2.8
Hispanic or Latino	---	---	5.3	7.3	---	10.6	10.7	12.2	12.9
Multiple race or unknown	---	---	21.3	17.6	---	12.2	12.3	11.2	10.8
Payments per beneficiary ⁷									
Amount									
All beneficiaries	\$ 358	\$1,079	\$2,568	\$3,311	\$ 3,936	\$ 4,487	\$ 4,639	\$ 4,764	\$ 4,654
Basis of eligibility: ²									
Aged (65 years and over)	580	2,540	6,717	8,868	11,929	13,677	13,687	14,402	13,277
Blind and disabled	807	2,618	6,564	8,435	10,559	13,303	13,714	14,536	13,983
Adults in families with dependent children ³	307	662	1,429	1,777	2,030	2,296	2,475	2,590	2,631
Children under age 21 ⁴	145	335	811	1,047	1,358	1,606	1,664	1,729	1,822
Other Title XIX ⁵	555	398	1,062	2,380	1,778	2,458	2,867	2,379	2,260
Race and Hispanic origin: ⁶									
White	---	---	3,207	3,953	---	5,869	6,026	6,429	6,207
Black or African American	---	---	1,878	2,568	---	3,944	4,158	4,398	4,359
American Indian or Alaska Native	---	---	1,706	2,142	---	4,001	4,320	4,627	4,490
Asian or Pacific Islander	---	---	1,257	1,713	---	3,328	3,513	3,712	3,698
Hispanic or Latino	---	---	903	1,400	---	2,463	2,563	2,822	2,831
Multiple race or unknown	---	---	3,909	6,099	---	4,395	4,493	3,816	3,770

--- Data not available.

¹Beneficiaries include Medicaid enrollees who received services and those enrolled in managed care plans.

²In 1980 and 1985, beneficiaries are included in more than one category. In 1990–1996, 0.2%–2.5% of beneficiaries have unknown basis of eligibility. Starting with 1997 data, unknowns are included in Other Title XIX.

³Includes adults who meet the requirements for the Aid to Families with Dependent Children (AFDC) program that were in effect in their state on July 16, 1996, or, at state option, more liberal criteria (with some exceptions). Starting with 1997 data, includes adults in the Temporary Assistance for Needy Families (TANF) program. Starting with 2001 data, includes women in the Breast and Cervical Cancer Prevention and Treatment Program. For more information on the eligibility requirements, see [Appendix II, Medicaid](#).

⁴Starting with 1997 data, includes children (including those in the foster care system) in the TANF program. Prior to 1997, foster care children are included in Other Title XIX. For more information on the eligibility requirements, see [Appendix II, Medicaid](#).

⁵Includes some participants in the Supplemental Security Income program and other people deemed medically needy in participating states. Includes unemployed adults. Starting with 1997 data, excludes foster care children and includes unknown eligibility.

⁶Race and Hispanic origin are as determined on initial Medicaid application. Categories are mutually exclusive. Starting with 2001 data, the Hispanic category included Hispanic persons, regardless of race. Persons indicating more than one race were included in the multiple race category.

⁷Medicaid payments exclude disproportionate share hospital (DSH) payments (\$13.5 billion in FY2006) and DSH mental health facility payments (\$3.7 billion in FY2006).

NOTES: 1972 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30. Starting with 1999 data, a new Medicaid data system (MSIS) was introduced. Prior to 1999, beneficiary counts exclude those individuals who only received coverage under prepaid health care and for whom no direct payments were made during the year, and payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). See [Appendix II, Medicaid; Medicaid payments](#). See [Appendix I, Medicaid Statistical Information System \(MSIS\)](#). For more information, see: <http://www.cms.hhs.gov/MSIS/downloads/msisddd2008.pdf>. Due to changes in data collection procedures over time, caution should be used when interpreting trends. Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Center for Medicaid and State Operations, Medicaid Statistical Information System (MSIS). Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are calculated from MSIS and unpublished data. MSIS data for 2006 were accessed on May 28, 2009.

Table 146 (page 1 of 2). Medicaid beneficiaries and payments, by type of service: United States, selected fiscal years 1972–2006

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Type of service	1972	1980	1990	1995	2000	2003	2004	2005	2006
Beneficiaries¹									
Number in millions									
All beneficiaries	17.6	21.6	25.3	36.3	42.8	52.0	55.6	57.3	57.5
Percent of beneficiaries									
Inpatient hospital	16.1	17.0	18.2	15.3	11.5	10.0	9.8	9.5	10.9
Mental health facility	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Mentally retarded intermediate care facility	---	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.2
Nursing facility	---	---	---	4.6	4.0	3.3	3.1	3.0	3.0
Skilled	3.1	2.8	2.4	---	---	---	---	---	---
Intermediate care	---	3.7	3.4	---	---	---	---	---	---
Physician	69.8	63.7	67.6	65.6	44.7	44.0	43.1	41.9	40.2
Dental	13.6	21.5	18.0	17.6	13.8	16.4	16.2	16.1	16.4
Other practitioner	9.1	15.0	15.3	15.2	11.1	11.1	10.7	10.2	10.1
Outpatient hospital	29.6	44.9	49.0	46.1	30.9	29.8	28.7	28.2	27.6
Clinic	2.8	7.1	11.1	14.7	17.9	19.6	20.0	20.6	20.5
Laboratory and radiological	20.0	14.9	35.5	36.0	26.6	28.3	28.9	27.7	28.0
Home health	0.6	1.8	2.8	4.5	2.3	2.3	2.1	2.1	2.1
Prescribed drugs	63.3	63.4	68.5	65.4	48.0	50.2	50.3	49.1	47.1
Family planning	---	5.2	6.9	6.9	---	---	---	---	---
Early and periodic screening	---	---	11.7	18.2	---	---	---	---	---
Rural health clinic	---	---	0.9	3.4	---	---	---	---	---
Capitated care	---	---	---	---	49.7	53.1	54.2	58.4	61.0
Primary care case management	---	---	---	---	13.0	14.5	15.4	14.9	14.8
Personal support	---	---	---	---	10.6	11.6	11.3	11.8	11.8
Other care ²	14.4	11.9	20.3	31.5	21.4	23.1	22.9	21.8	21.6
Vendor payments³									
Amount in billions									
All payments	\$ 6.3	\$ 23.3	\$ 64.9	\$120.1	\$168.3	\$233.2	\$257.7	\$273.2	\$267.4
Percent distribution									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient hospital	40.6	27.5	25.7	21.9	14.4	13.5	13.5	12.8	13.5
Mental health facility	1.8	3.3	2.6	2.1	1.1	0.9	0.9	0.8	0.9
Mentally retarded intermediate care facility	---	8.5	11.3	8.6	5.6	4.7	4.3	4.3	4.4
Nursing facility	---	---	---	24.2	20.5	17.3	16.3	16.3	17.0
Skilled	23.3	15.8	12.4	---	---	---	---	---	---
Intermediate care	---	18.0	14.9	---	---	---	---	---	---
Physician	12.6	8.0	6.2	6.1	4.0	3.9	4.0	4.1	3.9
Dental	2.7	2.0	0.9	0.8	0.8	1.1	1.1	1.1	1.2
Other practitioner	0.9	0.8	0.6	0.8	0.4	0.4	0.4	0.4	0.4
Outpatient hospital	5.8	4.7	5.1	5.5	4.2	4.0	4.0	3.6	3.8
Clinic	0.7	1.4	2.6	3.6	3.7	3.1	3.2	3.2	3.2
Laboratory and radiological	1.3	0.5	1.1	1.0	0.8	1.0	1.0	1.1	1.1
Home health	0.4	1.4	5.2	7.8	1.9	1.9	1.8	2.0	2.2
Prescribed drugs	8.1	5.7	6.8	8.1	11.9	14.5	15.3	15.6	10.4
Family planning	---	0.3	0.4	0.4	---	---	---	---	---
Early and periodic screening	---	---	0.3	1.0	---	---	---	---	---
Rural health clinic	---	---	0.1	0.2	---	---	---	---	---
Capitated care	---	---	---	---	14.5	16.0	16.5	17.0	18.8
Primary care case management	---	---	---	---	0.1	0.1	0.2	0.1	0.1
Personal support	---	---	---	---	6.9	7.4	7.2	7.5	8.0
Other care ²	1.8	1.9	3.7	7.7	8.8	10.2	10.3	10.1	11.1

See footnotes at end of table.

Table 146 (page 2 of 2). Medicaid beneficiaries and payments, by type of service: United States, selected fiscal years 1972–2006

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Type of service	1972	1980	1990	1995	2000	2003	2004	2005	2006
Payments per beneficiary ³									
Total payment per beneficiary	\$ 358	\$ 1,079	\$ 2,568	\$ 3,311	\$ 3,936	\$ 4,487	\$ 4,639	\$ 4,764	\$ 4,654
Inpatient hospital	903	1,742	3,630	4,735	4,919	6,047	6,424	6,401	5,781
Mental health facility	2,825	11,742	18,548	29,847	17,800	20,503	19,928	19,232	17,156
Mentally retarded intermediate care facility	---	16,438	50,048	68,613	79,330	95,287	97,497	107,135	110,340
Nursing facility	---	---	---	17,424	20,220	23,882	24,475	26,096	26,531
Skilled	2,665	6,081	13,356	---	---	---	---	---	---
Intermediate care	---	5,326	11,236	---	---	---	---	---	---
Physician	65	136	235	309	356	403	426	467	456
Dental	71	99	130	160	238	305	318	327	329
Other practitioner	37	61	96	178	139	154	160	201	196
Outpatient hospital	70	113	269	397	533	596	639	615	642
Clinic	82	209	602	804	805	720	750	749	731
Laboratory and radiological	23	38	80	90	113	161	168	183	185
Home health	229	847	4,733	5,740	3,135	3,720	3,978	4,493	4,977
Prescribed drugs	46	96	256	413	975	1,293	1,411	1,510	1,030
Family planning	---	72	151	206	---	---	---	---	---
Early and periodic screening	---	---	67	177	---	---	---	---	---
Rural health clinic	---	---	154	174	---	---	---	---	---
Capitated care	---	---	---	---	1,148	1,357	1,415	1,386	1,431
Primary care case management	---	---	---	---	30	28	58	27	29
Personal support	---	---	---	---	2,543	2,864	2,946	3,041	3,160
Other care ²	44	172	465	807	1,600	1,975	2,086	2,208	2,388

--- Data not available.

. . . Category not applicable.

¹Beneficiaries include Medicaid enrollees who received services and those enrolled in managed care plans.

²Unknown services are included with Other care (0.1% of beneficiaries and 0.3% of payments in 2006).

³Medicaid payments exclude disproportionate share hospital (DSH) payments (\$13.5 billion in FY2006) and DSH mental health facility payments (\$3.7 billion in FY2006).

NOTES: 1972 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30. Starting with 1999 data, a new Medicaid data system (MSIS) was introduced. Prior to 1999, beneficiary counts exclude those individuals who only received coverage under prepaid health care and for whom no direct payments were made during the year, and payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). See [Appendix II, Medicaid; Medicaid payments](#). See [Appendix I, Medicaid Statistical Information System \(MSIS\)](#). Beneficiaries receiving more than one type of service are included in each category. For more information on types of services, see: <http://www.cms.hhs.gov/MSIS/downloads/msisddd2008.pdf>. Due to changes in data collection procedures over time, caution should be used when interpreting trends. Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Center for Medicaid and State Operations, Medicaid Statistical Information System (MSIS). Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are calculated from MSIS and unpublished data. MSIS data for 2006 were accessed on June 2, 2009.

Table 147. Department of Veterans Affairs health care expenditures and use, and persons treated, by selected characteristics: United States, selected fiscal years 1970–2008

[Data are compiled from patient records, enrollment information, and budgetary data by the Department of Veterans Affairs]

Type of expenditure and use	1970	1980	1990	1995	2000	2005 ¹	2006 ¹	2007 ¹	2008 ¹
Health care expenditures									
All expenditures ²	\$1,689	\$ 5,981	\$11,500	\$16,126	\$19,327	\$30,291	\$31,909	\$34,025	\$38,282
Amount in millions									
Percent distribution									
All services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient hospital	71.3	64.3	57.5	49.0	37.3	24.3	24.0	24.0	23.5
Outpatient care	14.0	19.1	25.3	30.2	45.7	53.4	55.2	53.5	53.2
Nursing home care	5.5	7.1	9.5	10.0	8.2	8.4	8.2	8.3	8.1
All other ³	9.1	9.6	7.7	10.8	8.8	13.9	12.6	14.2	15.2
Health care use									
Number in thousands									
Inpatient hospital discharges ^{4,5}	787	1,248	1,029	879	579	614	601	607	622
Outpatient visits ⁶	7,312	17,971	22,602	27,527	38,370	57,169	59,132	62,234	66,484
Nursing home discharges ^{5,7}	47	57	75	79	91	61	59	63	64
Inpatients ⁸									
Total	---	---	598	527	417	488	467	477	492
Percent distribution									
Total	---	---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Veterans with service-connected disability	---	---	38.9	39.3	34.4	37.6	38.8	39.9	41.1
Veterans without service-connected disability	---	---	60.3	59.9	64.7	61.5	60.2	59.1	58.0
Low income	---	---	54.8	56.2	41.7	39.9	37.9	36.9	35.4
Veterans receiving aid and attendance or housebound benefits or who are catastrophically disabled ⁹	---	---	---	---	16.0	12.1	11.6	11.3	11.1
Veterans receiving medical care subject to copayments ¹⁰	---	---	2.8	2.8	5.2	8.6	9.7	9.8	10.0
Other and unknown ¹¹	---	---	2.7	0.9	1.8	1.0	1.0	1.0	1.6
Nonveterans	---	---	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Outpatients ⁸									
Total	---	---	2,564	2,790	3,657	5,077	5,180	5,221	5,291
Percent distribution									
Total	---	---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Veterans with service-connected disability	---	---	38.3	37.5	30.7	31.6	32.4	33.8	34.7
Veterans without service-connected disability	---	---	49.8	50.5	60.8	62.7	62.0	60.8	59.7
Low income	---	---	41.1	42.2	37.6	31.8	30.3	28.9	27.2
Veterans receiving aid and attendance or housebound benefits or who are catastrophically disabled ⁹	---	---	---	---	3.8	3.5	3.4	3.5	3.5
Veterans receiving medical care subject to copayments ¹⁰	---	---	3.6	4.2	15.4	25.4	25.7	25.5	25.2
Other and unknown ¹¹	---	---	5.1	4.1	4.0	2.0	2.6	3.0	3.8
Nonveterans	---	---	11.8	12.0	8.5	5.7	5.6	5.4	5.7

--- Data not available.

¹Starting with FY2005, the cost report data is taken from a different report than earlier years. The major impact of this change was to assign more cost to outpatient care than inpatient hospital. Also in FY2005, the responsibility for residential rehabilitation programs including domiciliary care were reassigned from extended care to mental health care.

²Health care expenditures exclude construction, medical administration, and miscellaneous operating expenses at Department of Veterans Affairs headquarters.

³Includes miscellaneous benefits and services, contract hospitals, education and training, subsidies to state veterans hospitals, nursing homes and residential rehabilitation treatment programs (formerly domiciliaries), and the Civilian Health and Medical Program of the Department of Veterans Affairs.

⁴Discharges from medicine, surgery, psychiatry, rehabilitation medicine, spinal cord, and neurology units. Starting with FY2005 data, includes domiciliary care. Does not include long-term stays. One-day dialysis patients were included in 1980. Interfacility transfers were included starting with 1990 data.

⁵Until FY2004 includes Department of Veterans Affairs nursing home and residential rehabilitation treatment programs (formerly domiciliary) stays, and community nursing home care stays.

⁶Hospital outpatient care. Includes the following services: physicians, lab tests, home-based primary care, or outpatient fee-basis care.

⁷Includes state nursing home veteran patients.

⁸Individuals receiving services. Individuals with multiple discharges or visits are only counted once in the inpatient or outpatient category. The inpatient and outpatient totals are not additive because most inpatients are also treated as outpatients.

⁹Includes veterans who are receiving aid and attendance or housebound benefit and veterans who have been determined by the Department of Veterans Affairs to be catastrophically disabled.

¹⁰Includes veterans who receive medical care subject to copayments according to income level, based on financial means testing.

¹¹Includes expenditures for services for veterans who were prisoners of war, exposed to Agent Orange, and other. Prior to FY1994, veterans who reported exposure to Agent Orange were classified as having a service-connected disability. Beginning in FY1994, those veterans reporting Agent Orange exposure but not treated for it were means tested and placed in the low income or other group depending on income.

NOTES: Estimates only relate to health care use paid for by the Veteran's Administration. In 1980 and subsequent years, the FY ended September 30. Starting with FY1995 data, categories for health care expenditures and health care use were revised. In FY1999, a new data reporting system was introduced. In 2007, the veteran population was estimated at 23.8 million. Of those, 23.8 million veterans, 2.9 million had served in World War II, 2.7 million during the Korean conflict, 7.6 million during the Vietnam era, 4.6 million during the Persian Gulf War (service from August 2, 1990 to present), and 6.1 million during peacetime. Veterans may serve in more than one time period but are classified by their earliest period of service (See related Figure 3). These data are from the U.S. Department of Veterans Affairs. Data for additional years are available. See [Appendix III](#).

SOURCES: Department of Veterans Affairs (VA), Office of the Assistant Deputy Under Secretary for Health, National Patient Care Database, National Enrollment Database, budgetary data, and unpublished data. Veteran population estimates were provided by the VA's Office of the Actuary.

Table 148 (page 1 of 2). Medicare enrollees, enrollees in managed care, payment per enrollee, and short-stay hospital utilization, by state: United States, 1994 and 2007

[Data are compiled by the Centers for Medicare & Medicaid Services]

State	Short-stay hospital utilization									
	Enrollment in thousands ¹		Percent of enrollees in managed care ²		Payment per fee-for-service enrollee		Discharges per 1,000 enrollees ³		Average length of stay in days ³	
	1994	2007	1994	2007	1994	2007	1994	2007	1994	2007
United States ⁴	36,190	43,259	7.9	19.5	\$4,375	\$8,246	345	347	7.5	5.6
Alabama	633	789	0.8	14.9	4,454	7,815	413	413	7.0	5.4
Alaska	33	57	0.6	0.8	3,687	6,720	269	242	6.3	5.6
Arizona	578	841	24.8	34.6	4,442	7,576	292	299	5.9	5.0
Arkansas	416	496	0.2	10.0	3,719	7,313	366	349	7.0	5.5
California	3,582	4,369	30.0	33.3	5,219	8,332	366	291	6.1	5.8
Colorado	413	558	17.2	30.9	3,935	7,159	302	296	6.0	4.9
Connecticut	497	537	2.6	10.6	4,426	9,093	287	341	8.1	5.9
Delaware	99	136	0.2	2.9	4,712	8,197	326	348	8.1	6.1
District of Columbia	80	74	3.9	8.7	5,655	9,732	376	388	10.1	6.7
Florida	2,584	3,133	13.8	24.8	5,027	9,594	326	358	7.1	5.7
Georgia	819	1,111	0.4	10.7	4,402	7,577	378	338	6.9	5.6
Hawaii	146	189	29.8	36.1	3,069	5,292	301	207	9.1	7.5
Idaho	146	207	2.5	21.3	3,045	6,014	274	219	5.2	4.6
Illinois	1,605	1,741	5.5	8.3	4,324	8,561	374	401	7.3	5.4
Indiana	805	941	2.6	10.1	3,945	7,658	345	337	6.9	5.4
Iowa	470	500	3.1	11.6	3,080	6,619	322	293	6.6	5.2
Kansas	378	412	3.3	7.8	3,847	7,514	348	323	6.5	5.3
Kentucky	578	711	2.3	11.5	3,862	7,625	396	374	7.2	5.5
Louisiana	572	639	0.4	17.6	5,468	9,388	399	388	7.2	5.7
Maine	198	247	0.1	2.8	3,464	6,553	322	273	7.6	5.3
Maryland	596	723	1.4	6.1	4,997	9,628	362	400	7.5	5.2
Massachusetts	924	997	6.1	17.5	5,147	8,684	350	364	7.6	5.4
Michigan	1,331	1,541	0.7	15.5	4,307	8,974	328	378	7.6	5.6
Minnesota	625	729	19.6	30.1	3,394	7,396	334	343	5.7	4.8
Mississippi	391	469	0.1	7.3	4,189	8,440	423	397	7.4	5.9
Missouri	821	946	3.4	16.4	4,191	7,795	349	378	7.3	5.4
Montana	128	156	0.4	12.3	3,114	6,026	306	261	5.9	4.7
Nebraska	247	268	2.2	9.7	2,926	7,279	281	283	6.3	5.3
Nevada	187	318	19.0	29.8	4,306	7,705	291	284	7.0	5.8
New Hampshire	152	204	0.2	3.2	3,414	6,947	281	253	7.6	5.8
New Jersey	1,158	1,257	2.6	9.5	4,531	9,520	354	377	10.2	6.4
New Mexico	205	285	13.6	21.6	3,110	6,472	301	264	6.0	5.0
New York	2,601	2,841	6.2	24.4	4,855	9,128	334	369	11.2	7.1
North Carolina	1,001	1,359	0.5	14.3	3,465	7,694	314	345	8.0	5.6
North Dakota	101	105	0.6	6.6	3,218	6,029	327	264	6.3	5.0
Ohio	1,649	1,805	2.4	17.9	3,982	8,245	350	389	7.1	5.3
Oklahoma	481	565	2.5	12.1	4,098	8,191	355	392	7.0	5.4
Oregon	469	567	27.7	39.4	3,285	6,451	305	249	5.2	4.9
Pennsylvania	2,053	2,184	3.3	32.8	5,212	8,239	379	386	8.0	5.7
Rhode Island	166	175	7.0	35.0	4,148	7,544	312	339	8.1	6.0
South Carolina	497	697	0.1	10.2	3,777	7,746	319	340	8.3	6.0
South Dakota	114	129	0.1	6.5	2,952	6,081	356	260	6.1	5.1
Tennessee	754	975	0.3	17.8	4,441	7,847	375	384	7.1	5.6
Texas	2,029	2,708	4.1	14.9	4,703	9,542	333	355	7.2	5.6
Utah	182	254	9.4	22.3	3,443	6,807	238	256	5.4	4.7
Vermont	82	102	0.1	1.9	3,182	6,740	283	211	7.6	5.5
Virginia	803	1,045	1.5	9.9	3,748	6,907	348	328	7.3	5.6
Washington	676	873	12.5	19.8	3,401	6,658	269	246	5.3	4.9
West Virginia	326	367	8.3	20.1	3,798	7,557	420	402	7.1	5.6
Wisconsin	752	854	2.0	20.5	3,246	7,187	310	303	6.8	5.0
Wyoming	58	74	3.3	4.6	3,537	6,234	315	269	5.6	4.8

See footnotes at end of table.

Table 148 (page 2 of 2). Medicare enrollees, enrollees in managed care, payment per enrollee, and short-stay hospital utilization, by state: United States, 1994 and 2007

[Data are compiled by the Centers for Medicare & Medicaid Services]

¹Total persons enrolled in hospital insurance, supplementary medical insurance, or both, as of July 1. Includes fee-for-service and managed care enrollees.

²Includes enrollees in Medicare-approved managed care organizations. See [Appendix II, Managed care](#).

³Data are for fee-for-service enrollees only.

⁴Includes residents of any of the 50 states and the District of Columbia.

NOTES: Prior to 2004, enrollment and percent of enrollees in managed care were based on a 5% annual Denominator File derived from the Centers for Medicare & Medicaid Services' (CMS) Enrollment Database. Starting with 2004 data, the 100% Denominator File was used. Payments per fee-for-service enrollee are based on fee-for-service billing reimbursement for a 5% sample of Medicare beneficiaries as recorded in CMS' National Claims History File. Short-stay hospital utilization is based on the Medicare Provider Analysis and Review (MEDPAR) stay records for a 20% sample of Medicare beneficiaries. Estimates may not sum to totals because of rounding. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of Research, Development, and Information. Health Care Financing Review: Medicare and Medicaid Statistical Supplements for publication years 1996 to 2008. Available from: <http://www.cms.hhs.gov/MedicareMedicaidStatSupp/LT/list.asp>.

Table 149. Medicaid beneficiaries, beneficiaries in managed care, payments per beneficiary, and beneficiaries per 100 persons below the poverty level, by state: United States, selected fiscal years 1989–2006

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

State	Beneficiaries in thousands ¹		Percent of beneficiaries in managed care ²		Payments per beneficiary ³			Beneficiaries per 100 persons below the poverty level	
	1996	2006	1996	2006	1990	1996	2006	1989–1990	2005–2006
United States	36,118	57,459	40	65	\$2,568	\$3,369	\$4,654	75	156
Alabama	546	845	11	63	1,731	2,675	4,612	43	120
Alaska	69	121	—	—	3,562	4,027	7,915	70	198
Arizona	528	1,019	86	90	—	—	3,095	—	122
Arkansas	363	753	39	83	2,267	3,375	3,688	55	199
California	5,107	10,427	23	50	1,795	2,178	2,782	88	229
Colorado	271	625	80	95	2,705	3,815	4,288	45	122
Connecticut	329	518	61	76	4,829	6,179	7,702	167	173
Delaware	82	171	78	76	3,004	3,773	5,548	68	213
District of Columbia	143	159	55	68	2,629	4,955	8,695	86	145
Florida	1,638	3,123	64	65	2,273	2,851	4,024	55	156
Georgia	1,185	1,818	32	98	3,190	2,604	3,324	64	156
Hawaii	41	227	80	80	2,252	6,574	4,354	73	200
Idaho	119	217	37	81	2,973	3,402	4,870	36	147
Illinois	1,454	2,195	13	7	2,271	3,689	4,539	69	160
Indiana	594	999	31	72	3,859	4,130	5,016	45	137
Iowa	308	431	41	87	2,589	3,534	5,854	80	132
Kansas	251	343	32	57	2,524	3,425	5,810	71	106
Kentucky	641	900	53	92	2,089	3,014	4,597	81	136
Louisiana	778	1,149	6	71	2,247	3,154	3,462	58	157
Maine	167	—	1	67	3,248	4,321	—	88	—
Maryland	399	759	64	70	3,300	5,138	6,876	74	149
Massachusetts	715	1,167	70	60	4,622	5,285	7,423	103	163
Michigan	1,172	1,872	73	85	2,094	2,867	3,813	85	148
Minnesota	455	718	33	64	3,709	5,342	7,670	70	171
Mississippi	510	745	7	10	1,354	2,633	4,219	67	125
Missouri	636	1,136	35	100	2,002	3,171	4,198	63	174
Montana	101	115	59	67	2,793	3,478	5,545	47	92
Nebraska	191	248	27	81	2,595	3,548	5,863	61	143
Nevada	109	253	41	82	3,161	3,361	4,077	37	102
New Hampshire	100	126	16	75	5,423	5,496	6,758	53	172
New Jersey	714	1,004	43	69	4,054	5,217	7,479	83	146
New Mexico	318	516	45	65	2,120	2,757	4,523	39	149
New York	3,281	5,194	23	61	5,099	6,811	7,746	95	187
North Carolina	1,130	1,631	37	65	2,531	3,255	4,978	66	136
North Dakota	61	74	55	56	3,955	4,889	6,885	58	105
Ohio	1,478	2,021	32	40	2,566	3,729	5,857	98	144
Oklahoma	358	726	19	86	2,516	2,852	4,042	56	131
Oregon	450	516	91	90	2,283	2,915	4,406	74	122
Pennsylvania	1,168	2,089	53	86	2,449	3,993	5,459	88	147
Rhode Island	130	212	63	66	3,778	5,280	7,750	163	178
South Carolina	503	862	1	20	2,343	3,026	4,656	52	157
South Dakota	77	131	65	98	3,368	4,114	4,641	51	152
Tennessee	1,409	1,591	100	100	1,896	2,049	3,743	67	183
Texas	2,572	3,910	4	69	1,928	2,672	3,520	47	102
Utah	152	288	82	87	2,279	2,775	5,279	72	129
Vermont	102	150	—	65	2,530	2,954	5,430	108	316
Virginia	623	821	68	63	2,596	2,849	5,085	53	120
Washington	621	1,128	100	87	2,128	2,242	4,637	98	203
West Virginia	395	373	30	46	1,443	2,855	5,962	80	135
Wisconsin	434	973	32	47	3,179	4,384	4,573	95	173
Wyoming	51	69	1	—	2,036	3,571	5,930	59	132

— Quantity zero.

— — — Data not available.

¹Beneficiaries include Medicaid enrollees who received services and those enrolled in managed care plans.

²Medicaid managed care enrollment data include individuals in state health care reform programs that expand eligibility beyond traditional Medicaid eligibility standards. The managed care enrollment data include enrollees receiving comprehensive and limited benefits. Managed care enrollment as of June 30 of year shown. Starting with 2001 data, U.S. total excludes Puerto Rico and Virgin Islands.

³Medicaid payments exclude disproportionate share hospital (DSH) payments (\$13.5 billion in FY2006) and DSH mental health facility payments (\$3.7 billion in FY2006).

NOTES: Starting with 1999 data, a new Medicaid data system (MSIS) was introduced. Prior to 1999, beneficiary counts exclude individuals who only received coverage under prepaid health care and for whom no direct vendor payments were made during the year, and payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). See [Appendix II, Medicaid; Medicaid payments](#). See [Appendix I, Medicaid Statistical Information System \(MSIS\)](#). Due to changes in data collection procedures over time, caution should be used when interpreting trends. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Center for Medicaid and State Operations, Medicaid Statistical Information System (MSIS). Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are calculated from MSIS. MSIS data for 2006 were accessed on June 2, 2009. Poverty populations are available from: Department of Commerce, U.S. Census Bureau, Housing and Household Economic Statistics Division. Available from: http://pubdb3.census.gov/macro/032006/pov/new46_100125_01.htm. Managed care enrollment data from 2006 Medicaid managed care enrollment report: Summary statistics as of June 30, 2006. Available from: <http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/Downloads/mmcerc06.pdf>.

Table 150. Persons without health insurance coverage, by state: United States, average annual 1995–1997 through 2005–2007

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

State	1995–1997	1998–2000	2001–2003	2005–2007 ¹
	Percent of population			
United States	15.7	14.4	15.1	15.4
Alabama	14.0	14.2	13.3	13.9
Alaska	14.7	18.1	17.8	17.3
Arizona	23.0	19.5	17.3	19.6
Arkansas	21.3	15.3	16.6	17.5
California	20.7	19.2	18.7	18.6
Colorado	15.5	14.1	16.3	16.7
Connecticut	10.6	9.5	10.4	9.9
Delaware	14.1	11.2	10.1	11.8
District of Columbia	16.1	14.5	13.3	11.4
Florida	18.9	17.2	17.6	20.5
Georgia	17.8	15.2	16.4	17.8
Hawaii	8.3	9.8	9.9	8.3
Idaho	16.1	16.5	17.5	14.7
Illinois	11.6	13.3	14.0	13.7
Indiana	11.5	11.3	12.9	12.3
Iowa	11.6	8.2	9.5	9.4
Kansas	11.8	11.0	10.9	11.8
Kentucky	15.0	13.1	13.3	13.8
Louisiana	18.8	19.5	19.4	19.4
Maine	13.5	11.5	10.7	9.5
Maryland	13.4	11.9	13.2	13.6
Massachusetts	12.0	9.2	9.6	8.3
Michigan	10.1	10.6	11.0	10.8
Minnesota	9.1	8.2	8.2	8.5
Mississippi	19.4	15.7	17.0	18.8
Missouri	13.5	9.0	10.9	12.5
Montana	15.3	18.3	16.1	16.1
Nebraska	10.4	9.5	10.3	12.0
Nevada	17.3	17.5	18.3	17.9
New Hampshire	10.4	8.6	9.9	10.5
New Jersey	15.8	12.9	13.7	15.2
New Mexico	23.5	22.6	21.3	21.9
New York	16.6	15.3	15.5	13.4
North Carolina	15.3	13.7	16.1	16.6
North Dakota	11.1	12.1	10.5	11.1
Ohio	11.6	10.2	11.7	11.0
Oklahoma	18.0	17.7	18.7	18.2
Oregon	13.7	13.7	14.8	16.8
Pennsylvania	9.8	8.3	10.7	9.8
Rhode Island	11.0	6.9	9.3	10.3
South Carolina	16.2	13.8	13.1	16.5
South Dakota	10.2	12.0	11.0	11.2
Tennessee	14.5	10.8	11.8	13.9
Texas	24.4	22.2	24.6	24.4
Utah	12.4	13.2	13.6	15.6
Vermont	11.3	10.3	9.9	11.0
Virginia	12.9	12.9	12.5	13.6
Washington	12.4	12.8	14.3	12.1
West Virginia	15.8	15.2	14.8	14.9
Wisconsin	7.9	9.3	9.5	8.8
Wyoming	15.0	15.1	16.5	14.3

¹The 2004 (available in spreadsheet version) and 2005 data were revised in March 2007. Available from: <http://www.census.gov/hhes/www/hlthins/usemote/schedule.html>.

NOTES: Questions on health insurance coverage are asked of the previous calendar year. Persons were considered uninsured if they were not covered by any type of health insurance at any time in that year. Ninety-percent confidence intervals for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Starting with 1997 data, people with no coverage other than access to the Indian Health Service are no longer considered covered by health insurance. The effect of this change on the estimate of number uninsured is negligible. Starting with 1999 data, estimates reflect the results of follow-up verification questions which decreased the percent uninsured by 1.2 percentage points. See [Appendix I, Current Population Survey](#). Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements. DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance coverage in the United States: 2007. Current population reports, P60–235. This report and reports from earlier years are available from: <http://www.census.gov/hhes/www/hlthins/reports.html>.

Appendix Contents

Appendix I—Data Sources 445

Government Sources 446

Abortion Surveillance	446
AIDS Surveillance	446
Annual Survey of Jails and Census of Jails	447
Census of Fatal Occupational Injuries (CFOI)	448
Clinical Laboratory Improvement Amendments (CLIA) Database	449
Consumer Price Index (CPI)	450
Current Population Survey (CPS)	450
Department of Veterans Affairs National Patient Care Database, Patient Treatment File, and National Enrollment Database	452
Employee Benefits Survey—See National Compensation Survey.	
Healthcare Cost & Utilization Project (HCUP), Nationwide Inpatient Sample (NIS)	452
Medicaid Statistical Information System (MSIS)	453
Medical Expenditure Panel Survey (MEPS)	454
Medicare Administrative Data	455
Medicare Current Beneficiary Survey (MCBS)	456
Monitoring the Future Study (MTF)	457
National Ambulatory Medical Care Survey (NAMCS)	458
National Assisted Reproductive Technology (ART) Surveillance System (NASS)	459
National Compensation Survey (NCS)	459
National Health Expenditure Accounts	461
National Health and Nutrition Examination Survey (NHANES)	462
National Health Interview Survey (NHIS)	465
National Hospital Ambulatory Medical Care Survey (NHAMCS)	466
National Hospital Discharge Survey (NHDS)	467
National Immunization Survey (NIS)	468
National Medical Expenditure Survey (NMES)—See Medical Expenditure Panel Survey.	
National Notifiable Disease Surveillance System (NNDSS)	469
National Nursing Home Survey (NNHS)	470
National Prisoner Statistics (NPS)	472
National Survey of Ambulatory Surgery (NSAS)	473
National Survey on Drug Use & Health (NSDUH)	474
National Survey of Family Growth (NSFG)	475
National Vital Statistics System (NVSS)	476
Birth File	477
Mortality File	477
Multiple Cause-of-Death File	478
Linked Birth/Infant Death Data Set	479

Compressed Mortality File (CMF)	480
Occupational Employment Statistics (OES)	480
Online Survey Certification and Reporting Database (OSCAR)	481
Organ Procurement and Transplantation Network (OPTN)	482
Population Census and Population Estimates	483
Decennial Census	483
Race Data on the 1990 Census	483
Race Data on the 2000 Census	483
Modified Decennial Census Files	483
Bridged-Race Population Estimates for Census 2000	483
Postcensal Population Estimates	484
Intercensal Population Estimates	485
Sexually Transmitted Disease (STD) Surveillance	485
Surveillance, Epidemiology, and End Results Program (SEER)	486
Survey of Mental Health Organizations (SMHO)	487
Survey of Occupational Injuries and Illnesses (SOII)	487
United States Renal Data System (USRDS)	488
Youth Risk Behavior Survey (YRBS)	489

Private and Global Sources 490

American Association of Colleges of Nursing (AACN)	490
American Association of Colleges of Osteopathic Medicine (AACOM)	490
American Association of Colleges of Pharmacy (AAPC)	490
American Association of Colleges of Podiatric Medicine (AACPM)	491
American Dental Association (ADA)	491
American Hospital Association (AHA) Annual Survey of Hospitals	491
American Medical Association (AMA) Physician Masterfile	491
American Osteopathic Association (AOA)	491
Association of American Medical Colleges (AAMC)	492
Association of Schools and Colleges of Optometry (ASCO)	492
Association of Schools of Public Health (ASPH)	492
Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census	492
Dartmouth Atlas of Health Care	493
Guttmacher Institute Abortion Provider Census	493
Organisation for Economic Co-operation and Development (OECD) Health Data	494

Appendix II—Definitions and Methods	496	Education	510
Acquired immunodeficiency syndrome (AIDS)	496	Emergency department	512
Active physician—See Physician.		Emergency department or emergency room visit	512
Activities of daily living (ADLs)	496	Employer costs for employee compensation	512
Addition—See Admission.		End-stage renal disease (ESRD)	512
Admission	497	Ethnicity—See Hispanic origin.	
Age	497	Exercise—See Physical activity, leisure-time.	
Age adjustment	498	Expenditures—See Health expenditures, national; Appendix I, National Health Expenditure Accounts.	
AIDS—See Acquired immunodeficiency syndrome.		External cause of injury	513
Alcohol consumption	499	Family income	513
Any-listed diagnosis—See Diagnosis.		Federal hospital—See Hospital.	
Average annual rate of change (percent change)	500	Fee-for-service health insurance	514
Average length of stay	500	Fertility rate—See Rate: Birth and related rates.	
Basic actions difficulty	500	General hospital—See Hospital.	
Bed, health facility	500	General hospital providing separate psychiatric services—See Mental health organization.	
Binge drinking	501	Geographic region	514
Birth cohort	501	Gestation	514
Birth rate—See Rate: Birth and related rates.		Gross domestic product (GDP)	514
Birthweight	501	Health care contact	514
Blood pressure, elevated	501	Health expenditures, national	515
Body mass index (BMI)	502	Health insurance coverage	516
Cause of death	502	Health maintenance organization (HMO)	518
Cause-of-death ranking	502	Health services and supplies expenditures—See Health expenditures, national.	
Children's Health Insurance Program (CHIP)	502	Health status, respondent-assessed	518
Cholesterol, serum	503	Hearing trouble	518
Chronic condition—See Condition.		Hispanic origin	519
Cigarette smoking	503	HIV—See Human immunodeficiency virus disease.	
Civilian noninstitutionalized population; Civilian population—See Population.		Home visit	520
Community hospital—See Hospital.		Hospital	520
Comparability ratio	506	Hospital-based physician—See Physician.	
Compensation—See Employer costs for employee compensation.		Hospital day—See Days of care.	
Complex activity limitation	507	Hospital utilization	521
Computed tomography (CT) scanner	508	Human immunodeficiency virus (HIV) disease	521
Condition	508	Hypertension—See Blood pressure, elevated.	
Consumer Price Index (CPI)	508	ICD: ICD codes—See Cause of death; <i>International Classification of Diseases</i> .	
Contraception	508	Illicit drug use	522
Crude birth rate; Crude death rate—See Rate: Birth and related rates; Rate: Death and related rates.		Immunization—See Vaccination.	
Days of care	508	Incidence	522
Death rate—See Rate: Death and related rates.		Income—See Family income.	
Dental caries	508	Individual practice association (IPA)—See Health maintenance organization.	
Dental visit	509	Industry of employment	522
Diagnosis	509	Infant death	523
Diagnostic and other nonsurgical procedure—See Procedure.		Injury	523
Dietary supplement	509	Injury-related visit	523
Discharge	509	Inpatient	524
Domiciliary care home—See Long-term care facility; Nursing home.		Inpatient care—See Hospital utilization; Mental health service type.	
Drug	509		
Drug abuse—See Illicit drug use.			

Inpatient day—See Days of care.	
Instrumental activities of daily living (IADLs)	524
Insurance—See Health insurance coverage.	
Intermediate care facility—See Nursing home.	
<i>International Classification of Diseases (ICD)</i>	524
<i>International Classification of Diseases, ninth revision, Clinical Modification (ICD-9-CM)</i>	524
Late fetal death rate—See Rate: Death and related rates.	
Leading causes of death—See Cause-of-death ranking.	
Length of stay—See Average length of stay.	
Life expectancy	525
Limitation of activity	526
Long-term care facility	526
Low birthweight—See Birthweight.	
Magnetic resonance imaging (MRI) unit	527
Mammography	527
Managed care	527
Marital status	528
Maternal age—See Age.	
Maternal death	529
Maternal education—See Education.	
Maternal mortality rate—See Rate: Death and related rates.	
Medicaid	529
Medicaid payments	530
Medical specialty—See Physician specialty.	
Medicare	530
Mental health organization	530
Mental health service type	531
Metropolitan statistical area (MSA)	531
Micropolitan statistical area	532
Multiservice mental health organization—See Mental health organization.	
National Drug Code (NDC) Directory therapeutic class	532
Neonatal mortality rate—See Rate: Death and related rates.	
Nonprofit hospital—See Hospital.	
North American Industry Classification System (NAICS)—See Industry of employment.	
Notifiable disease	533
Nursing home	533
Nursing home expenditures—See Health expenditures, national.	
Obesity—See Body mass index (BMI).	
Occupancy rate	534
Office-based physician—See Physician.	
Office visit	534
Operation—See Procedure.	
Outpatient department	534
Outpatient surgery	534
Outpatient visit	535
Overweight—See Body mass index (BMI).	
Pap smear	535
Partial care organization—See Mental health organization.	
Partial care treatment—See Mental health service type.	
Patient—See Inpatient; Office visit; Outpatient visit.	
Percent change/percentage change—See Average annual rate of change (percent change).	
Perinatal mortality rate; ratio—See Rate: Death and related rates.	
Personal care home with or without nursing—See Nursing home.	
Personal health care expenditures—See Health expenditures, national.	
Physical activity, leisure-time	536
Physician	536
Physician specialty	536
Population	537
Postneonatal mortality rate—See Rate: Death and related rates.	
Poverty	537
Preferred provider organization (PPO)	538
Prenatal care	538
Prevalence	538
Primary care specialty—See Physician specialty.	
Private expenditures—See Health expenditures, national.	
Procedure	538
Proprietary hospital—See Hospital.	
Psychiatric hospital—See Hospital; Mental health organization.	
Public expenditures—See Health expenditures, national.	
Purchasing power parities (PPPs)	538
Race	539
Rate	544
Region—See Geographic region.	
Registered hospital—See Hospital.	
Registration area	546
Relative standard error (RSE)	546
Relative survival rate	546
Reporting area	546
Resident, health facility	546
Resident population—See Population.	
Residential treatment care—See Mental health service type.	
Residential treatment center for emotionally disturbed children—See Mental health organization.	
Rural—See Urbanization.	
Self-assessment of health—See Health status, respondent-assessed.	
Serious psychological distress	546
Short-stay hospital—See Hospital.	
Skilled nursing facility—See Nursing home.	
Smoker—See Cigarette smoking.	
Specialty hospital—See Hospital.	

State mental health agency	547
Substance use	547
Suicidal ideation	547
Surgery—See Outpatient surgery; Procedure.	
Surgical specialty—See Physician specialty.	
Tobacco use—See Cigarette smoking.	
Uninsured	547
Urbanization	548
Usual source of care	548
Vaccination	548
Wages and salaries—See Employer costs for employee compensation.	
Years of potential life lost (YPLL).	549

Appendix II: Tables

I. United States year 2000 standard population and age groups used to age-adjust data	497
II. United States year 2000 standard population and proportion distribution by age, for age-adjusting death rates prior to 2003	499
III. Number of live births and mother's age group used to adjust maternal mortality rates to live births: United States, 1970	500
IV. Revision of the <i>International Classification of Diseases</i> (ICD), by year of conference by which adopted and years in use in the United States	503
V. Cause-of-death codes, by applicable revision of the <i>International Classification of Diseases</i> (ICD)	504
VI. Comparability of selected causes of death between the ninth and tenth revisions of the <i>International Classification of Diseases</i> (ICD)	507
VII. Percentage of persons under 65 years of age with Medicaid or who are uninsured, by selected demographic characteristics, using Method 1 and Method 2 estimation procedures: United States, 2004	517
VIII. Codes for industries, based on the North American Industry Classification System (NAICS).	523
IX. Codes for first-listed external causes of injury, from the <i>International Classification of Diseases, ninth revision, Clinical Modification</i>	524
X. Codes for diagnostic categories, from the <i>International Classification of Diseases, ninth revision, Clinical Modification</i>	525
XI. Codes for procedure categories, from the <i>International Classification of Diseases, ninth revision, Clinical Modification</i>	526
XII. National Drug Code (NDC) therapeutic class analgesic drug recodes	533

XIII. Current cigarette smoking among persons 18 years of age and over, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995	540
XIV. Private health care coverage among persons under 65 years of age, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995	541

Appendix II: Figure

I. Census Bureau: Four Geographic Regions and Nine Divisions of the United States	515
---	-----

Appendix III: Additional Data Years Available . . . 550

Appendix I

Data Sources

Health, United States consolidates the most current data on the health of the population of the United States, the availability and use of health resources, and health care expenditures. Information was obtained from data files and published reports of many federal government, private, and global agencies and organizations. In each case, the sponsoring agency or organization collected data using its own methods and procedures. Therefore, data in this report may vary considerably with respect to source, method of collection, definitions, and reference period.

Although a detailed description and comprehensive evaluation of each data source are beyond the scope of this appendix, readers should be aware of the general strengths and weaknesses of the different data collection systems. For example, population-based surveys obtain socioeconomic data, data on family characteristics, and information on the impact of an illness, such as days lost from work or limitation of activity. These data are limited by the amount of information a respondent remembers or is willing to report. For example, a respondent may not know detailed medical information, such as a precise diagnosis or the type of procedure performed, and therefore cannot report that information. In contrast, records-based surveys, which collect data from physician and hospital records, usually contain good diagnostic information but little or no information about the socioeconomic characteristics of individuals or the impact of illnesses on individuals.

Different data collection systems may cover different populations, and understanding these differences is critical to interpreting the resulting data. Data on vital statistics and national expenditures cover the entire population. However, most data on morbidity and the utilization of health resources cover only the civilian noninstitutionalized population and thus may not include data for military personnel, who are usually young; for institutionalized people, including the prison population, who may be of any age; or for nursing home residents, who are usually older.

All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. Respondents may not remember essential information, a question may not mean the same thing to different respondents, and some institutions or individuals may not respond at all. It is not always possible to measure the magnitude of these errors or their effect on the data. Where possible, table notes describe the universe and method of data collection to assist users in evaluating data quality.

Some information is collected in more than one survey, and estimates of the same statistic may vary among surveys because of different survey methodologies, sampling frames, questionnaires, definitions, and tabulation categories. For example, cigarette use is measured by the National Health Interview Survey, the National Survey on Drug Use & Health, the Monitoring the Future Survey, and the Youth Risk Behavior Survey. These surveys use slightly different questions, cover persons of differing ages, and interview in diverse settings (at school compared with at home), so estimates will differ.

Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on a small sample size and have relatively large sampling errors. Numbers of births and deaths from the National Vital Statistics System (NVSS) represent complete counts (except for births in those states where data are based on a 50% sample for certain years). Therefore, these data are not subject to sampling error. However, when the figures are used for analytical purposes, such as the comparison of rates over a period, the number of events that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances. When the number of events is small and the probability of such an event is rare, estimates may be unstable, and considerable caution must be used in interpreting the statistics. Estimates that are unreliable because of large sampling errors or small numbers of events are noted with asterisks in selected tables, and the criteria used to designate unreliable estimates are indicated in the accompanying footnote.

In this appendix, government data sources are listed alphabetically by data set name, and private and global sources are listed separately. To the extent possible, government data systems are described using a standard format. The Overview is a brief, general statement about the purpose or objectives of the data system. The Selected Content section lists major data elements that are collected or estimated using interpolation or modeling. The Data Years section gives the years that the survey or data system has existed or been fielded. The Coverage section describes the population that the data system represents: for example, residents of the United States, the noninstitutionalized population, persons in specific population groups, or other entities that make up the survey. The Methodology section presents a short description of the methods used to collect data. Sample size and response rates are given for surveys. The Issues Affecting Interpretation section describes major changes in the data collection methodology or other factors that must be considered when analyzing trends: for example, a major survey redesign that may introduce a discontinuity in the trend. For additional information about the methodology,

data files, and history of a data source, consult the References and For More Information sections at the end of each summary.

Government Sources

Abortion Surveillance

CDC/National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

Overview: The abortion surveillance program documents the number and characteristics of women obtaining legal induced abortions, monitors unintended pregnancy, and assists efforts to identify and reduce preventable causes of morbidity and mortality associated with abortions.

Selected Content: Content includes age, race/ethnicity, marital status, previous live births, period of gestation, and previous induced abortions of women obtaining legal induced abortions.

Data Years: Between 1973 and 1997, the number of abortions is based on reporting from 52 reporting areas: 50 states, the District of Columbia, and New York City. In 1998 and 1999, CDC compiled abortion data from 48 reporting areas. Alaska, California, New Hampshire, and Oklahoma did not report, and data for these areas were not estimated. In 2000–2004, CDC compiled data from 49 reporting areas. Alaska, California, and New Hampshire did not report abortion data to CDC in 2000–2002. In 2003 and 2004, California, New Hampshire, and West Virginia did not report. In 2005, California, Louisiana, and New Hampshire did not report.

Coverage: The system includes women of all ages, including adolescents, who obtain legal induced abortions.

Methodology: Starting with 2000 data, the number and characteristics of women who obtain legal induced abortions are provided for 49 reporting areas by central health agencies, such as state health departments and the health departments of New York City and the District of Columbia, and by hospitals and other medical facilities. In general, the procedures are reported by the state in which the procedure is performed (i.e., state of occurrence). Although the total number of legal induced abortions is available for those 49 reporting areas, not all areas collect information on the characteristics of women who obtain abortions. The number of areas reporting each characteristic and the number of areas with complete data for each characteristic vary from year to year. For example, in 2005 the number of areas reporting different women's characteristics ranged from 28 areas reporting adequate data for the Office of Management and Budget (OMB) recommended race categories (accounting

for 39% of the total number of reported abortions), 30 areas reporting adequate data on Hispanic ethnicity, and 43 areas reporting marital status, to 48 areas reporting age. Data from reporting areas with more than 15% unknown for a given characteristic are excluded from the analysis of that characteristic.

Issues Affecting Interpretation: The drug mifepristone for medical abortion was approved in September 2000 by the U.S. Food and Drug Administration (FDA) for distribution and use in the United States. The percentage of medical abortions increased from 1% in 2000 to 10% in 2005. Between 1989 and 1997, the total number of abortions reported to CDC was about 10% less than the total estimated independently by The Guttmacher Institute (previously, the Alan Guttmacher Institute, or AGI), a not-for-profit organization for reproductive health research, policy analysis, and public education. Between 1998 and 2005, the total number of abortions reported to CDC was about 34% less than the total estimated by Guttmacher. The three reporting areas (the largest of which was California) that did not report abortions to CDC in 2005 accounted for 18% of all abortions tallied by Guttmacher's 2005 survey. (Also see [Appendix I, Guttmacher Institute Abortion Provider Census.](#))

Reference:

Gamble SB, Strauss LT, Parker WY, Cook DA, Zane SB, Hamdan S. Abortion surveillance—United States, 2005. In: Surveillance Summaries, 28 Nov 2008. MMWR 2008;57(SS-13):1–32. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5713a1.htm>.

For More Information: See the NCCDPHP surveillance and research website: http://www.cdc.gov/reproductivehealth/Data_Stats/index.htm.

AIDS Surveillance

CDC/National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)

Overview: Acquired immunodeficiency syndrome (AIDS) surveillance data are used to detect and monitor cases of human immunodeficiency virus (HIV) disease and AIDS in the United States, identify epidemiologic trends, identify unusual cases requiring follow-up, and inform public health efforts to prevent and control the disease.

Selected Content: Data collected on cases diagnosed with AIDS include age, sex, race/ethnicity, mode of exposure, and geographic region.

Data Years: Reports on AIDS cases are available from the beginning of the epidemic that started in 1981.

Coverage: All 50 states, the District of Columbia (D.C.), U.S. dependencies and possessions, and independent nations in free association with the United States report AIDS cases to CDC using a uniform surveillance case definition and case report form.

Methodology: AIDS surveillance is conducted by health departments in each state or territory and D.C. Although surveillance activities range from passive to active, most areas employ multifaceted active surveillance programs, which include four major reporting sources of AIDS information: hospitals and hospital-based physicians, physicians in nonhospital practice, public and private clinics, and medical record systems (death certificates, tumor registries, hospital discharge abstracts, and communicable disease reports). Using a standard confidential case report form, the health departments collect information that is then transmitted electronically without personal identifiers to CDC.

Adjustments of the estimated data on HIV infection (not AIDS) and AIDS to account for reporting delays are calculated by a maximum likelihood statistical procedure that takes into account the differences in reporting delays among exposure, geographic, racial/ethnic, age, sex, and vital status categories and is based on the assumption that reporting delays in these categories have not changed over time. AIDS surveillance data are provisional and are updated annually.

Issues Affecting Interpretation: Although completeness of reporting of AIDS cases to state and local health departments differs by geographic region and patient population, studies conducted by state and local health departments indicate that the reporting of AIDS cases in most areas of the United States is more than 85% complete. To assess trends in AIDS cases, deaths, and prevalence, it is preferable to use case data adjusted for reporting delays and presented by year of diagnosis, rather than straight counts of cases presented by year of report.

The definition of AIDS was modified in 1985 and 1987. The case definition for adults and adolescents was modified again in 1993. The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. Laboratory and diagnostic criteria for the 1987 pediatric case definition were updated in 1994. Effective January 2000, the surveillance case definition for HIV infection was revised to reflect advances in laboratory HIV virologic tests. The definition incorporates the reporting criteria for HIV infection and AIDS into a single case definition for adults and children.

Decreases in AIDS incidence and in the number of AIDS deaths, first noted in 1996, have been ascribed to the effect of new treatments, which prevent or delay the onset of AIDS

and premature death among HIV-infected persons and result in an increase in the number of persons living with HIV and AIDS. A growing number of states require confidential reporting of persons with HIV infection and participate in CDC's integrated HIV/AIDS surveillance system that compiles information on the population of persons newly diagnosed and living with HIV infection.

Reference:

CDC. HIV/AIDS surveillance report. Atlanta, GA: CDC; [published annually]. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>.

For More Information: See the NCHHSTP website: <http://www.cdc.gov/nchhstp/>.

Annual Survey of Jails and Census of Jails

Bureau of Justice Statistics

Overview: The number of jail inmates is determined by a periodic census of jails and by a survey of jails in the intervening years. The Census of Jails is taken every 5 to 6 years. In years between the census, the Annual Survey of Jails is conducted. The census and survey provide estimates of the characteristics of U.S. jails and the inmates they house.

Selected Content: Data are supplied on facility characteristics, staffing, inmate deaths, jail programs, admissions and releases, number of inmates held, and inmate characteristics. Inmate characteristics collected include number of adult and juvenile inmates, conviction status, sex, and race/ethnicity.

Data Years: The first Census of Jails was conducted in 1970; the annual survey has been conducted every year since 1982, except for years in which the Census of Jails is conducted. Data are requested for activities as of June 30 of the reference year.

Coverage: Data are collected on local jails, multijurisdiction (regional) jails, and privately contracted jails in all 50 states and the District of Columbia.

Methodology: Local jails are locally operated correctional facilities that confine persons before or after adjudication. Inmates sentenced to jails usually have a sentence of 1 year or less. The census is based on a facility list maintained by the U.S. Census Bureau. For the Annual Survey of Jails, there have been minor changes in the sample selection over time. For more recent surveys, all multijurisdictional jails (jails operated jointly by two or more jurisdictions) were included in the sample. Other jurisdictions were included automatically in the sample if their jails held juvenile inmates and had an average daily population of 250 or more inmates, or housed

only adults and had an average daily population of 500 or more, based on the most recent census. The remaining jurisdictions were stratified into two groups: jurisdictions with jails holding at least one juvenile at last census and jurisdictions with jails holding adults only. Using stratified probability sampling, jurisdictions were then selected from eight strata from the juvenile and adult jails and four strata based on the average daily population during 2005. All surveys prior to the 1994 survey were based on all jails in jurisdictions with 100 or more jail inmates and a stratified random sample of jurisdictions with an average daily population of fewer than 100 inmates.

Sample Size and Response Rate: Data were obtained by mailed and web-based survey questionnaires. After follow-up phone calls, the response rates for most years approach 100% for critical items such as rated capacity, average daily population, and number of inmates confined.

Reference:

Pastore AL, Maguire K, eds. Sourcebook of criminal justice statistics: Online. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics. Available from: <http://www.albany.edu/sourcebook/app4.html>.

For More Information: See the Bureau of Justice Statistics website: <http://www.ojp.usdoj.gov/bjs/correct.htm>.

Census of Fatal Occupational Injuries (CFOI)

Bureau of Labor Statistics (BLS)

Overview: CFOI compiles comprehensive and timely information on fatal work injuries occurring in the 50 states and the District of Columbia (D.C.), to monitor workplace safety and to inform private and public health efforts to improve workplace safety.

Selected Content: Information is collected about each workplace fatality, including occupation and other worker characteristics, equipment involved, and circumstances of the event.

Data Years: Data have been collected annually since 1992.

Coverage: The data cover all 50 states and D.C.

Methodology: CFOI is administered by BLS, in conjunction with participating state agencies, to compile counts that are as complete as possible to identify, verify, and profile fatal work injuries. Key information about each workplace fatality (occupation and other worker characteristics, equipment or machinery involved, and circumstances of the event) is obtained by cross-referencing source records. For a fatality to

be included in the census, the decedent must have been employed (that is, working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job. These criteria are generally broader than those used by federal and state agencies administering specific laws and regulations. Fatalities that occur during a person's commute to or from work are excluded from the census counts. Fatalities to volunteer workers who are exposed to the same work hazards and perform the same duties or functions as paid employees and that meet the CFOI work relationship criteria are included.

Data for CFOI are compiled from various federal, state, and local administrative sources including death certificates, workers' compensation reports and claims, reports to various regulatory agencies, medical examiner reports, police reports, and news reports. Diverse sources are used because studies have shown that no single source captures all job-related fatalities. Source documents are matched so that each fatality is counted only once. To ensure that a fatality occurred while the decedent was at work, information is verified from two or more independent source documents or from a source document and a follow-up questionnaire.

Issues Affecting Interpretation: The number of occupational fatalities and fatality rates is revised periodically. States have up to 1 year to update their initial published counts and may identify additional fatal work injuries after data collection has closed for a reference year. Fatalities initially excluded from the published count because of insufficient information to determine work relationship may subsequently be verified as work related and included in the revised counts and rates. Increases in the published counts over the last 5 years based on additional information have averaged approximately 80 fatalities per year, or less than 1.5% of the annual total.

Beginning with 2003 data, CFOI began using the North American Industry Classification System (NAICS) to classify industries. Prior to 2003, the program used the Standard Industrial Classification (SIC) system and the U.S. Census Bureau occupational classification system. Although some titles in SIC and NAICS are similar, there is limited comparability between the two systems because the industry groupings are defined differently. (See [Appendix II, Industry of employment](#).)

Reference:

Bureau of Labor Statistics. National Census of Fatal Occupational Injuries in 2007 [press release]. Washington, DC: U.S. Department of Labor; 2008 August 20.

For More Information: See the CFOI website: <http://www.bls.gov/iif/oshcfoi1.htm>.

Clinical Laboratory Improvement Amendments (CLIA) Database

Centers for Medicare & Medicaid Services (CMS)

Overview: Congress enacted the Clinical Laboratory Improvement Amendments of 1988 to ensure the quality of certain clinical laboratory testing. Under CLIA, CMS provides oversight of nonexempt and nonexcepted laboratory testing performed in the U.S. to diagnose, prevent, or treat disease or to assess human health.

Selected Content: A laboratory is defined as a facility that performs certain testing on human specimens to obtain information that can be used for the diagnosis, prevention, or treatment of any disease or for the assessment of health. CLIA regulatory requirements are based on the complexity of the testing each laboratory conducts. Tests are categorized as waived, moderate complexity, or high complexity. The Food and Drug Administration (FDA) has the authority to implement the CLIA complexity categorization provisions for commercially available tests, which include but are not limited to the following:

- Interpreting the CLIA provisions related to complexity categorization.
- Holding public workshops and meetings on CLIA complexity categorization.
- Developing and issuing implementing rules and guidance for CLIA complexity categorization.

The CMS CLIA database contains publicly accessible, high-level, aggregated descriptive data, which can be searched by year. It contains registration information for the various facilities that are tracked by CMS, including U.S. laboratories that are regulated under CLIA. This includes all laboratories that perform any patient testing for which the testing results are reported to clinicians. Laboratories are identified by certificate type, i.e., Certificate of Waiver, Certificate of Compliance, Certificate of Accreditation, Certificate of Provider-Performed Microscopy Procedures, or Certificate of Registration (a temporary standing). For those laboratories documented as holding a Certificate of Accreditation, the accrediting organization is identified (e.g., College of American Pathologists, COLA). Also included is the laboratory classification by facility type; there are more than 20 laboratory types, including hospital, independent (i.e., commercial), and physician office laboratory. The annual test volume for each laboratory is documented as well.

Data Years: CLIA was enacted in 1988 and all laboratory facilities were regulated under CLIA starting in 1992. Data are available from the CMS CLIA database starting with 1993.

Coverage: In total, CLIA covers more than 200,000 laboratory entities. Laboratories that perform testing only for forensic purposes, laboratories that do not report patient-specific results for the assessment of the health of individuals and laboratories certified under the Substance Abuse and Mental Health Services Administration (SAMHSA), the Department of Defense, or the Veterans Administration are excluded. CDC, FDA, and the Division of Laboratory Services within the Survey and Certification Group, under the Center for Medicaid and State Operations (CMSO), have the responsibility for implementing the CLIA program. Although all clinical laboratories must be properly certified to receive Medicare or Medicaid payments, CLIA has no direct Medicare or Medicaid program responsibilities.

Methodology: Laboratories that perform both moderate and highly complex tests are surveyed every 2 years by the federal CLIA program, a state survey agency under contract with CMS or private CMS-approved agencies. In states such as Washington and New York that have regulatory programs that meet or exceed the regulatory requirements contained in CLIA, where the state has applied for exemption from CLIA for its laboratories, laboratories are regulated under those state laws and are exempt from the CLIA requirements. For those laboratories that are surveyed under the CLIA program, CMS utilizes an outcome-oriented survey protocol with a quality assurance focus that evaluates the laboratories' systems and processes to ensure quality test results and reviews information that effectively identifies problems that could cause actual or potential harm to patients.

Sample Size and Response Rates: All facilities that perform laboratory testing for the diagnosis, prevention, or treatment of disease or for the assessment of human health are regulated under CLIA.

Issues Affecting Interpretation: Laboratories are surveyed on a 2-year cycle, during which time new laboratories may be opening, while others are closing or changing certificate type.

Reference:

Centers for Medicare & Medicaid Services.
CMS initiatives to improve quality of laboratory testing under the CLIA program. Baltimore, MD: Centers for Medicare & Medicaid Services; 2006. Available from:
http://www.cms.hhs.gov/CLIA/downloads/060630_Backgrounder.r1EG.pdf.

For More Information: See the CLIA website: http://www.cms.hhs.gov/CLIA/01_Overview.asp#TopOfPage; the CDC website: <http://wwwn.cdc.gov/clia/default.aspx>; and the FDA website: <http://www.fda.gov/cdrh/clia/>.

Consumer Price Index (CPI)

Bureau of Labor Statistics (BLS)

Overview: The CPI is designed to produce a monthly measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services.

Selected Content: Price indexes are available for the United States, the four census regions, size of city, cross-classifications of regions and size-classes, and 26 local areas. For other local areas, data are bimonthly or semiannual. Indexes are available for major groups of consumer expenditures (food and beverages, housing, apparel, transportation, medical care, recreation, education and communications, and other goods and services), for items within each group, and for special categories such as services. Monthly indexes are available for the United States, the four census regions, and some local areas. More detailed item indexes are available for the United States than for regions and local areas. Indexes are available for two population groups: a CPI for All Urban Consumers (CPI-U), which covers approximately 87% of the total population; and a CPI for Urban Wage Earners and Clerical Workers (CPI-W), which covers 32% of the population.

Data Years: Data are available back to 1913. Prior to 1978, the data are based on the CPI-W population.

Coverage: The all-urban index (CPI-U), introduced in 1978, covers residents of metropolitan areas and residents of urban parts of nonmetropolitan areas (about 87% of the U.S. population in 2000).

Methodology: In calculating the index, price changes for the various items in each location are averaged together with weights that represent their importance in the spending of all urban consumers. Local data are aggregated to obtain a U.S. city average.

The index measures price changes from a designated reference date, 1982–1984, which equals 100. An increase of 22%, for example, is shown as 122. Change can also be expressed in dollars as follows: the price of a base period market basket of goods and services bought by all urban consumers has risen from \$100 in 1982–1984 to \$215 in 2008.

The CPI currently reflects spending patterns based on the Survey of Consumer Expenditures from 2005–2006, the 1990 Census of Population, and the ongoing Point-of-Purchase Survey. Using an improved sample design, prices for the goods and services required to calculate the index are collected in urban areas throughout the country and from retail and service establishments. Data on rents are collected from tenants of rented housing and residents of owner-

occupied housing units. Food, fuels, and other goods and services are priced monthly in urban locations. Price information is obtained through visits or calls by trained BLS field representatives using computer-assisted telephone interviews.

Issues Affecting Interpretation: A 1987 revision changed the treatment of health insurance in the cost-weight definitions for medical care items. This change has no effect on the overall index result but provides a clearer picture of the role of health insurance in the CPI. As part of the revision, three new indexes were created by separating previously combined items; for example, eye care is separated from other professional services, and inpatient and outpatient treatment is separated from other hospital and medical care services.

Effective January 1997, the hospital index was restructured by combining the three categories—room, inpatient services, and outpatient services—into one category: hospital services. In addition, new procedures for hospital data collection identify a payor, diagnosis, and the payor's reimbursement arrangement from selected hospital bills.

References:

Bureau of Labor Statistics. BLS handbook of methods. BLS bulletin no 2490. Washington, DC: U.S. Department of Labor; 1997.

Bureau of Labor Statistics. Revising the Consumer Price Index. *Mon Labor Rev* 1996;119(12).

Ford IK, Ginsburg DH. Medical care in the Consumer Price Index. In: Cutler DM, Berndt ER, eds. *Medical care output and productivity*. Bureau of Economic Research studies in income and wealth, vol 62. Chicago, IL: University of Chicago Press; 2001. pp 203–19.

For More Information: See the BLS/CPI website: <http://www.bls.gov/cpi/>.

Current Population Survey (CPS)

Bureau of Labor Statistics (BLS) and U.S. Census Bureau

Overview: CPS provides current estimates and trends in employment, unemployment, and other characteristics of the general labor force, the population as a whole, and various population subgroups.

Selected Content: The CPS interview is divided into three basic parts: (a) household and demographic information, (b) labor force information, and (c) supplement information for months that include supplements. Comprehensive work experience information is gathered on the employment status, occupation, and industry of persons interviewed.

Estimates of poverty and health insurance coverage presented in *Health, United States* from CPS are derived from the Annual Social and Economic Supplement (ASEC), formerly called the Annual Demographic Supplement (ADS) or commonly called the March Supplement. ASEC collects data on family characteristics, household composition, marital status, migration, income from all sources, information on weeks worked, time spent looking for work or on layoff from a job, occupation and industry classification of the job held longest during the year, health insurance coverage, and receipt of noncash benefits such as food stamps, school lunch program, employer-provided group health insurance plan, employer-provided pension plan, personal health insurance, Medicaid, Medicare, CHAMPUS or military health care, and energy assistance.

Data Years: The basic CPS has been conducted since 1945, although some data were collected prior to that time. The U.S. Census Bureau has collected data in the ASEC or ADS since 1947.

Coverage: The 2000-based basic CPS sample was introduced in April 2004 and is located in 792 sample areas in 2008, with coverage in every state and the District of Columbia. The adult universe (i.e., population of marriageable age) is composed of persons 15 years of age and over in the civilian noninstitutionalized population for CPS labor force data. The sample for the March CPS supplement is expanded to include members of the Armed Forces who are living in a household that includes at least one civilian adult, as well as additional Hispanic households that are not included in the monthly labor force estimates.

Methodology: The basic CPS sample is selected from multiple frames using multiple stages of selection. Each unit is selected with a known probability to represent similar units in the universe. The sample design is state-based, with the sample in each state being independent of the others.

One person generally responds for all eligible members of a household. For those who are employed, employment information is collected on the job held in the reference week. The reference week is defined as the 7-day period, Sunday through Saturday, that includes the 12th of the month. In CPS, a person with two or more jobs is classified according to the job at which he or she worked the greatest number of hours. In general, the BLS publishes labor force data only for persons age 16 years and over because those under 16 years are substantially limited in their labor market activities by compulsory schooling and child labor laws. No upper age limit is used, and full-time students are treated the same as nonstudents.

The additional Hispanic sample is from the previous November's basic CPS sample. If a person is identified as

being of Hispanic origin from the November interview and is still residing at the same address in March, that housing unit is eligible for the March survey. This amounts to a near doubling of the Hispanic sample because there is no overlap of housing units between the basic CPS samples in November and March.

For all CPS data files, a single weight is prepared and used to compute the monthly labor force status estimates. An additional weight is prepared for the earnings universe that roughly corresponds to wage and salary workers in the two outgoing rotations. The final weight is the product of the basic weight, the adjustments for special weighting, the noninterview adjustment, the first-stage ratio adjustment factor, and the second-stage ratio adjustment factor. This final weight should be used when producing estimates from the basic CPS data. Differences in the questionnaire, sample, and data uses for the March CPS supplement result in the need for additional adjustment procedures to produce what is called the March supplement weight.

Sample Size and Response Rate: Beginning with 2001, the Children's Health Insurance Program (CHIP) sample expansion was introduced. This included an increase in the basic CPS sample to 60,000 households per month. Prior to 2001, estimates were based on 50,000 households per month. The expansion also included an additional 12,000 households that were allocated differentially across states, based on prior information of the number of uninsured children in each state, to produce statistically reliable current state data on the number of low-income children who do not have health insurance coverage. In an average month, the nonresponse rate for the basic CPS is about 7%–8%.

Issues Affecting Interpretation: Over the years, the number of income questions has expanded, questions on work experience and other characteristics have been added, and the month of interview was moved to March. In 2002, an ASEC sample increase was implemented, requiring more time for data collection. Thus, additional ASEC interviews are now taking place in February and April. However, even with this sample increase, most of the data collection still occurs in March.

In 1994, major changes were introduced that included a complete redesign of the questionnaire to include new health insurance questions and the introduction of computer-assisted interviewing for the entire survey. In addition, some of the labor force concepts and definitions were revised. Prior to the redesign, CPS data were primarily collected using a paper-and-pencil form. Beginning in 1994, population controls were based on the 1990 census and adjusted for the estimated population undercount. Starting with *Health, United States, 2003*, poverty estimates for data years 2000 and beyond were recalculated based on the expanded CHIP sample, and Census 2000-based population controls were

implemented. Starting with 2002 health insurance data, 1997 race standards were implemented that allowed respondents to report more than one race.

Reference:

U.S. Census Bureau. Current Population Survey: Design and methodology, Technical paper 66. Washington, DC: U.S. Census Bureau; 2006. Available from: <http://www.census.gov/prod/2006pubs/tp-66.pdf>.

For More Information: See the CPS website: <http://www.census.gov/cps/>.

Department of Veterans Affairs National Patient Care Database, Patient Treatment File, and National Enrollment Database

Department of Veterans Affairs (VA)

Overview: The VA compiles and analyzes multiple data sets on the health and health care of its clients and other veterans to monitor access and quality of care and to conduct program and policy evaluations.

Selected Content: The VA maintains the National Patient Care Database (NPCD), the Patient Treatment file (PTF), and the National Enrollment Database (NED).

The NPCD and PTF are nationwide systems that contain a statistical record for each episode of care provided under VA auspices, in VA and non-VA hospitals, nursing homes, VA residential rehabilitation treatment programs (formerly called domiciliaries), and VA outpatient clinics. Three major extracts are the PTF, the Patient Census file (PCF), and the NPCD.

The PTF collects data at the time of the patient's discharge on each episode of inpatient care provided to patients at VA hospitals, VA nursing homes, VA residential rehabilitation treatment programs, community nursing homes, and other non-VA facilities. The PTF record contains unique patient identifiers, dates of inpatient treatment, date of birth, state and county of residence, type of disposition, place of disposition after discharge, and *International Classification of Diseases, ninth revision, Clinical Modification* (ICD-9-CM) diagnostic and procedure or operative codes for each episode of care.

The PCF collects data on each patient remaining in a VA medical facility at midnight at the end of each quarter of the fiscal year. The census record includes information similar to that reported in the PTF record.

The NPCD collects data on each instance of medical treatment provided to a veteran in an outpatient setting. The NPCD record includes the age, unique patient identifiers,

state and county of residence, VA eligibility code, clinic(s) visited, purpose of visit, and date of visit for each episode of care.

The VA also maintains NED as the official repository of enrollment information for each veteran enrolled in the VA health care system.

Coverage: U.S. veterans who receive services within the VA medical system are included. Data are available for some nonveterans who receive care at VA facilities.

Methodology: The NPCD and PTF are the source data for the Veterans Health Administration (VHA) Medical SAS Datasets. NPCD and PTF are the VHA's centralized relational databases (a data warehouse) that receive encounter data from VHA clinical information systems. They are updated daily. Data are collected locally at each VA medical center and are transmitted electronically to the VA's Austin Automation Center for use in providing nationwide statistics, reports, and comparisons.

Issues Affecting Interpretation: The databases include users of the VA health care system. VA eligibility is a hierarchy based on service-connected disabilities, income, age, and availability of services. Therefore, different VA programs may serve populations with different sociodemographic characteristics than those served by other health care systems.

For More Information: See the VA Information Resource Center website: <http://www.virec.research.va.gov/Support/Training-NewUsersToolkit/IntroToVAData.htm>.

Employee Benefits Survey—See [National Compensation Survey](#)

Healthcare Cost & Utilization Project (HCUP), Nationwide Inpatient Sample (NIS)

Agency for Healthcare Research and Quality (AHRQ)

Overview: HCUP is a family of health care databases and related software tools developed through a federal-state-industry partnership to build a multistate health data system for health care research and decision making. The NIS, a component of HCUP, is the largest all-payer inpatient care database that is publicly available in the United States, containing data from 5 to 8 million hospital stays from about 1,000 hospitals sampled to approximate a 20% stratified sample of U.S. community hospitals.

Selected Content: The NIS contains a core set of clinical and nonclinical information found in a typical discharge abstract, including all-listed diagnoses and procedures, discharge status, patient demographics, and charges for all patients,

regardless of payer (e.g., persons covered by Medicare, Medicaid, and private insurance, as well as no insurance).

Data Years: NIS data releases are available for data years beginning in 1988. The number of states in the NIS varies by year.

Coverage: The NIS for 2006 includes 1,045 hospitals from 38 states that contain about 90% of U.S. community hospitals. The NIS contains data from 11 states from 1993–1994; 19 states from 1995–1996; 22 states from 1997–1998; 24 states in 1999; 28 states in 2000; 33 states in 2001; 35 states in 2002; and 37 states in 2003–2005.

Methodology: The NIS is designed to approximate a 20% sample of U.S. community hospitals, defined by the American Hospital Association to be all nonfederal, short-term, general, and other specialty hospitals, excluding hospital units of institutions. This universe of U.S. community hospitals is divided into strata using five hospital characteristics: ownership or control, bed size, teaching status, urban or rural location, and U.S. region. The NIS is a stratified probability sample of hospitals in the frame, with sampling probabilities proportional to the number of U.S. community hospitals in each stratum. The frame is limited by the availability of inpatient data from the data sources currently participating in HCUP. The information abstracted from hospital discharge records is translated into a uniform format to facilitate both multistate and national–state comparisons and analyses.

Sample Size and Response Rate: The 2006 NIS contains data from approximately 8 million hospital stays from roughly 1,000 hospitals; this approximates a 20% stratified sample of U.S. community hospitals. The Inpatient Core file contains data for 100% of the discharges from a sample of hospitals in participating states.

Issues Affecting Interpretation: Periodically, new data elements are added to the NIS and some are dropped. Although weights are produced to create estimates that approximate a nationally representative sample, because not all states provide data, some bias in national estimates may occur if omitted states have substantially different hospitalization patterns than states that provided data.

Reference:

Agency for Healthcare Research and Quality. Healthcare Cost & Utilization Project—HCUP: A federal–state–industry partnership in health data. Rockville, MD: Agency for Healthcare Research and Quality; 2006. Available from: http://www.hcup-us.ahrq.gov/db/nation/nis/2006NIS_INTRODUCTION.pdf.

For More Information: See the HCUP website: <http://www.hcup-us.ahrq.gov/>.

Medicaid Statistical Information System (MSIS)

Centers for Medicare & Medicaid Services (CMS)

Overview: CMS works with its state partners to collect data on each person served by the Medicaid program to monitor and evaluate access and quality of care, trends in program eligibility, characteristics of enrollees, changes in payment policy, and other program-related issues.

Selected Content: Data collected include claims for services and their associated payments for each Medicaid beneficiary by type of service. MSIS also collects information on the characteristics of every Medicaid eligible, including eligibility and demographic information.

Data Years: Selected state data are available starting in 1992. MSIS was an optional program until 1999, when the Balanced Budget Act of 1997 mandated that all states use MSIS. Data for the 50 states and the District of Columbia are available starting in 1999.

Coverage: The data include information about all individuals enrolled in the Medicaid program, the services they receive, and the payments made for those services.

Methodology: The primary data sources for Medicaid statistical data are the MSIS and CMS–64 reports.

MSIS is the basic source of state-reported eligibility and claims data on the Medicaid population, and their characteristics, utilization, and payments. Beginning in FY 1999, as a result of legislation enacted from the Balanced Budget Act of 1997, states were required to submit individual eligibility and claims data tapes to CMS quarterly through MSIS. Prior to FY 1999, states were required to submit an annual HCFA–2082 report, designed to collect aggregated statistical data on eligibles, recipients, services, and expenditures during a federal fiscal year (October 1 through September 30), or, at state option, to submit eligibility data and claims through MSIS. The claims data reflect bills adjudicated or processed during the year, rather than services used during the year.

CMS–64 is a product of the financial budget and grant system. CMS–64 is a statement of expenditures for the Medicaid program that states submit to CMS 30 days after each quarter. The report is an accounting statement of actual expenditures made by the states for which they are entitled to receive federal reimbursement under Title XIX for that quarter. The amount claimed on CMS–64 is a summary of expenditures derived from source documents such as invoices, cost reports, and eligibility records.

CMS-64 shows the disposition of Medicaid grant funds for the quarter being reported and for previous years, the recoupments made or refunds received, and income earned on grant funds. The data on CMS-64 are used to reconcile the monetary advance made on the basis of states' funding estimates filed prior to the beginning of the quarter on CMS-37. As such, CMS-64 is the primary source for making adjustments for any identified overpayments and underpayments to the states. Also incorporated into this process are disallowance actions forwarded from other federal financial adjustments. Finally, CMS-64 provides information that forms the basis for a series of Medicaid financial reports and budget analyses. Also included are third-party liability (TPL) collections tables. TPL refers to the legal obligation of certain health care sources to pay the medical claims of Medicaid recipients before Medicaid pays these claims. Medicaid pays only after the TPL sources have met their legal obligation to pay.

Issues Affecting Interpretation: *Health, United States* Medicaid tables are based on MSIS data. Users of Medicaid data may note apparent inconsistencies in Medicaid data that are primarily due to the difference in information captured in MSIS compared with CMS-64 reports. The most substantive difference is due to payments made to disproportionate share hospitals. Payments to disproportionate share hospitals do not appear in MSIS because states reimburse these hospitals directly and there is no fee-for-service billing. Other, less significant, differences between MSIS and CMS-64 occur because adjudicated claims data are used in MSIS versus actual payments reflected in CMS-64. Differences also may occur because of internal state practices for capturing and reporting these data through two separate systems. Finally, national totals for CMS-64 are different because they include other jurisdictions, such as the Northern Mariana Islands and American Samoa. Starting with 1999 data, MSIS excluded data from Puerto Rico and the U.S. Virgin Islands, which accounted for approximately 1 million eligibles and \$250 million in Medicaid payments.

For More Information: See the CMS websites: <http://www.cms.hhs.gov/home/medicaid.asp> and <http://www.cms.hhs.gov/msis/>; and the Research Data Assistance Center (ResDAC) website: http://www.resdac.umn.edu/medicaid/data_available.asp. (Also see [Appendix II, Medicaid](#).)

Medical Expenditure Panel Survey (MEPS)

Agency for Healthcare Research and Quality (AHRQ)

Overview: MEPS produces nationally representative estimates of health care use, expenditures, sources of payment, insurance coverage, and quality of care for the U.S. civilian noninstitutionalized population.

Selected Content: MEPS data in *Health, United States* include total health care expenses and prescribed medicine expenses, presented by sociodemographic characteristics, type of health insurance, and sources of payment.

Data Years: The 1977 National Medical Care Expenditure Survey and the 1987 National Medical Expenditure Survey (NMES) are earlier versions of this survey. Since 1996, MEPS has been conducted on an annual basis.

Coverage: The U.S. civilian noninstitutionalized population is the primary population represented. The 1987 and 1996 surveys also had an institutionalized population component.

Methodology: MEPS is a national probability survey conducted on an annual basis since 1996. The panel design of the survey features several rounds of interviewing covering two full calendar years. MEPS consists of three components: the Household Component (HC), the Medical Provider Component (MPC), and the Insurance Component (IC).

The HC is a nationally representative survey of the civilian noninstitutionalized population drawn from a subsample of households that participated in the prior year's National Health Interview Survey conducted by NCHS. Missing expenditure data are imputed using data collected in the MPC whenever possible.

The MPC collects data from hospitals, physicians, home health care providers, and pharmacies that were reported in the HC as providing care to MEPS sample persons. Data are collected in MPC to improve the accuracy of expenditure estimates derived solely from the HC. The MPC is particularly useful in obtaining expenditure information for persons enrolled in managed care plans and Medicaid recipients. Sample sizes for the MPC vary from year to year depending on the HC sample size and the MPC sampling rates for providers.

The IC consists of two subcomponent samples: a household sample and a list sample. The household sample collects detailed information from employers on the health insurance held by and offered to respondents to the MEPS-HC. The list sample collects data on the types and costs of workplace health insurance from a total of about 40,000 business establishments and governments each year.

MEPS updates the 1987 NMES, which consists of two components: the Household Survey (HS) and the Medical Provider Survey (MPS). The NMES–HS component was designed to provide nationally representative estimates of health insurance status, health insurance coverage, and health care use for the U.S. civilian noninstitutionalized population for the calendar year 1987. Data from the NMES–MPS component were used in conjunction with HS data to produce estimates of health care expenditures. The NMES–HS consisted of four rounds of household interviews. Income was collected in a special supplement administered early in 1988. Events under the scope of the NMES–MPS included medical services provided by or under the direction of a physician, all hospital events, and home health care. The sample of events included in the NMES–MPS was all events for persons covered by Medicaid and for a 25% sample of NMES–HS respondents. Missing expenditure data were imputed.

Sample Size and Response Rate: For the MEPS first core household interview, 17,500 households were selected. The sample sizes for the MEPS–HC are approximately 10,000 families in 1996 and 1998–2000, 13,500 families in 1997 and 2001, and 13,000–15,000 families annually beginning in 2002. The full-year household core response rate has generally been about 66%. The 12-month joint core questionnaire/health questionnaire/access supplement response rate for the HC of NMES was 80%.

Issues Affecting Interpretation: The 1987 estimates are based on the NMES, and 1996 and later years estimates are based on MEPS. Because expenditures in NMES were based primarily on charges, whereas those for MEPS were based on payments, data for NMES were adjusted to be more comparable to MEPS using estimated charge-to-payment ratios for 1987. For a detailed explanation of this adjustment, see Zuvekas and Cohen (2002).

References:

Hahn B, Lefkowitz D. Annual expenses and sources of payment for health care services. National Medical Expenditure Survey research findings no 14; AHRQ pub no 93–0007. Rockville, MD: Agency for Healthcare Research and Quality; 1992.

Cohen SB. Sample design of the 1997 Medical Expenditure Panel Survey Household Component. MEPS methodology report no 11; AHRQ pub no 01–0001. Rockville MD: Agency for Healthcare Research and Quality; 2000.

Zuvekas SH, Cohen JW. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86.

For More Information: See the MEPS website:
<http://www.meps.ahrq.gov/mepsweb/>.

Medicare Administrative Data

Centers for Medicare & Medicaid Services (CMS)

Overview: CMS collects and synthesizes Medicare enrollment, spending, and claims data to monitor and evaluate access to and quality of care, trends in utilization, changes in payment policy, and other program-related issues.

Selected Content: Data include claims information for services furnished to Medicare beneficiaries and Medicare enrollment data. Claims data include type of service, procedures, diagnoses, dates of service, charge amounts, and payment amounts. Enrollment data include date of birth, sex, race or ethnicity, and reason for entitlement.

Data Years: Some data files are available as far back as 1987, but CMS no longer provides technical support for files with data prior to 1991.

Coverage: Enrollment data are for all persons enrolled in the Medicare program. Claims data include data for Medicare beneficiaries who filed claims.

Methodology: The claims and utilization data files contain extensive utilization information at various levels of summarization for a variety of providers and services. There are many types and levels of these files: the National Claims History (NCH) files, the Standard Analytic files (SAFs), Medicare Provider and Analysis Review (MEDPAR) files, Medicare enrollment files, and various other files.

The NCH 100% Nearline file contains all institutional and noninstitutional claims and provides records of every Medicare claim submitted, including adjustment claims. SAFs contain final action claims data in which all adjustments have been resolved. These files contain information collected by Medicare to pay for health care services provided to a Medicare beneficiary. SAFs are available for each institutional (inpatient, outpatient, skilled nursing facility, hospice, or home health agency) and noninstitutional (physician and durable medical equipment providers) claim type. The record unit of SAFs is the claim (some episodes of care may have more than one claim). SAFs include the Inpatient SAF, the Skilled Nursing Facility SAF, the Outpatient SAF, the Home Health Agency SAF, the Hospice SAF, the Durable Medical Equipment SAF, and the Physician/Supplier SAF.

MEDPAR files contain inpatient hospital and skilled nursing facility (SNF) final action stay records. Each MEDPAR record represents a stay in an inpatient hospital or SNF. An inpatient stay record summarizes all services rendered to a beneficiary from the time of admission to a facility through discharge. Each MEDPAR record may represent one claim or multiple claims, depending on the length of a beneficiary's stay and the amount of inpatient services used throughout the stay.

The Denominator file contains demographic and enrollment information about each beneficiary enrolled in Medicare during a calendar year. The information in the Denominator file is frozen in March of the following calendar year. Some of the information contained in this file includes the beneficiary unique identifier, state and county codes, ZIP code, date of birth, date of death, sex, race, age, monthly entitlement indicators (for Medicare Part A, Medicare Part B, or Part A and Part B), reasons for entitlement, state buy-in indicators, and monthly managed care indicators (yes/no). The Denominator file is used to determine beneficiary demographic characteristics, entitlement, and beneficiary participation in Medicare Managed Care Organizations (MCOs).

The Vital Status file contains demographic information about each beneficiary ever entitled to Medicare. Some of the information contained in this file includes the beneficiary unique identifier, state and county codes, ZIP code, date of birth, date of death, sex, race, and age. Often the Vital Status file is used to obtain recent death information for a cohort of Medicare beneficiaries.

The Group Health Plan (GHP) master file contains data on beneficiaries who are currently enrolled, or have ever been enrolled, in an MCO under contract with CMS. Each record represents one beneficiary, and each beneficiary has one record. Some of the information contained in this file includes the beneficiary unique identifier, date of birth, date of death, state and county, and managed care enrollment information such as dates of membership and MCO contract number. The GHP master file is used to identify the exact MCO in which beneficiaries were enrolled.

Issues Affecting Interpretation: Because Medicare managed care programs may not file claims, files based only on claims data will exclude care for persons enrolled in Medicare managed care programs. In addition, to maintain a manageable file size, some files are based on a sample of enrollees, rather than on all Medicare enrollees. Coding changes and the interpretation of Medicare coverage rules have also changed over the life of the Medicare program.

For More Information: See the CMS Research Data Assistance Center (ResDAC) website: <http://www.resdac.umn.edu/medicare/index.asp>; and the CMS website: <http://www.cms.hhs.gov/home/medicare.asp>. (Also see [Appendix II, Medicare.](#))

Medicare Current Beneficiary Survey (MCBS)

Centers for Medicare & Medicaid Services (CMS)

Overview: MCBS produces nationally representative estimates of health status, health care use and expenditures, health insurance coverage, and socioeconomic and demographic characteristics of Medicare beneficiaries. It is used to estimate expenditures and sources of payment for all services used by Medicare beneficiaries, including copayments, deductibles, and noncovered services; to ascertain all types of health insurance coverage and relate coverage to sources of payment; and to trace processes over time, such as changes in health status and the effects of program changes.

Selected Content: The survey collects data on the utilization of health services, health and functional status, health care expenditures, and health insurance and beneficiary information (such as income, living arrangement, family assistance, and quality of life).

Data Years: The first round of interviewing was conducted from September through December 1991, and the survey has been in the field continuously since then. The data are designed to support both cross-sectional and longitudinal analyses.

Coverage: MCBS is a continuous survey of a nationally representative sample of aged, institutionalized, and disabled Medicare beneficiaries.

Methodology: The overlapping panel design of the survey allows each sample person to be interviewed three times a year for 4 years, whether he or she resides in the community or a facility or moves between the two settings, using the version of the questionnaire appropriate to the setting. Sample persons are interviewed using computer-assisted personal interviewing (CAPI) survey instruments. Because residents of long-term care facilities often are in poor health, information about institutionalized residents is collected from proxy respondents such as nurses and other primary caregivers affiliated with the facility. The sample is selected from the Medicare enrollment files, with oversampling among disabled persons under age 65 years and among persons 80 years of age and over.

MCBS has two components: the Cost and Use file and the Access to Care file. Medicare claims are linked to survey-reported events to produce the Cost and Use file, which provides complete expenditure and source of payment data on all health care services, including those not covered by Medicare. The Access to Care file contains information on beneficiaries' access to health care, satisfaction with care, and usual source of care. The sample for this file represents

the always enrolled population—those who participated in the Medicare program for the entire year. In contrast, the Cost and Use file represents the ever enrolled population, including those who entered Medicare and those who died during the year.

Sample Size and Response Rate: Each fall, about one-third of the sample is retired and roughly 6,000 new sample persons are included in the survey; the exact number chosen is based on projections of target samples of 12,000 persons with 3 years of cost and use information distributed appropriately across the sample cells. In the community, response rates for initial interviews range in the mid- to high 80s; once respondents have completed the first interview, their participation in subsequent rounds is 95% or more. In recent rounds, data have been collected from approximately 16,000 beneficiaries. Roughly 90% of the sample is made up of persons who live in the community, with the remaining persons living in long-term care facilities. Response rates for facility interviews approach 100%.

Issues Affecting Interpretation: Because only Medicare enrollees are included in the survey, the survey excludes a small proportion of persons age 65 years and over who are not enrolled in Medicare. This should be noted when using the MCBS to make estimates of the entire population age 65 years and over in the United States.

References:

Adler GS. A profile of the Medicare Current Beneficiary Survey. *Health Care Financ Rev* 1994;15(4):153–63.

Lo A, Chu A, Apodaca R. Redesign of the Medicare Current Beneficiary Survey sample. Rockville, MD: Westat, Inc.; 2003. Available from: <http://www.amstat.org/sections/srms/proceedings/y2002/Files/JSM2002-000662.pdf>.

For More Information: See the MCBS website: <http://www.cms.hhs.gov/MCBS>.

Monitoring the Future Study (MTF)

National Institute on Drug Abuse (NIDA)

Overview: MTF is an ongoing study of the behaviors, attitudes, and values of U.S. secondary school students, college students, and young adults.

Selected Content: Data collected include lifetime, annual, and 30-day prevalence of use of specific illegal drugs and substances, inhalants, tobacco, and alcohol. Data are also collected on usage levels, frequency of use, perceived risks associated with use, opinions about whether use is approved or disapproved by others, and opinions about availability of the substances.

Data Years: MTF has been conducted annually since 1975, initially with high school seniors. Ongoing panel studies of representative samples from each graduating class have been conducted by mail since 1976, and annual surveys of 8th and 10th graders were initiated in 1991.

Coverage: MTF surveys a sample of high school seniors, 10th graders, and 8th graders selected to be representative of all seniors, 10th graders, and 8th graders in public and private high schools in the continental United States.

Methodology: The survey design is a multistage random sample, with stage 1 being selection of particular geographic areas, stage 2 being selection of one or more schools in each area, and stage 3 being selection of classes within each school. Data are collected using self-administered questionnaires conducted in the classroom by representatives of the Institute for Social Research. Dropouts and students who are absent on the day of the survey are excluded. Recognizing that the dropout population is at higher risk for drug use, this survey was expanded in 1991 to include similar nationally representative samples of 8th and 10th graders, which have lower dropout rates than seniors and include future high-risk 12th grade dropouts. For more information on MTF adjustments for absentees and dropouts, see:

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future: National survey results on drug use, 1975–2007, vol I: Secondary school students 2007, Appendix A. NIH pub no 08–6418A. Bethesda, MD: National Institute on Drug Abuse; 2008. Available from: http://www.monitoringthefuture.org/pubs/monographs/vol1_2007.pdf.

Sample Size and Response Rates: In 2008, a total of 46,348 students in 8th, 10th, and 12th grades in 386 secondary schools were surveyed. The annual senior samples comprised 14,577 seniors in 120 public and private high schools nationwide. The 10th-grade samples involved 15,518 students in 122 schools, and the 8th-grade samples had 16,253 students in 144 schools. Response rates were 79%, 88%, and 90% for 12th, 10th, and 8th graders, respectively, and have been relatively constant across time. Absentees constitute virtually all of the nonresponding students.

Issues Affecting Interpretation: Estimates of substance use among youth based on the National Survey on Drug Use & Health (NSDUH) are not directly comparable with estimates based on MTF and the Youth Risk Behavior Surveillance System (YRBSS). In addition to the fact that MTF excludes dropouts and absentees, rates are not directly comparable across these surveys because of differences in populations covered, sample design, questionnaires, and interview setting. NSDUH collects data in residences, whereas MTF and YRBSS collect data in school classrooms. In addition,

NSDUH estimates are tabulated by age, whereas MTF and YRBSS estimates are tabulated by grade, representing different ages as well as different populations.

References:

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future: National results on adolescent drug use. Overview of key findings, 2007. NIH pub no 08-6418. Bethesda, MD: National Institute on Drug Abuse; 2008. Available from: <http://www.monitoringthefuture.org/pubs/monographs/overview2007.pdf>.

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future: National survey results on drug use, 1975-2007, vol I: Secondary school students 2007. NIH pub no 08-6418A. Bethesda, MD: National Institute on Drug Abuse; 2008. Available from: http://www.monitoringthefuture.org/pubs/monographs/vol1_2007.pdf.

Cowan CD. Coverage, sample design, and weighting in three federal surveys. *J Drug Issues* 2001;31(3):599-614.

For More Information: See the NIDA website: <http://www.nida.nih.gov/Infofax/HSYouthtrends.html>; and the MTF website: <http://www.monitoringthefuture.org/>.

National Ambulatory Medical Care Survey (NAMCS)

CDC/NCHS

Overview: NAMCS is a national survey designed to provide information about the provision and use of medical care services in office-based physician practices in the United States.

Selected Content: Data are collected from medical records on type of providers seen; reason for visit; diagnoses; drugs ordered, provided, or continued; and selected procedures and tests ordered or performed during the visit. Patient data include age, sex, race, and expected source of payment. Data are also collected on selected characteristics of physician practices.

Data Years: NAMCS, which began in 1973, was conducted annually until 1981, once in 1985, and resumed an annual schedule in 1989.

Coverage: The scope of the survey covers patient encounters in the offices of nonfederally employed physicians classified by the American Medical Association (AMA) or American Osteopathic Association (AOA) as office-based, patient care physicians. Patient encounters with physicians engaged in

prepaid practices—health maintenance organizations (HMOs), independent practice organizations (IPAs), and other prepaid practices—are included in NAMCS. Excluded are visits to hospital-based physicians; visits to specialists in anesthesiology, pathology, and radiology; and visits to physicians who are principally engaged in teaching, research, or administration. Telephone contacts and nonoffice visits are also excluded.

Methodology: A multistage probability design is employed. The first-stage sample consisted of 84 primary sampling units (PSUs) in 1985, and beginning in 1989, 112 PSUs, which were selected from about 1,900 such units into which the United States had been divided. In each sample PSU, a sample of practicing nonfederal office-based physicians is selected from master files maintained by the AMA and the AOA. The final stage involves systematic random samples of office visits during randomly assigned 7-day reporting periods. In 1985, the survey excluded Alaska and Hawaii. Starting in 1989, the survey included all 50 states and the District of Columbia.

The U.S. Census Bureau acts as the data collection agent for NAMCS. Screening interviews are conducted by Census field representatives to obtain information about physicians' office-based practices and to ensure that the practice is within the scope of the survey. Field representatives visit eligible physicians prior to their participation in the survey to provide them with survey materials and instruct them on how to sample patient visits and complete patient record forms. Participants are asked to complete forms for a systematic random sample of approximately 30 office visits occurring during a randomly assigned 1-week period, but increasingly patient record forms are abstracted by field representatives.

Sample data are weighted to produce national estimates. The estimation procedure used in NAMCS has three basic components: inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment to fixed totals.

Sample Size and Response Rate: In 2003, a sample of 3,000 physicians was selected; 2,007 were in scope and 1,407 participated for a response rate of 67%. Data were provided for 25,288 visits. In 2004, a sample of 3,000 physicians was selected; 1,961 were in scope and 1,372 participated for a response rate of 70%. Data were provided for 25,286 visits. In 2005, a sample of 3,000 physicians was selected; 1,936 were in scope and 1,281 participated for a response rate of 66%. Data were provided for 25,665 visits. In 2006, a sample of 3,500 physicians was selected; 2,268 were in scope and 1,455 participated for a response rate of 64%. Data were provided for 29,392 visits. In 2007, a sample of 3,540 physicians was selected; 2,399 were in scope and 1,568

participated for a response rate of 65.4%. Data were provided for 32,778 visits.

Issues Affecting Interpretation: The NAMCS patient record form is modified approximately every 2–4 years to reflect changes in physician practice characteristics, patterns of care, and technological innovations. Examples of recent changes include increasing the number of drugs recorded on the patient record form and adding checkboxes for specific tests or procedures performed. Sample sizes vary by survey year. For some years it is suggested that analysts combine two or more years of data if they wish to examine relatively rare populations or events. Starting with *Health, United States, 2005*, data for survey years 2001–2002 were revised to be consistent with the weighting scheme introduced in the 2003 NAMCS data. For more information on the new weighting scheme, see the [National Ambulatory Medical Care Survey: 2003 Summary](#).

Reference:

Hing E, Cherry DK, Woodwell DA. National Ambulatory Medical Care Survey: 2003 summary. Advance data from vital and health statistics; no 365. Hyattsville, MD: NCHS; 2005. Available from: <http://www.cdc.gov/nchs/data/ad/ad365.pdf>.

For More Information: See the Ambulatory Health Care Data website: <http://www.cdc.gov/nchs/ahcd.htm>.

National Assisted Reproductive Technology (ART) Surveillance System (NASS)

CDC/National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), Division of Reproductive Health (DRH)

Overview: NASS is a web-based data collection system that documents ART procedures initiated in a given reporting year by fertility clinics across the United States. The data are used to provide an in-depth picture of the number and outcome of ART cycles performed in U.S. fertility clinics. The data also provide information on factors that could contribute to, or are associated with, a successful ART treatment—the delivery of a live-born infant.

Selected Content: Data collected on ART cycles initiated in fertility clinics throughout the U.S. include patient age, patient infertility diagnosis, ART treatments pertaining to the ART cycle, type of ART cycle, patient age, and cycle success rates. Summary statistics are reported nationally and for each reporting clinic.

Data Years: Reports on ART are available from cycles initiated in 1996.

Coverage: All fertility clinics in the United States and its territories that are in operation through the reporting year are required to report ART data to CDC. In 2006, 48 states, the District of Columbia, and Puerto Rico had fertility clinics. Approximately 90% of clinics that provide ART services throughout the United States are included in CDC's annual ART report. Clinics or practitioners that do not report as required by the Fertility Clinic Success Rate and Certification Act of 1992 may not have been in operation throughout the reporting year.

Methodology: Fertility clinics electronically enter or import data without personal identifiers into NASS for each ART procedure initiated and verify data on the outcomes of all ART cycles.

Issues Affecting Interpretation: The number of clinics reporting to NASS varies every year. A comparison of clinic success rates may not be meaningful because patient medical characteristics and treatment approaches vary from clinic to clinic. The number of ART cycles reported does not include cycles in which a new treatment procedure was being evaluated.

Reference:

CDC, American Society for Reproductive Medicine, Society for Assisted Reproductive Technology. 2006 Assisted reproductive technology success rates: National summary and fertility clinic reports. Atlanta, GA: CDC; 2008. Available from: <http://www.cdc.gov/ART/ART2006/508PDF/2006ART.pdf>.

For More Information: See the Division of Reproductive Health, ART website: <http://www.cdc.gov/ART/index.htm>.

National Compensation Survey (NCS)

Bureau of Labor Statistics (BLS)

Overview: NCS provides comprehensive measures of occupational earnings, compensation cost trends, benefit incidence, and detailed plan provisions.

Selected Content: Detailed occupational earnings are collected for metropolitan and nonmetropolitan areas, for broad geographic regions, and on a national basis. The Employment Cost Index (ECI) and Employer Costs for Employee Compensation (ECEC) are compensation measures derived from the NCS. ECI measures changes in labor costs. Average hourly employer costs for employee compensation are presented in ECEC. National benefits data are presented for five broad occupational groupings: professional and management, sales, service, natural resources and construction, and production and transportation. Data are also

available by goods- and service-producing occupations, union affiliation, and establishment size.

Data Years: NCS replaces three existing BLS surveys: the ECI, the Occupational Compensation Survey Program (OCSP), and the Employee Benefits Survey (EBS). ECI and EBS were fully integrated into NCS in 1999. Prior to 1999, EBS was collected for small private establishments (those employing fewer than 100 workers) and from state and local governments (regardless of employment size). In odd-numbered years, data were collected for medium and large private establishments (those employing 100 workers or more). ECI was created in the mid-1970s, and EBS was added to an existing data collection effort, the National Pay Survey, in the late 1970s. ECEC was developed in 1987.

Coverage: NCS provides information for the Nation, for 81 metropolitan areas and 73 nonmetropolitan counties representing the United States, and for the nine census divisions (although not all areas have information for all occupations). It includes both full- and part-time workers who are paid a wage or salary and includes data for the civilian economy, including both private industry and state and local government. It excludes agriculture, fishing and forestry industries, private household workers, and the federal government.

Methodology: NCS is conducted quarterly by the BLS' Office of Compensation and Working Conditions. The sample is selected using a three-stage design. The first stage involves the selection of areas for the state and local government sample and the private industry sample. In the second stage, establishments are selected systematically, with the probability of selection proportionate to their relative employment size within the industry. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. The third stage of sampling is a probability sample of occupations within a sampled establishment. This step is performed by the BLS field economist during an interview with the respondent establishment in which selection of an occupation is based on probability of selection proportionate to employment in the establishment and each occupation is classified under its corresponding major occupational group.

Data collection is conducted by the BLS field economists. Data are gathered from each establishment on the primary business activity of the establishment; types of occupations; number of employees; wages, salaries, and benefits; hours of work; and duties and responsibilities. Wage data obtained by occupation and work level allows NCS to publish occupational wage statistics for localities, census divisions, and the Nation.

Sample: The sample consists of approximately 150 areas that represent the Nation's 361 metropolitan statistical

areas and 573 micropolitan statistical areas, as defined by the Office of Management and Budget (OMB), and the remaining portions of the 50 states. NCS is in the midst of a 6-year transition from the OMB's December 1993 area definitions to the December 2003 area definitions. During this transition, NCS is surveying additional areas as new areas are being phased into the sample and others are being phased out. For more information, see: <http://www.bls.gov/ncs/ncswage2007.htm#AppendixA>.

Issues Affecting Interpretation: Because the NCS merges separate surveys, trend analyses prior to 2000 should be interpreted with care. The industrial coverage, establishment size coverage, and geographic coverage for EBS have changed since 1990. All surveys conducted from 1979–1989 excluded part-time employees, as well as establishments in Alaska and Hawaii. The surveys conducted from 1979–1986 covered only medium and large private establishments and excluded most of the service industries. Establishments that employed at least 50, 100, or 250 workers (depending on the industry) were included. The survey conducted in 1987 consisted of state and local governments with 50 or more employees. The surveys carried out in 1988 and 1989 included all private-sector establishments that employed 100 or more people.

ECEC switched to new industry and occupation classification systems with the release of the March 2004 data. The North American Industry Classification System (NAICS) is now used to classify industries, and the 2000 Standard Occupational Classification (SOC) system is used to classify occupations. ECEC data based on the 1987 Standard Industrial Classification System and the 1990 Occupational Classification System are no longer produced, and data classified under these coding schemes are not comparable to data classified under NAICS or SOC. The 2007 NAICS is gradually replacing the 2002 NAICS, but this does not affect trends. Beginning with the March 2004 quarter, historical data are available based on NAICS and the 2000 SOC. The historical tables are available from: <http://www.bls.gov/ncs/ect/home.htm> or upon request from BLS. For more detailed information on NAICS and SOC, including background definitions and implementation schedules, see the BLS websites: <http://www.bls.gov/bls/naics.htm> and <http://www.bls.gov/soc/home.htm>.

The state and local government sample, which is replaced less frequently than the private industry sample, was replaced in its entirety in September 2007. As a result of this replacement, the number of state and local government occupations and establishments increased substantially. The private industry sample is rotated over approximately 5 years, which makes the sample more representative of the economy

and reduces respondent burden. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December. The sample is replaced on a cross-area, cross-industry basis.

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For More Information: See the NCS website: <http://www.bls.gov/ncs/>.

National Health Expenditure Accounts

Centers for Medicare & Medicaid Services (CMS)

Overview: National Health Expenditure Accounts provide estimates of how much money is spent on different types of health care-related services and programs in the United States.

Selected Content: National health expenditures measure spending for health care in the United States by type of service delivered (e.g., hospital care, physician services, nursing home care) and source of funding for those services (e.g., private health insurance, Medicare, Medicaid, out-of-pocket spending).

Data Years: Expenditure estimates are available starting from 1960 in data files or in published articles.

Methodology: The American Hospital Association data on hospital finances and the U.S. Census Bureau's Services Annual Survey (SAS), are the primary sources for estimates relating to hospital care. These are supplemented by data on federal hospitals. The salaries of physicians and dentists on the staffs of hospitals, hospital outpatient clinics, hospital-based home health agencies, and nursing home care provided in the hospital setting are also considered to be components of hospital care. Expenditures for home health care and for services of health professionals (i.e., doctors, chiropractors, private duty nurses, therapists, and podiatrists)

are estimated primarily by using a combination of data from SAS and the quinquennial Census of Service Industries.

The estimates of retail spending for prescription drugs are based on household and industry data on prescription drug transactions. Expenditures for other medical nondurables and for vision products and other medical durables purchased in retail outlets are based on estimates of personal consumption expenditures prepared by the U.S. Department of Commerce's Bureau of Economic Analysis, U.S. Bureau of Labor Statistics/Consumer Expenditure Survey; the 1987 National Medical Expenditure Survey and the Medical Expenditure Panel Surveys conducted by the Agency for Healthcare Research and Quality; and spending by Medicare and Medicaid. Those durable and nondurable products provided to inpatients in hospitals or nursing homes, and those provided by licensed professionals or through home health agencies are excluded here but are included with the expenditure estimates of the provider service category.

Nursing home expenditures cover care rendered in establishments providing inpatient nursing and health-related personal care through active treatment programs for medical and health-related conditions. These establishments cover skilled nursing and intermediate care facilities, including those for the mentally retarded. Spending estimates are based primarily on data from SAS and the quinquennial Census of Service Industries.

Expenditures for construction include those spent on the erection or renovation of hospitals, nursing homes, medical clinics, and medical research facilities but not for private office buildings providing office space for private practitioners. Expenditures for noncommercial research (the cost of commercial research by drug companies is assumed to be embedded in the price charged for the product; to include this item again would result in double counting) are developed from information gathered by the National Institutes of Health and the National Science Foundation.

Source of funding estimates likewise come from many sources. Data on federal health programs are taken from administrative records maintained by the servicing agencies. Among the sources used to estimate state and local government spending for health are the U.S. Census Bureau's Government Finances reports and the National Academy of Social Insurance reports on state-operated workers' compensation programs. Federal, state, and local expenditures for education and training of medical personnel are excluded from these measures where they are separable. For the private financing of health care, data on the financial experience of health insurance organizations come from special CMS analyses of private health insurers and from the Bureau of Labor Statistics' survey on the cost of employer-sponsored health insurance and on consumer expenditures.

Information on out-of-pocket spending from the U.S. Bureau of the Census Services Annual Survey; U.S. Bureau of Labor Statistics' Consumer Expenditure Survey; the 1987 National Medical Care Expenditure Survey and the Medical Expenditure Panel Surveys conducted by the Agency for Healthcare Research and Quality; and from private surveys conducted by the American Hospital Association, American Medical Association, American Dental Association, and IMS Health (an organization that collects data from the pharmaceutical industry) is used to develop estimates of direct spending by customers.

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For More Information: See the CMS National Health Expenditure Accounts website:
<http://www.cms.hhs.gov/NationalHealthExpendData/>.

National Health and Nutrition Examination Survey (NHANES)

CDC/NCHS

Overview: The NHANES program includes a series of cross-sectional nationally representative health examination surveys conducted in mobile examination units or clinics (MECs). In the first series of surveys, the National Health Examination Survey (NHES), data were collected on the prevalence of certain chronic diseases, the distributions of various physical and psychological measures, and measures of growth and development. In 1971, a nutrition surveillance component was added, and the survey name was changed to NHANES. See the Data Years section for more information on the survey name and the years it was conducted.

Selected Content: NHANES have collected data on chronic disease prevalence and conditions (including undiagnosed conditions) and risk factors such as obesity and smoking, serum cholesterol levels, hypertension, diet and nutritional status, immunization status, infectious disease prevalence, health insurance, and measures of environmental exposures. Other topics addressed include hearing, vision, mental health, anemia, diabetes, cardiovascular disease, osteoporosis, oral health, mental health, pharmaceuticals and dietary supplements used, and physical fitness.

NHES I data were collected on the prevalence of certain chronic diseases, as well as the distribution of various physical and psychological measures, including blood

pressure and serum cholesterol levels. NHES II and NHES III focused on factors related to growth and development in children and youth.

For NHANES I, data were collected on indicators of the nutritional and health status of the American people through dietary intake data, biochemical tests, physical measurements, and clinical assessments for evidence of nutritional deficiency. Detailed examinations were given by dentists, ophthalmologists, and dermatologists, with an assessment of need for treatment. In addition, data were obtained for a subsample of adults on overall health care needs and behavior, and more detailed examination data were collected on cardiovascular, respiratory, arthritic, and hearing conditions. For NHANES II, the nutrition component was expanded and the medical area focused on diabetes, kidney and liver function, allergy, and speech pathology. The third National Health and Nutrition Examination Survey (NHANES III) also included data on antibodies, spirometry, and bone health.

Beginning in 1999 with continuous data collection for NHANES, new topics include cardiorespiratory fitness, physical functioning, lower extremity disease, full body scan (DXA) for body fat as well as bone density, and tuberculosis infection.

Data Years: Data have been collected from surveys conducted during 1960–1962 (NHES I), 1963–1965 (NHES II), 1966–1970 (NHES III), 1971–1974 (NHANES I), 1976–1980 (NHANES II), 1982–1984 (Hispanic Health and Nutrition Examination Survey (HHANES)), and 1988–1994 (NHANES III). Beginning in 1999, the survey has been conducted continuously.

Coverage: With the exception of HHANES (see [Methodology](#), below), NHES and NHANES provide estimates of the health status of the civilian noninstitutionalized population of the United States. NHES II and NHES III examined probability samples of the Nation's noninstitutionalized children ages 6–11 years and 12–17 years, respectively.

The NHANES I target population was the civilian non-institutionalized population 1–74 years of age residing in the coterminous United States, except for people residing on any of the reservation lands set aside for the use of American Indians.

The NHANES II target population was the civilian noninstitutionalized population 6 months–74 years of age residing in the United States, including Alaska and Hawaii.

HHANES studied three geographically and ethnically distinct populations: Mexican Americans living in Texas, New Mexico, Arizona, Colorado, and California; Cuban Americans living in Dade County, Florida; and Puerto Ricans living in parts of New York, New Jersey, and Connecticut.

The NHANES III target population was the civilian noninstitutionalized population 2 months of age and over. The sample design provided for oversampling among children 2 months–5 years of age, persons 60 years of age and over, black persons, and persons of Mexican origin.

Beginning in 1999, NHANES oversampled low-income persons, adolescents 12–19 years of age, persons 60 years of age and over, African Americans, and persons of Mexican origin. The sample is not designed to give a nationally representative sample for the total population of Hispanics residing in the United States.

Methodology: NHANES include clinical examinations, selected medical and laboratory tests, and self-reported data. NHANES and previous surveys interviewed persons in their homes and conducted medical examinations, including laboratory analysis of blood, urine, and other tissue samples. Medical examinations and laboratory tests follow very specific protocols and are as standard as possible to ensure comparability across sites and providers. In 1999–2002, as a substitute for the MEC examinations, a small number of survey participants received an abbreviated health examination in their homes if they were unable to come to the MEC.

For the first program or cycle of NHES I, a highly stratified multistage probability sample was selected to represent the 111 million civilian noninstitutionalized adults 18–79 years of age in the United States at that time. The sample areas consisted of 42 primary sampling units (PSUs) from the 1,900 geographic units. NHES II and NHES III were also multistage stratified probability samples of clusters of households in land-based segments. NHES II and III used the same 40 PSUs.

For NHANES I, the sample areas consisted of 65 PSUs. A subsample of persons 25–74 years of age was selected to receive the more detailed health examination. Groups at high risk of malnutrition were oversampled.

NHANES II used a multistage probability design that involved selection of PSUs, segments (clusters of households) within PSUs, households, eligible persons, and, finally, sample persons. The sample design provided for oversampling among persons 6 months–5 years of age, 60–74 years of age, and those living in poverty areas.

HHANES was similar in content and design to NHANES I and II. The major difference between HHANES and the previous national surveys is that HHANES used a probability sample of three special subgroups of the population living in selected areas of the United States, rather than a national probability sample. The three HHANES universes included approximately 84%, 57%, and 59% of the respective 1980 Mexican-,

Cuban-, and Puerto Rican-origin populations in the continental United States.

The survey for NHANES III was conducted from 1988 to 1994 and consisted of two phases of equal length and sample size. Phases 1 and 2 comprised random samples of the civilian U.S. population living in households. About 40,000 persons 2 months of age and over were selected and asked to complete an extensive interview and an examination. Participants were selected from households in 81 counties across the United States. Children 2 months–5 years of age and persons 60 years of age and over were oversampled to provide precise descriptive information on the health status of selected population groups in the United States.

Beginning in 1999, NHANES became a continuous, annual survey, which also allows increased flexibility in survey content. Since April 1999, NHANES has collected data every year from a representative sample of the civilian noninstitutionalized U.S. population, newborns and older, by in-home personal interviews and physical examinations in the MEC. The sample design is a complex, multistage, clustered design using unequal probabilities of selection. The first-stage sample frame for continuous NHANES during 1999–2001 was the list of PSUs selected for the design of the National Health Interview Survey. Typically, an NHANES PSU is a county. For 2002, an independent sample of PSUs (based on current census data) was selected. This independent design was used for the period 2002–2006. For 1999, because of a delay in the start of data collection, 12 distinct PSUs were in the annual sample. For each year in 2000–2006, 15 PSUs were selected. The within-PSU design involves forming secondary sampling units that are nested within census tracts, selecting dwelling units within secondary units, and then selecting sample persons within dwelling units. The final sample person selection involves differential probabilities of selection according to the demographic variables of sex (male or female), race/ethnicity (Mexican American, black, all others), and age. Because of the differential probabilities of selection, dwelling units are screened for potential sample persons. Sample weights are available and should be used in estimation of descriptive statistics. The complex design features should be used in estimating standard errors for the descriptive estimates.

The estimation procedure used to produce national statistics for all NHANES involved inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and poststratified ratio adjustment to population totals. Sampling errors also were estimated to measure the reliability of the statistics.

Sample Size and Response Rates: NHES I sampled 7,710 adults. The examination response rate was 87%. NHES II sampled 7,417 children and reported a response rate of 96%

for the questionnaire sample and 73% for the examination sample. NHES III sampled 7,514 youth and reported a response rate of 90%.

A sample of 28,043 persons was selected for NHANES I. Household interviews were completed for more than 96% of the persons selected, and about 75% (20,749) were examined. A sample of 27,801 persons was selected for NHANES II; 73% (20,322 persons) were examined.

In HHANES, 9,894 persons in the Southwest were selected (75% or 7,462 were examined); in Dade County, 2,244 persons were selected (60% or 1,357 were examined); and in the Northeast, 3,786 persons were selected (75% or 2,834 were examined). Over the 6-year survey period of NHANES III, 39,695 persons were selected, the household interview response rate was 86%, and the medical examination response rate was 78%.

In the sample selection for NHANES 1999–2000, there were 22,839 dwelling units screened. Of these, 6,005 households had at least one eligible sample person identified for interviewing, for a total of 12,160 eligible sample persons. The overall response rate in NHANES 1999–2000 for those interviewed was 82% (9,965 of 12,160), and the response rate for those examined was 76% (9,282 of 12,160). For NHANES 2001–2002 there were 13,156 persons selected in the sample, of which 84% (11,039) were interviewed and 80% (10,480) of the 13,156 selected completed the health examination component of the survey. For NHANES 2003–2004, 6,410 households had at least one eligible sample person identified for interviewing. A total of 12,761 eligible sample persons were identified, of which 79% (10,115) were interviewed and 76% (9,653) completed the health examination component of the survey. For NHANES 2005–2006, a total of 12,862 persons were identified, of which 80% (10,348) were interviewed and 77% (9,950) completed the health examination component of the survey. For more information on unweighted NHANES response rates and response weights using sample size weighted to Current Population Survey population totals, see: http://www.cdc.gov/nchs/nhanes/nhanes_cps_totals.htm.

Issues Affecting Interpretation: Data elements, laboratory tests performed, and the technological sophistication of medical examination and laboratory equipment have changed over time. Therefore, trend analyses should carefully examine how specific data elements were collected across the various NHANES and NHES surveys.

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For More Information: See the NHANES website: <http://www.cdc.gov/nchs/nhanes.htm>.

National Health Interview Survey (NHIS)

CDC/NCHS

Overview: NHIS monitors the health of the U.S. population through the collection and analysis of data on a broad range of health topics. A major strength of this survey lies in the ability to analyze health measures by many demographic and socioeconomic characteristics.

Selected Content: NHIS obtains information during household interviews on illnesses, injuries, activity limitation, chronic conditions, health insurance coverage, utilization of health care, and other health topics. Demographic data gathered include age, sex, education, race/ethnicity (reported by respondent or proxy), place of birth, income, and place of residence. Other data collected include risk factors such as lack of exercise, smoking, alcohol consumption, and use of prevention services such as vaccinations, mammography, and Pap smears. Special modules and supplements focus on different issues each year and have included topics such as HIV/AIDS, aging, cancer screening, prevention, alternative and complementary medicine, and many other topics.

Data Years: NHIS has been conducted annually since 1957 with a major redesign every 10–15 years.

Coverage: NHIS covers the civilian noninstitutionalized population of the United States. Among those excluded are patients in long-term care facilities, persons on active duty with the Armed Forces (although their dependents are included), and U.S. nationals living in foreign countries.

Methodology: NHIS is a cross-sectional household interview survey. Sampling and interviewing are continuous throughout each year. The sampling plan follows a multistage area probability design that permits the representative sampling of households. Traditionally, the sample for NHIS is redesigned and redrawn about every 10 years to better measure the changing U.S. population and to meet new survey objectives. A new sample design was implemented in the 2006 survey. The fundamental structure of the new design is very similar to the previous design for the 1995–2005 surveys. Information is presented only for the current sampling plan covering design years 2006–2014. The first stage of the current sampling plan consists of a sample of 428 primary sampling units (PSUs) drawn from approximately 1,900 geographically defined PSUs that cover the 50 states and the District of Columbia. A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area.

Within a PSU, two types of second-stage units are used: area segments and permit segments. Area segments are defined geographically and contain an expected 8, 12, or 16 addresses. Permit segments cover housing units built after the 2000 census. The permit segments are defined using

updated lists of building permits issued in the PSU since 2000 and contain an expected four addresses. Within each segment, all occupied households at the sample addresses are targeted for interview.

The total NHIS sample of PSUs is subdivided into four separate panels, or subdesigns, such that each panel is a representative sample of the U.S. population. This design feature has a number of advantages, including flexibility for the total sample size. The households selected for interview each week in the NHIS are a probability sample representative of the target population.

The NHIS sample was reduced by 13% in the 2006–2014 redesign. In addition, the NHIS sample was reduced by approximately 50% during the third quarter of 2006, cutting about 13% of the sample size of the original 2006 sample. This cutback was in addition to the 13% reduction introduced in the 2006–2014 sample. In 2007, the NHIS sample was reduced by approximately 50% during July–September 2007. The 2007 sample reduction was implemented in the same way and during the same time of year as the 2006 sample reduction. Overall, about 13% of the households in the 2007 NHIS sample were deleted from interviewers' assignments. This cutback was in addition to the ongoing 13% reduction due to the new sample design that was implemented in 2006.

Oversampling of the black and Hispanic populations was retained in the 2006–2014 design to allow for more precise estimation of health characteristics in these growing minority populations. The new sample design also oversamples the Asian population. In addition, the sample adult selection process was revised so that when black, Hispanic, or Asian persons 65 years of age and over are present, they have an increased chance of being selected as the sample adult.

The NHIS that was fielded from 1982–1996 consisted of two parts: (a) a set of basic health and demographic items (known as the Core questionnaire) and (b) one or more sets of questions on current health topics (known as Supplements). The Core questionnaire remained the same over that time period, whereas the current health topics changed depending on data needs.

The NHIS questionnaire revision, implemented in 1997, has two basic parts: a Core module and one or more supplements that vary by year. The Core remains largely unchanged from year to year and allows for trend analysis and for data from more than 1 year to be pooled to increase the sample size for analytic purposes. The Core contains three components: the Family, the Sample Adult, and the Sample Child. The Family component collects information on everyone in the family and allows NHIS to serve as a sampling frame for additional integrated surveys as needed. Information collected in the Family section for all family

members includes household composition and socio-demographic characteristics, tracking information, information for matches to administrative databases, health insurance coverage, and basic indicators of health status and utilization of health care services. Information from the Family component is included on the Person file (see the NHIS website, below). From each family in NHIS, one sample adult and, for families with children under 18 years of age, one sample child are randomly selected to participate in the Sample Adult and Sample Child questionnaires. Because some health issues are different for children and adults, these two questionnaires differ in some items but both collect basic information on health status, use of health care services, health conditions, and health behaviors.

Sample Size and Response Rates: Between 1997 and 2005, the sample numbered about 100,000 persons with about 30,000–36,000 persons participating in the Sample Adult and about 12,000–14,000 persons in the Sample Child questionnaire. In 2007, the sample numbered 75,764 with 23,393 persons participating in the Sample Adult and 9,417 persons in the Sample Child questionnaires. In 2007, the total household response rate was 87%. The final response rate for the Sample Adult file was 68% and for the Sample Child file was 77%. Between 1997 and 2006, the final response rate for the Sample Adult supplement was 70%–80% and for the Sample Child supplement was 78%–84%.

Issues Affecting Interpretation: In 1997, the questionnaire was redesigned; some basic concepts were changed, and other concepts were measured in different ways. For some questions there was a change in the reference period. Also in 1997, the collection methodology changed from paper-and-pencil questionnaires to computer-assisted personal interviewing (CAPI). Because of the major redesign of the questionnaire in 1997, most NHIS trend tables in *Health, United States* begin with 1997 data. Starting with *Health, United States, 2005*, estimates for 2000–2002 were revised to use 2000-based weights and differ from previous editions of *Health, United States* that used 1990-based weights for those data years. The weights available on the public-use NHIS files for 2000–2002 are 1990-based. Data for 2003 and later years use weights derived from the 2000 Census. In 2006, the sample size was reduced, and this is associated with slightly larger variance estimates than in previous years when the full sample was fielded.

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For More Information: See the NHIS website: <http://www.cdc.gov/nchs/nhis.htm>.

National Hospital Ambulatory Medical Care Survey (NHAMCS)

CDC/NCHS

Overview: NHAMCS collects data on the utilization and provision of medical care services provided in hospital emergency and outpatient departments.

Selected Content: Data are collected from medical records on types of providers seen; reason for visit; diagnoses; drugs ordered, provided, or continued; and selected procedures and tests performed during the visit. Patient data include age, sex, race, and expected source of payment. Data are also collected on selected characteristics of the hospitals included in the survey.

Data Years: Annual data collection began in 1992.

Coverage: The survey is a representative sample of visits to emergency departments (EDs) and outpatient departments (OPDs) of nonfederal, short-stay, or general hospitals. Telephone contacts are excluded.

Methodology: A four-stage probability sample design is used in NHAMCS, involving (a) samples of geographically defined primary sampling units (PSUs), (b) hospitals within PSUs, (c) clinics within OPDs, and (d) patient visits within clinics. EDs are treated as their own stratum, and all service areas within EDs are included. In the rare event that a sample hospital has more than five emergency service areas, a sample of five areas is selected. The first-stage sample of NHAMCS consists of 112 PSUs selected from 1,900 such units that make up the United States. Within PSUs, 600 general and short-stay hospitals were sampled and assigned to 1 of 16 panels. In any given year, 13 panels are included. Each panel is assigned to a 4-week reporting period during the calendar year.

In the NHAMCS OPD survey, a clinic is defined as an administrative unit of the OPD in which ambulatory medical care is provided under the supervision of a physician. Clinics

where only ancillary services—such as radiology, laboratory services, physical rehabilitation, renal dialysis, and pharmacy—are provided, or other settings in which physician services are not typically provided, are considered out of scope. If a hospital OPD has five or fewer in-scope clinics, all are included in the sample. For hospital OPDs with more than five clinics, a systematic sample of clinics proportional to size is included in the survey.

The U.S. Census Bureau acts as the data collection agent for NHAMCS. Census field representatives contact sample hospitals to determine whether they have a 24-hour ED or an OPD that offers physician services. Visits to eligible EDs and OPDs are systematically sampled over the 4-week reporting period such that about 100 ED encounters and about 200 OPD encounters are selected. Hospital staff are asked to complete patient record forms (PRFs) for each sampled visit, but census field representatives typically abstract data for more than one-half of these visits.

Sample data are weighted to produce national estimates. The estimation procedure used in NHAMCS has three basic components: inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment to fixed totals.

Sample Size and Response Rates: In any given year, the hospital sample consists of approximately 500 hospitals, of which 80% have EDs and about one-half have eligible OPDs. Typically, about 1,000 clinics are selected from participating hospital OPDs. In 2002, the number of PRFs completed for EDs was 37,337 and for OPDs was 35,586. In 2003, the number of PRFs completed for EDs was 40,253 and for OPDs was 34,492. In 2004, the number of PRFs completed for EDs was 36,589 and for OPDs was 31,783. In 2005, the number of PRFs completed for EDs was 33,605 and for OPDs was 29,975. In 2006, the number of PRFs completed for EDs was 35,849 and for OPDs was 31,505. In 2007, the number of PRFs completed for EDs was 35,490 and for OPDs was 34,473. In 2002, the hospital response rate for NHAMCS was 92% for EDs and 75% for OPDs. In 2003, the hospital response rate was 85% for EDs and 73% for OPDs. In 2004, the hospital response rate was 89% for EDs and 75% for OPDs. In 2005, the hospital response rate was 89% for EDs and 80% for OPDs. In 2006, the hospital response rate was 83% for EDs and 73% for OPDs. In 2007, the hospital response rate was 94% for EDs and 84% for OPDs.

Issues Affecting Interpretation: The NHAMCS PRF is modified approximately every 2 to 4 years to reflect changes in physician practice characteristics, patterns of care, and technological innovations. Examples of recent changes are the number of drugs recorded on the PRF form and the number of checkboxes for specific tests or procedures performed.

Reference:

McCaig LF, McLemore T. Plan and operation of the National Hospital Ambulatory Medical Care Survey. *Vital Health Stat* 1(34). Hyattsville, MD: NCHS; 1994. Available from: http://www.cdc.gov/nchs/data/series/sr_01/sr01_034acc.pdf.

For More Information: See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm>; and the Ambulatory Health Care Data website: <http://www.cdc.gov/nchs/ahcd.htm>.

National Hospital Discharge Survey (NHDS)

CDC/NCHS

Overview: NHDS collects and produces national estimates on characteristics of inpatient stays in nonfederal, short-stay hospitals in the United States.

Selected Content: Patient information collected includes demographics, length of stay, diagnoses, and procedures. Hospital characteristics collected include region, ownership, and bed size.

Data Years: NHDS has been conducted annually since 1965.

Coverage: The survey design covers the 50 states and the District of Columbia. Included in the survey are hospitals with an average length of stay of less than 30 days for all inpatients, general hospitals, and children's general hospitals. Excluded are federal, military, and Department of Veterans Affairs hospitals, as well as hospital units of institutions (such as prison hospitals) and hospitals with fewer than six beds staffed for patient use. All discharged patients from in-scope hospitals are included in the survey; however, data for newborns are not included in *Health, United States*.

Methodology: The NHDS design implemented in 1965 continued through 1987, and a redesign with a new sample of hospitals, fielded in 1988, is currently in place. The sample for the 1965 NHDS was selected in 1964 from a frame of short-stay hospitals listed in the National Master Facility Inventory. A two-stage stratified sample design was used, with hospitals stratified according to bed size and geographic region. Sample hospitals were selected with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals. Within each participating hospital, a systematic random sample was selected from a daily listing sheet of discharges. Within-hospital sampling rates for discharges varied inversely with the probability of hospital selection, so the overall probability of selecting a discharge was approximately the same across the sample.

Data collection was conducted by means of manual abstraction of patient information from sampled medical

records. Sample selection and transcription of information from inpatient medical records to NHDS survey forms were performed by hospital staff, representatives of NCHS, or both. In 1985, a second data collection procedure was introduced that involved the purchase of computer data tapes from commercial abstracting services that contained automated discharge data for some hospitals participating in NHDS. This procedure was used in approximately 17% of the sample hospitals for 1985–1987. Discharges on these computer files were subjected to the NHDS sampling specifications as well as the computer edits and estimation procedures. Two data collection methods, manual and automated, continue to be used in NHDS.

A redesign of NHDS was implemented for the 1988 survey. Under the redesign, hospitals were selected using a modified three-stage stratified design. Units selected at the first stage consisted of either hospitals or geographic areas. The geographic areas were the primary sampling units (PSUs) used for the 1985–1994 National Health Interview Survey, which are geographic areas such as counties or townships. Hospitals within PSUs were then selected at the second stage. Strata at this stage were defined by geographic region, PSU size, abstracting service status, and hospital specialty-size groups. Within these strata, hospitals were selected with probabilities proportional to their annual number of discharges. At the third stage, a sample of discharges was selected by a systematic random sampling technique. The sampling rate was determined by the hospital's sampling stratum and the type of data collection system (manual or automated) used. Discharge records from hospitals submitting data from commercial abstracting services and selected state data systems (approximately 45% of sample hospitals in 2006) were arrayed by primary diagnoses, patient sex and age group, and date of discharge, before sampling.

The NHDS hospital sample is updated every 3 years by continuing the sampling process among hospitals that become eligible for the survey during the intervening years and by deleting hospitals that are no longer eligible. This update was conducted in 1991, 1994, 1997, 2000, 2003, and 2006.

The basic unit of estimation for NHDS is a sampled discharge. The basic estimation procedure involves inflation by the reciprocal of the probability of selection. Adjustments are made for nonresponding hospitals and discharges, and a post-ratio adjustment to fixed totals is employed.

Sample Size and Response Rate: In 2006, 501 hospitals were selected: 478 were within scope, 438 participated (92%), and data were collected from medical records for approximately 376,000 discharges.

Issues Affecting Interpretation: NHDS was redesigned in 1988, and caution is required in comparing trend data from

before and after the redesign. In addition, annual modifications to the *International Classification of Diseases, ninth revision, Clinical Modification (ICD–9–CM)* may affect diagnosis and procedure categories. (See [Appendix II, International Classification of Diseases, ninth revision, Clinical Modification](#); and [Tables X and XI](#).)

Hospital utilization rates per 10,000 population were computed using estimates of the civilian population of the United States as of July 1 of each year. Rates for 1990–1999 use postcensal estimates of the civilian population based on the 1990 census, adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. The estimates for 2000 and beyond that appear in *Health, United States, 2003* and later editions were calculated using estimates of the civilian population based on Census 2000, and therefore are not strictly comparable with postcensal rates calculated for the 1990s. (See [Appendix I, Population Census and Population Estimates](#).)

References:

DeFrances CJ, Lucas CA, Buie VC, Golosinskiy A. 2006 National Hospital Discharge Survey. National health statistics reports; no 5. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr005.pdf>.

Dennison C, Pokras R. Design and operation of the National Hospital Discharge Survey: 1988 Redesign. Vital Health Stat 1(39). Hyattsville, MD: NCHS; 2000. Available from: http://www.cdc.gov/nchs/data/series/sr_01/sr01_039.pdf.

Haupt BJ, Kozak LJ. Estimates from two survey designs: National Hospital Discharge Survey. Vital Health Stat 13(111). Hyattsville, MD: NCHS; 1992. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_111.pdf.

For More Information: See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm>; and the National Hospital Discharge Survey website: <http://www.cdc.gov/nchs/nhds.htm>.

National Immunization Survey (NIS)

CDC/National Center for Immunization and Respiratory Diseases (NCIRD) and NCHS

Overview: NIS is a continuing nationwide telephone sample survey to monitor vaccination coverage rates among children 19–35 months of age and among teenagers 13–17 years of age.

Selected Content: Data collected for children include vaccination status and date of vaccinations for Diphtheria, Tetanus toxoids, and acellular Pertussis vaccine (DTP/DT/DTaP); poliovirus vaccine (Polio); Measles, Mumps, and

Rubella vaccine (MMR); *Haemophilus influenzae* type b vaccine (Hib); Hepatitis B vaccine (Hep B); Varicella zoster vaccine; Pneumococcal conjugate vaccine (PCV); Hepatitis A (Hep A); and influenza, by race/ethnicity, poverty level, geographic division, state, and selected urban areas.

Data Years: Annual data collection was initiated beginning with the data year 1994. Data collection for Varicella began in July 1996; data collection for PCV began in July 2001. Data collection for teenagers began in 2006.

Coverage: Children 19–35 months of age in the civilian noninstitutionalized population are represented in this survey. Estimates of vaccine-specific coverage are available for the Nation, states, and selected urban areas.

Methodology: NIS is a nationwide telephone sample survey of households with age-eligible children. NIS uses a two-phase sample design. First, a random-digit-dialing sample of telephone numbers is drawn. When households with age-eligible children are contacted, the interviewer collects information on the vaccinations received by all age-eligible children and obtains permission to contact the children's vaccination providers. In the second phase, identified providers are sent vaccination history questionnaires by mail. Providers' responses are compared with information obtained from households to provide a more accurate estimate of vaccination coverage levels. Final estimates are adjusted for households without telephones and for nonresponse.

Sample Size and Response Rates: In 2007, vaccination data were collected from providers for 17,017 children 19–35 months of age. In 2007, the overall interview response rate was 65%. Vaccination information from providers was obtained for 69% of all children who were eligible for provider follow-up in 2007.

Issues Affecting Interpretation: For data years 1998, 2002, 2004, and 2005, slight modifications to the estimation procedure were implemented to obtain vaccination coverage rates from the provider data. Published estimates of vaccination coverage based on the NIS data for years prior to 1998 (e.g., estimates published in *Morbidity and Mortality Weekly Report* (MMWR) articles) may differ slightly from estimates published in *Health, United States* and on the NIS website for the same NIS data. All released public-use data files include the sampling weights using the revised estimation procedure. The findings in recent years are subject to at least three limitations. First, NIS is a telephone survey, and statistical adjustments might not compensate fully for nonresponse and for households without landline telephones. Second, underestimates of vaccination coverage might have resulted in exclusive use of provider-reported vaccination histories because completeness of records is unknown. Finally, although national coverage estimates are precise, annual estimates and trends for state and local areas should

be interpreted with caution because of smaller sample sizes and wider confidence intervals.

References:

CDC. National, state, and local area vaccination coverage among children aged 19–35 months—United States, 2007. *MMWR* 2008;57(35):961–6. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5735a1.htm>.

CDC, National Center for Immunization and Respiratory Diseases, NCHS. National Immunization Survey: A user's guide for the 2007 public-use data file. Hyattsville, MD: NCHS; 2008. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NIS/NISPUF07_DUG.pdf.

Smith PJ, Hoaglin DC, Battaglia MP, Khare M, Barker LE. Statistical methodology of the National Immunization Survey, 1994–2002. *Vital Health Stat* 2(138). Hyattsville, MD: NCHS; 2005. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_138.pdf.

For More Information: See the NIS website:

<http://www.cdc.gov/nis>.

National Medical Expenditure Survey (NMES)—See [Medical Expenditure Panel Survey](#)

National Notifiable Disease Surveillance System (NNDSS)

CDC

Overview: NNDSS provides weekly provisional information on the occurrence of diseases defined as notifiable by the Council of State and Territorial Epidemiologists (CSTE).

Selected Content: Data include incidence of reportable diseases using uniform case definitions.

Data Years: The first annual summary of the notifiable diseases in 1912 included reports of 10 diseases from 19 states, the District of Columbia (D.C.), and Hawaii. By 1928, all states, D.C., Hawaii, and Puerto Rico were participating in national reporting of 29 specified diseases. At their annual meeting in 1950, State and Territorial Health Officers authorized a conference of state and territorial epidemiologists whose purpose was to determine which diseases should be reported to Public Health Service. In 1961, CDC assumed responsibility for the collection and publication of data concerning nationally notifiable diseases.

Coverage: Notifiable disease reports are received from health departments in the 50 states, five territories, New York City, and

D.C. Policies for reporting notifiable disease cases can vary by disease or by reporting jurisdiction, depending on case status classification (i.e., confirmed, probable, or suspect).

Methodology: CDC, in partnership with CSTE, operates NNDSS. Notifiable disease surveillance is conducted by public health practitioners at local, state, and national levels to support disease prevention and control activities. The system also provides annual summaries of the data. CSTE and CDC annually review the status of national infectious disease surveillance and recommend additions or deletions to the list of nationally notifiable diseases, based on the need to respond to emerging priorities. For example, Q fever and tularemia became nationally notifiable in 2000. However, reporting nationally notifiable diseases to CDC is voluntary. Because reporting is currently mandated by law or regulation only at the local and state levels, the list of diseases that are considered notifiable varies slightly by state. For example, reporting of cyclosporiasis to CDC is not done by some states in which this disease is not notifiable to local or state authorities.

State epidemiologists report cases of notifiable diseases to CDC, which tabulates and publishes these data in *Morbidity and Mortality Weekly Report* (MMWR) and in *Summary of Notifiable Diseases, United States* (titled *Annual Summary* before 1985).

Issues Affecting Interpretation: NNDSS data must be interpreted in light of reporting practices. Some diseases that cause severe clinical illness (for example, plague and rabies) are likely reported accurately if diagnosed by a clinician. However, persons who have diseases that are clinically mild and infrequently associated with serious consequences (e.g., salmonellosis) may not seek medical care from a health care provider. Even if these less severe diseases are diagnosed, they are less likely to be reported.

The degree of completeness of data reporting is also influenced by the diagnostic facilities available, the control measures in effect, public awareness of a specific disease, and the interests, resources, and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in case definitions for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

Reference:

CDC. Summary of notifiable diseases—United States, 2007. MMWR 2009;56(53). Available from:
<http://www.cdc.gov/mmwr/summary.html>.

For More Information: See the NNDSS website:
<http://www.cdc.gov/ncphi/diss/nndss/nndsshis.htm>.

National Nursing Home Survey (NNHS)

CDC/NCHS

Overview: NNHS collects and provides national estimates on the characteristics of nursing homes and their residents and staff.

Selected Content: NNHS provides information on nursing homes from two perspectives—that of the provider of services and that of the recipient. Data about the facilities include characteristics such as bed size, ownership, affiliation, Medicare/Medicaid certification, specialty units, services offered, number and characteristics of staff, expenses, and charges. Data about the current residents and discharges include demographic characteristics, health status, level of assistance needed with activities of daily living, vision and hearing impairment, continence, services received, sources of payment, and discharge disposition (for discharges). The redesigned NNHS conducted in 2004 included new facility data items on Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accreditation, electronic information systems, cultural competency, immunization policies and practices, end-of-life practices, and special service programs, as well as new patient-level data items on hospitalizations and emergency department admissions, pain assessment and pain relief, medications, family and caregiver services, end-of-life care and advance directives, pressure ulcers, behavior or mood symptoms, falls, and out-of-pocket charges. In addition to these facility and resident data items, data were also collected on nurse staffing and a supplemental survey was conducted on nursing assistants working in nursing homes.

Data Years: NCHS has conducted seven NNHSs. The first survey was performed August 1973–April 1974; the second, May–December 1977; the third, August 1985–January 1986; the fourth, July–December 1995; the fifth, July–December 1997; and the sixth, July–December 1999. The seventh and most recent NNHS, which had undergone a major redesign, was conducted August 2004–January 2005.

Coverage: The initial NNHS, conducted in 1973–1974, included the universe of nursing homes that provided some level of nursing care and excluded homes providing only personal or domiciliary care. The 1977 NNHS encompassed all types of nursing homes, including personal care and domiciliary care homes. The 1985 NNHS was designed to be similar to the 1973–1974 survey in that it excluded personal or domiciliary care homes; however, in 1985 an unknown number of residential care facilities were present in the sampling frame. These facilities were identified in the 1986 inventory survey and can be removed from the estimate of facilities and beds for 1985. The 1995, 1997, 1999, and 2004 NNHS also included only nursing homes that provided some

level of nursing care and excluded homes providing only personal or domiciliary care, similar to the 1985 and 1973–1974 surveys.

Methodology: The survey uses a stratified two-stage probability design. The first stage is the selection of facilities, and the second stage is the selection of residents and discharges. Prior to the 2004 NNHS, up to six current residents and/or six discharges were selected for each facility. The 2004 survey was designed to select only 12 current residents from each facility to participate in the survey. Information on the facility was collected through a personal interview with the administrator or with staff designated by the administrator. Resident data were provided by staff familiar with the care provided to the resident. Staff relied on the medical record and personal knowledge of the resident. In addition to employee data collected during the interview with the administrator, in several years staffing data were collected by means of a self-administered questionnaire. Discharge data, when collected, were based on information recorded in the medical record.

Current residents are those on the facility's roster as of the night before the survey. Included are all residents for whom beds are maintained, even though they may be away on an overnight leave or in the hospital. People residing in personal care or domiciliary care homes are excluded. Discharges are those who are formally discharged from care by the facility during a designated reference period randomly selected for each facility before data collection. Both live and deceased discharges are included. Residents were counted more than once if they were discharged more than once during the reference period. Resident rates are calculated using estimates of the civilian population of the United States, including institutionalized persons. Population data are from unpublished tabulations provided by the U.S. Census Bureau. The 2004 population estimates are postcensal estimates as of July 1, 2004, based on the 2000 census. For more information about the 2004 population estimates, see Technical Notes in:

Kozak LJ, DeFrances CJ, Hall MJ. National Hospital Discharge Survey: 2004 annual summary with detailed diagnosis and procedure data. *Vital Health Stat* 13(162). Hyattsville, MD: NCHS; 2006. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_162acc.pdf.

Statistics for NNHS are derived by a multistage estimation procedure that has three major components: (a) inflation by the reciprocals of the probabilities of sample selection, (b) adjustment for nonresponse, and (c) ratio adjustment to fixed totals. The surveys are adjusted for four types of nonresponse: (a) when an eligible nursing facility did not respond, (b) when the facility failed to complete the sampling lists, (c) when the facility did not complete the facility

questionnaire but did complete the questionnaire for residents in the facility, and (d) when the facility did not provide information to complete the questionnaire for the sample resident or discharge.

Sample Size and Response Rates: In 1973–1974, the sample of 2,118 homes was selected from the 1971 National Master Facility Inventory (NMFI) and from those that opened for business in 1972. For the 1977 NNHS, the sample of 1,698 facilities was selected from nursing homes in the sampling frame, which consisted of all homes listed in the 1973 NMFI and those opening for business between 1973 and December 1976. The sample for the 1985 survey consisted of the 1,220 facilities selected from the 1982 NMFI, data for homes identified in the 1982 Complement Survey of the NMFI, data on hospital-based nursing homes obtained from the Health Care Financing Administration (now known as the Centers for Medicare & Medicaid Services), and data on nursing homes open for business between 1982 and June 1, 1984. The 1995 sample of 1,500 homes was selected from a sampling frame consisting of nursing homes from the 1991 National Health Provider Inventory (NHPI) and updated lists from the Agency Reporting System (ARS). The ARS was an ongoing system designed to periodically update the NHPI and consisted primarily of lists or directories of facilities from state agencies, federal agencies, and national voluntary organizations. For the 1997 survey, data were obtained from about 1,488 nursing homes from a sampling frame consisting of nursing homes listed on the 1991 NHPI that was updated with a current listing of nursing facilities supplied by the Health Care Finance Administration and other national organizations. The facility frame for the 1999 NNHS consisted of all nursing homes identified in the 1997 NNHS and updated with current nursing facilities listed by the Centers for Medicare & Medicaid Services and other national organizations. The 1999 sample consisted of 1,496 nursing homes. In 1995, 1997, and 1999, facility-level response rates were over 93%. For the 2004 redesigned and expanded NNHS, 1,500 nursing homes were selected and a facility response rate of 81% was achieved.

Issues Affecting Interpretation: Samples of discharges and residents contain different populations with different characteristics. The resident sample is more likely to contain long-term nursing home residents and, conversely, to underestimate short nursing home stays. Because short-term residents are less likely to be on the nursing home rolls on a given night, they are less likely to be sampled. Estimates of discharges underestimate long nursing home stays. In addition, analysts should ensure that the underlying populations are similar across survey years—for example, whether the survey includes personal or domiciliary care homes.

References:

Meiners MR. Selected operating and financial characteristics of nursing homes, United States: 1973–74 National Nursing Home Survey. *Vital Health Stat* 13(22). Hyattsville, MD: NCHS; 1975. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_022.pdf.

Van Nostrand JF, Zappolo A, Hing E, Bloom B, Hirsch B, Foley DJ. The National Nursing Home Survey: 1977 summary for the United States. *Vital Health Stat* 13(43). Hyattsville, MD: NCHS; 1979. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_043.pdf.

Hing E, Sekscenski E, Strahan G. The National Nursing Home Survey: 1985 summary for the United States. *Vital Health Stat* 13(97). Hyattsville, MD: NCHS; 1989. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_097.pdf.

Strahan GW. An overview of nursing homes and their current residents: Data from the 1995 National Nursing Home Survey. *Advance data from vital and health statistics*; no 280. Hyattsville, MD: NCHS; 1997. Available from: <http://www.cdc.gov/nchs/data/ad/ad280.pdf>.

Gabrel CS, Jones A. The National Nursing Home Survey: 1997 summary. *Vital Health Stat* 13(147). Hyattsville, MD: NCHS; 2000. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_147.pdf.

Jones A. The National Nursing Home Survey: 1999 summary. *Vital Health Stat* 13(152). Hyattsville, MD: NCHS; 2002. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_152.pdf.

Jones AL, Dwyer LL, Bercovitz AR, Strahan GW. The National Nursing Home Survey: 2004 overview. *Vital Health Stat* 13(167). Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/series/sr_13/sr13_167.pdf.

For More Information: See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm>; and the NNHS website: <http://www.cdc.gov/nchs/mnhs.htm>.

National Prisoner Statistics (NPS)

Bureau of Justice Statistics (BJS)

Overview: NPS produces semiannual national- and state-level data on the number of prisoners in state and federal prison facilities. It provides information on prisoners incarcerated in state and federal correctional institutions, including their characteristics, movements, and locations.

Data Years: Since 1926, the federal government has published data annually on the prisoner count in each state and in the federal prison system.

Coverage: Data are collected from all 50 states. The prisoner count in the District of Columbia was included until 2001, when the District ceased operating a prison system.

Methodology: NPS obtains prisoner information from a census of prisons in the United States, conducted by the U.S. Census Bureau. The census is based on a facility list maintained by the Census Bureau. Prisons are mailed NPS forms that can be returned by mail or facsimile. Starting with 2003 data, respondents were provided with an Internet reporting option. NPS distinguishes prisoners in custody from those under jurisdiction. To have custody of a prisoner, a state must hold that person in one of its facilities. To have jurisdiction, a state must have legal authority over the prisoner. Prisoners under a state's jurisdiction may be in the custody of a local jail, another state's prison, or other correctional facility such as a privately operated institution. NPS collects data on prisoners in custody and under jurisdiction, although some states are unable to provide both custody and jurisdiction counts. NPS counts include all inmates in state-operated facilities in Alaska, Connecticut, Delaware, Hawaii, Rhode Island, and Vermont, which have combined jail–prison systems. Data on the number of inmates held in the custody of local jails are from the BJS Annual Survey of Jails. (See [Appendix I, Annual Survey of Jails and Census of Jails](#).)

Sample Size and Response Rate: Data were obtained by mailed and website-based survey questionnaires. After follow-up phone calls, the response rates for most years approach 100%. Some estimates of the prisoner population in Illinois during 2007 and 2008 were calculated using the data provided in 2006. Nevada was unable to provide data for December 31, 2007; therefore, estimates were calculated using ratio estimates. (See West and Sabol (2009).)

Reference:

West HC, Sabol WJ. Prison inmates at midyear 2008—Statistical tables. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; 2009. Available from: <http://www.ojp.usdoj.gov/bjs/pub/pdf/pim08st.pdf>.

For More Information: See the BJS website: <http://www.ojp.usdoj.gov/bjs/correct.htm>.

National Survey of Ambulatory Surgery (NSAS)

CDC/NCHS

Overview: NSAS is a national study of ambulatory surgical care in hospital-based and freestanding ambulatory surgery centers (ASCs).

Selected Content: Patient information collected included demographic characteristics, diagnoses, procedures, types of anesthesia, and discharge disposition.

Data Years: NSAS was first conducted from 1994 to 1996 but was discontinued due to lack of resources. NSAS was again conducted in 2006.

Coverage: The universe of eligible facilities for NSAS consists of hospitals and freestanding ASCs. The hospital universe includes noninstitutional hospitals—exclusive of federal, military, and Department of Veterans Affairs hospitals—located in the 50 states and the District of Columbia. Only short-stay hospitals (those with an average length of stay for all patients of less than 30 days) or those whose specialty is general (medical or surgical) or children's general are included in the survey. Those hospitals must also have six beds or more staffed for patient use. The universe definition is the same as that used for the National Hospital Discharge Survey and the National Hospital Ambulatory Medical Care Survey. For the 2006 NSAS, the hospital sample frame was constructed from products of Verispan databases.

In the 1994–1996 NSAS, the universe of freestanding facilities includes the freestanding ASCs listed in the 1993 SMG Freestanding Outpatient Surgery Center Database or Medicare-certified facilities included in the Health Care Financing Administration Provider-of-Services (POS) file. Facilities specializing in dentistry, podiatry, abortion, family planning, or birthing are excluded. In the 2006 NSAS, the universe of freestanding facilities includes facilities that were regulated by the states or certified by the Centers for Medicare & Medicaid Services (CMS) for Medicare participation. The sampling frame consisted of facilities listed in the 2005 Verispan Freestanding Outpatient Surgery Center Database and Medicare-certified facilities included in the CMS POS file.

Methodology: The 1994–1996 NSAS used a multistage probability design with independent samples of hospitals and freestanding ASCs selected at the first or second stages and visits to these facilities selected at the final stage. The first stage consisted of selection of a subsample of the primary sampling units (PSUs) used in the 1985–1994 National Health Interview Survey. PSUs are counties, a group of counties, county equivalents (such as parishes or independent cities),

or towns and townships (for some PSUs in New England). The second stage consisted of selection of facilities from the sample PSUs.

At the third stage, a systematic random sample of ambulatory surgery visits was selected. Sampled visits were drawn from all locations within a facility where ambulatory surgery is performed, including main or general operating rooms, all dedicated ambulatory surgery rooms, cystoscopy and endoscopy units, cardiac catheterization laboratories, and laser procedure rooms (in-scope locations). However, locations within hospitals dedicated exclusively to abortion, dentistry, podiatry, pain block, or small procedures (sometimes referred to as “lump and bump” rooms) were not included. The exclusion of these specialty locations, as well as the exclusion of specialty facilities, was recommended on the basis of the NSAS feasibility study. A detailed description of the design and development of the NSAS is included in:

McLemore T, Lawrence L. Plan and operation of the National Survey of Ambulatory Surgery. Vital Health Stat 1(37). Hyattsville, MD: NCHS; 1997. Available from: http://www.cdc.gov/nchs/data/series/sr_01/sr01_037.pdf.

In the 2006 NSAS, a two-stage list-based sampling design was utilized. Facilities were stratified by facility type, facility specialty, and geographic region. The first stage consisted of selection of facilities, and the second stage consisted of a sample of ambulatory surgery visits within each facility for each location where ambulatory surgery was performed. Excluded sites were the same as in the 1994–1996 NSAS, except that pain block sites were included in the 2006 survey.

Sample Size and Response Rate: NSAS data for 1994–1996 included about 120,000 sampled visits annually from about 500 facilities, with an overall response rate of about 80% annually. In 2006, about 52,000 visits were sampled from about 400 facilities, with an overall response rate of 74%.

Issues Affecting Interpretation: Advances in medical technology (e.g., improvements in anesthesia) and increases in the types of minimally invasive and noninvasive procedures affect the types of procedures performed on an ambulatory basis. Pain block facilities were included in the 2006 NSAS but were excluded in the earlier years.

Reference:

Cullen KA, Hall MJ, Golosinskiy A. Ambulatory surgery in the United States, 2006. National health statistics reports; no 11. Hyattsville, MD: NCHS; 2009. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr011.pdf>.

For More Information: See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm>.

National Survey on Drug Use & Health (NSDUH)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Overview: NSDUH, formerly called the National Household Survey on Drug Abuse (NHSDA), collects data on substance use, abuse, and dependence; mental health problems; and receipt of substance abuse and mental health treatment.

Selected Content: NSDUH reports on the prevalence, incidence, and patterns of drug and alcohol use and abuse in the general U.S. civilian noninstitutionalized population 12 years of age and over. Data are collected primarily on the use of illicit drugs, the nonmedical use of prescription psychotherapeutic drugs, and use of alcohol and tobacco products; dependence and abuse involving drugs and alcohol; mental health problems; and treatment of substance use and mental health problems. Data are also collected on special topics of interest, such as attitudes about drugs, health conditions, driving under the influence of alcohol and illicit drugs, and criminal behavior.

Data Years: NHSDA has been conducted periodically since 1971 and annually starting in 1990. In 1999, NHSDA underwent a major redesign affecting the method of data collection, sample design, sample size, and oversampling. In 2002, the survey's name was changed to NSDUH, a monetary incentive for participation was introduced, and other improvements were made.

Coverage: The survey is representative of persons 12 years of age and over in the civilian noninstitutionalized population of the United States in each state and the District of Columbia. This includes civilians living on military bases and persons living in noninstitutionalized group quarters, such as college dormitories, rooming houses, and shelters. Persons excluded from the survey include homeless people who do not use shelters, active military personnel, and residents of institutional group quarters such as jails and hospitals.

Methodology: The data collection method is in-person interviews conducted with a sample of individuals at their place of residence. Prior to 1999, the NSDUH used a paper-and-pencil interviewing methodology. Since 1999, the interview has been carried out with computer-assisted interviewing methodology. The survey uses a combination of computer-assisted personal interviewing (CAPI), conducted by the interviewer to obtain basic demographic information, and audio computer-assisted self-interviewing (ACASI) for most of the questions. ACASI provides a highly private and confidential means of responding to questions, to increase the level of honest reporting of illicit drug use and other sensitive behavior.

In 1999, a 50-state sample design was introduced. Eight states (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) are designated as large sample states with target sample sizes of 3,600 per year. The remaining states and the District of Columbia have target sample sizes of 900 per year. This approach ensures that there are sufficient samples in every state to support small area estimation, while at the same time maintaining efficiency for national estimates. In the 1999–2001 and 2002–2004 surveys, the first-stage sampling units were clusters of census blocks called area segments. In 2005, NSDUH introduced a coordinated 5-year sample design in which the first stage of selection involved census tracts, with sample segments within a single census tract to the extent possible. States were first stratified into a total of 900 state sampling (SS) regions (48 regions in each large sample state and 12 regions in each small sample state). These regions were contiguous geographic areas designed to yield the same number of interviews on average. In the 2005–2009 surveys, a total of 48 census tracts per SS region were selected with probability proportional to size. Within sampled census tracts, adjacent census blocks were combined to form the second-stage sampling units, or area segments. One segment was selected within each sampled census tract with probability proportional to population size to support the 5-year sample and any supplemental studies that SAMHSA may choose to field. Of these segments, 24 were designated for the coordinated 5-year sample and 24 were designated as reserve segments. Eight sample segments per SS region were fielded during the 2005 survey year. These sampled segments were allocated equally into four separate samples, one for each 3-month period (calendar quarter) during the year, so that the survey was essentially continuous in the field.

The design also oversampled youths and young adults, so that each state's sample was approximately equally distributed among three major age groups: 12–17 years, 18–25 years, and 26 years and over.

Sample Size and Response Rate: Nationally, of the 158,411 eligible households sampled, 141,487 addresses were successfully screened for the 2007 survey, and in these screened households, a total of 85,774 sample persons were selected, from which 67,870 completed interviews were obtained. The survey was conducted from January to December 2007. Weighted response rates were 90% for household screening and 74% for interviewing.

Issues Affecting Interpretation: Several improvements to the survey were implemented in 2002. In addition to the name change, respondents were offered a \$30 incentive payment for participation in the survey starting in 2002, and quality control procedures for data collection were enhanced in 2001 and 2002. Because of these improvements and modifications,

estimates from the NSDUH completed in 2002 and later should not be compared with estimates from the 2001 or earlier versions of the survey. The data collected in 2002 represent a new baseline for tracking trends in substance use and other measures. Special questions on methamphetamine were added in 2005 and 2006. Data for years prior to 2007 were adjusted for comparability. Estimates of substance use for youth based on NSDUH are not directly comparable with estimates based on Monitoring the Future (MTF) and the Youth Risk Behavior Surveillance System (YRBSS). In addition to the fact that MTF excludes dropouts and absentees, rates are not directly comparable across these surveys because of differences in the populations covered, sample design, questionnaires, and interview setting. NSDUH collects data in residences, whereas MTF and YRBSS collect data in school classrooms. In addition, NSDUH estimates are tabulated by age, whereas MTF and YRBSS estimates are tabulated by grade, representing different ages as well as different populations.

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Hughes A, Sathe N, Spagnola K. State estimates of substance use from the 2006–2007 National Surveys on Drug Use and Health. NSDUH series H–35; DHHS pub no SMA 09–4362. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2009. Available from: <http://www.oas.samhsa.gov/2k7/State/toc.cfm>.

Office of Applied Studies. Results from the 2007 National Survey on Drug Use and Health: National findings. NSDUH series H–34; DHHS pub no SMA 08–4343. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2008. Available from: <http://www.oas.samhsa.gov/NSDUH/2k7/NSDUH/2k7results.cfm>.

For More Information: See the NSDUH website: <https://nsduhweb.rti.org/>; and the SAMHSA Office of Applied Studies website: <http://oas.samhsa.gov/>.

National Survey of Family Growth (NSFG)

CDC/NCHS

Overview: NSFG provides national data on factors affecting birth and pregnancy rates, adoption, and maternal and infant health.

Selected Content: Data elements include sexual activity, marriage, divorce and remarriage, unmarried cohabitation, forced sexual intercourse, contraception and sterilization, infertility, breastfeeding, pregnancy loss, low birthweight, and use of medical care for family planning and infertility.

Data Years: Six cycles of the survey have been completed: 1973, 1976, 1982, 1988, 1995, and 2002.

Coverage: The 1973–1995 cycles of NSFG were based on samples of women 15–44 years of age in the civilian noninstitutionalized population of the United States. Cycles 1 and 2 (1973 and 1976) excluded most women who had never been married. Cycles 3–5 (1982, 1988, and 1995) included all women 15–44 years of age in the civilian noninstitutionalized population of the United States. Cycle 6 (2002) included men and women 15–44 years of age in the household population of the United States.

Methodology: Interviews are conducted in person by professional female interviewers using a standardized questionnaire. In all cycles, black women were sampled at higher rates than white women so that detailed statistics for black women could be produced. In cycles 5 and 6 (1995 and 2002) Hispanic persons were also oversampled.

To produce national estimates from the sample for the millions of women 15–44 years of age in the United States, data for the interviewed sample women were (a) inflated by the reciprocal of the probability of selection at each stage of sampling (for example, if there was a 1 in 5,000 chance that a woman would be selected for the sample, her sampling weight was 5,000); (b) adjusted for nonresponse; and (c) poststratified, or forced to agree with benchmark population values based on data from the U.S. Census Bureau.

Sample Size and Response Rates: For cycle 1, from 101 primary sampling units (PSUs), 10,879 women 15–44 years of age were selected; 9,797 of these were interviewed. In cycle 2, from 79 PSUs, 10,202 eligible women were identified; of these, 8,611 were interviewed. In cycle 3, household screener interviews were completed in 29,511 households (95%). Of the 9,964 eligible women identified, 7,969 were interviewed. In cycle 4, 10,566 eligible women 15–44 years of age were sampled. Interviews were completed with 8,450 women. The response rate for the 1990 telephone reinterview was 68% of those responding to the 1988 survey and still eligible for the 1990 survey. In cycle 5, of the 13,795 eligible women in the sample, 10,847 were interviewed. In cycle 6, from 120 PSUs, 7,643 (about 80%) interviews were completed with eligible women and 4,928 (78%) interviews were completed with men.

References:

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Groves RM, Benson G, Mosher WD, Rosenbaum J, Granda P, Axinn W, et al. Plan and operation of cycle 6 of the National Survey of Family Growth. *Vital Health Stat* 1(42). Hyattsville, MD: NCHS; 2005. Available from: http://www.cdc.gov/nchs/data/series/sr_01/sr01_042.pdf.

For More Information: See the NSFG website: <http://www.cdc.gov/nchs/nsfg.htm>.

National Vital Statistics System (NVSS)

CDC/NCHS

Overview: NVSS collects and publishes official national statistics on births, deaths, fetal deaths, and, prior to 1996, marriages and divorces occurring in the United States, based on U.S. Standard Certificates. Fetal deaths are classified and tabulated separately from other deaths. The five vital statistics files—Birth, Mortality, Multiple Cause-of-Death, Linked Birth/Infant Death, and Compressed Mortality—are described in detail below.

Data Years: The death registration area for 1900 consisted of 10 states, the District of Columbia (D.C.), and a number of cities located in nonregistration states; it covered 40% of the continental U.S. population. The birth registration area was established in 1915 with 10 states and D.C. The birth and death registration areas continued to expand until 1933, when they included all 48 states and D.C. Alaska and Hawaii were added to both registration areas in 1959 and 1960, respectively—the years in which they gained statehood.

Coverage: NVSS collects and presents U.S. resident data for the aggregate of 50 states, New York City, and D.C., as well as for each individual state and D.C. Vital events occurring in the United States to non-U.S. residents and vital events occurring abroad to U.S. residents are excluded.

Methodology: NCHS's Division of Vital Statistics obtains information on births and deaths from the registration offices of each of the 50 states, New York City, D.C., Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and Northern Mariana Islands. Until 1972, microfilm copies of all death certificates and a 50% sample of birth certificates were received from all registration areas and processed by NCHS. In 1972, some states began sending their data to NCHS through the Cooperative Health Statistics System (CHSS). States that participated in the CHSS program processed 100% of their death and birth records and sent the entire data file to NCHS on computer tapes. Currently, data are sent to NCHS through the Vital Statistics Cooperative Program (VSCP), following the same procedures as with CHSS. The number of participating states grew from 6 in 1972 to 46 in 1984. Starting in 1985, all 50 states and D.C. participated in VSCP.

U.S. Standard Certificates—U.S. Standard Certificates of Live Birth and Death and Fetal Death Reports are revised periodically, allowing evaluation and addition, modification, and deletion of items. Beginning with 1989, revised Standard Certificates replaced the 1978 versions. The 1989 revision of the birth certificate included items to identify the Hispanic parentage of newborns and to expand information about maternal and infant health characteristics. The 1989 revision of the death certificate included items on educational attainment and Hispanic origin of decedents, as well as changes to improve the medical certification of cause of death. Standard Certificates recommended by NCHS are modified in each registration area to serve the area's needs. However, most certificates conform closely in content and arrangement to the Standard Certificate, and all certificates contain a minimum data set specified by NCHS. The 2003 revision of vital records went into effect in some states beginning in 2003, but full implementation in all states will be phased in over several years.

Birth File

Overview: Vital statistics natality data are a fundamental source of demographic, geographic, and medical and health information on all births occurring in the United States. This is one of the few sources of comparable health-related data for small geographic areas over an extended time period. The data are used to present the characteristics of babies and their mothers, track trends such as birth rates for teenagers, and compare natality trends with those in other countries.

Selected Content: The Birth file includes characteristics of the baby, such as sex, birthweight, and weeks of gestation; demographic information about the parents, such as age, race, Hispanic origin, parity, educational attainment, marital status, and state of residence; medical and health information, such as prenatal care, based on hospital records; and behavioral risk factors for the birth, such as mother's tobacco use during pregnancy.

Data Years: The birth registration area began in 1915 with 10 states and the District of Columbia.

Methodology: In the United States, state laws require birth certificates to be completed for all births. The registration of births is the responsibility of the professional attendant at birth, generally a physician or midwife. The birth certificate must be filed with the local registrar of the district in which the birth occurs. Each birth must be reported promptly; the reporting requirements vary from state to state, ranging from 24 hours to as much as 10 days after the birth.

Federal law mandates national collection and publication of birth and other vital statistics data. NVSS is the result of cooperation between NCHS and the states to provide access to statistical information from birth certificates. Standard forms for the collection of the data, and model procedures for the uniform registration of the events, are developed and recommended for state use through cooperative activities of the states and NCHS. NCHS shares the costs incurred by the states in providing vital statistics data for national use.

Issues Affecting Interpretation: Data on mother's educational attainment, tobacco use during pregnancy, and prenatal care based on the 2003 revision of the U.S. Standard Certificate of Live Birth are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Live Birth. For 2005 and 2006, data on mother's educational attainment, tobacco use during pregnancy, and prenatal care are shown separately for the reporting area (31 states, D.C., and New York City) that continued to use the 1989 revision in 2006 and for the reporting area (12 states) that implemented the 2003 revision by 2005, in order to provide 2 years of comparable data. Data are not shown for one state that implemented the 2003 revision midyear in 2005 and six states that implemented the 2003 revision in 2006. The states

that implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are as follows: starting in 2003, Pennsylvania and Washington; and starting in 2004, Idaho, Kentucky, New York state (excluding New York City), South Carolina, and Tennessee. Starting in 2005, the reporting area using the 2003 revision expanded to 13 states, adding Florida, Kansas, Nebraska, New Hampshire, Texas, and Vermont (midyear). Starting in 2006, the reporting area using the 2003 revision included 19 states, with the addition of California, Delaware, North Dakota, Ohio, South Dakota, and Wyoming. California does not report information on tobacco use during pregnancy. The 19 states using the 2003 revision represent 49% of all births in the United States. Prior to 2003, the number of states reporting information on maternal education, Hispanic origin, marital status, and tobacco use during pregnancy increased over the years. Interpretation of trend data should take into consideration changes to reporting areas and immigration. For methodological and reporting area changes for the following birth certificate items, see [Appendix II: Age \(maternal\); Cigarette smoking; Education \(maternal\); Hispanic origin; Marital status; Prenatal care; Race](#).

Reference:

Vital Statistics of the United States 2000, vol I: Natality, Technical appendix. Hyattsville, MD: NCHS; 2002.
Available from: <http://www.cdc.gov/nchs/data/techap00.pdf>.

For More Information: See the Birth Data website: <http://www.cdc.gov/nchs/births.htm>.

Mortality File

Overview: Vital statistics mortality data are a fundamental source of demographic, geographic, and cause-of-death information. This is one of the few sources of comparable health-related data for small geographic areas over an extended time period. The data are used to present the characteristics of those dying in the United States, to determine life expectancy, and to compare mortality trends with those in other countries.

Selected Content: The Mortality file includes demographic information on age, sex, race, Hispanic origin, state of residence, and educational attainment, as well as medical information on cause of death.

Data Years: The death registration area began in 1900 with 10 states and the District of Columbia.

Methodology: By law, the registration of deaths is the responsibility of the funeral director. The funeral director obtains demographic data for the death certificate from an informant. The physician in attendance at the death is required to certify the cause of death. Where death is from other than natural causes, a coroner or medical examiner

may be required to examine the body and certify the cause of death. Data for the entire United States refer to events occurring within the United States; data for geographic areas are by place of residence. For methodological and reporting area changes for the following death certificate items, see [Appendix II: Education](#); [Hispanic origin](#); [Race](#).

Issues Affecting Interpretation: The *International Classification of Diseases (ICD)*, by which cause of death is coded and classified, is revised approximately every 10–20 years. Because revisions of the ICD may cause discontinuities in trend data by cause of death, comparison of death rates by cause of death across ICD revisions should be done with caution and with reference to the comparability ratio. (See [Appendix II, Comparability ratio](#).) Prior to 1999, modifications to the ICD were made only when a new revision of the ICD was implemented. A process for updating the ICD was introduced with the tenth revision (ICD–10) that allows for mid-revision changes. These changes, however, may affect comparability of data between years for select causes of death. Minor changes may be implemented every year, whereas major changes may be implemented every 3 years (e.g., 2003 data year). In data year 2006, major changes were implemented, including the addition and deletion of several ICD codes. For more information, see:

Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

The death certificate has been revised periodically. A revised U.S. Standard Certificate of Death was recommended for state use beginning January 1, 1989. Among the changes were the addition of a new item on educational attainment and Hispanic origin of the decedent and changes to improve the medical certification of cause of death. The U.S. Standard Certificate of Death was revised again in 2003; states are adopting this new certificate on a rolling basis. The 2003 revision included significant changes in the way that information on educational attainment, maternal mortality, and race are collected and coded. The educational attainment item was changed to be consistent with the U.S. Census Bureau data and to improve the ability to identify specific types of educational degrees. Educational attainment data collected using the 2003 revision are not comparable with data collected using the 1989 revision. The 2003 revision introduced a standard question on pregnancy status of female decedents. This change, in addition to changes in the classification of maternal death under ICD–10, allows for more complete reporting of deaths associated with pregnancy, childbirth, and the puerperium. These changes may affect trends in maternal mortality. The 2003 revision also permits

reporting of more than one race (multiple races). This change was implemented to reflect the increasing diversity of the U.S. population and to be consistent with the decennial census. Many states, however, are still using the 1989 revision of the U.S. Standard Certificate of Death which allows only a single race to be reported. Until all states adopt the new death certificate, the race data reported using the 2003 revision were “bridged” for those for whom more than one race was reported (multiple race) to one, single race to provide comparability with race data reported on the 1989 revision. For more information on the impact of the 2003 certificate revisions on mortality data presented in *Health, United States*, including a list of states that have adopted the 2003 certificate, see [Appendix II: Education](#); [Maternal death](#); [Race](#).

References:

Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office; 1968.

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NCHS. Vital Statistics of the United States, vol II: Mortality, part A, Technical appendix. Hyattsville, MD: NCHS; [published annually]. Available from: <http://www.cdc.gov/nchs/datawh/statab/pubd/ta.htm>.

For More Information: See the Mortality Data website: <http://www.cdc.gov/nchs/deaths.htm>.

Multiple Cause-of-Death File

Overview: Multiple cause-of-death data reflect all medical information reported on death certificates and complement traditional underlying cause-of-death data. Multiple-cause data give information on diseases that are a factor in death, whether or not they are the underlying cause of death; on associations among diseases; and on injuries leading to death.

Selected Content: In addition to the same demographic variables listed for the Mortality file, the Multiple Cause-of-Death file includes record axis and entity axis cause-of-death data (see [Methodology](#), below).

Data Years: Multiple cause-of-death data files are available for every data year since 1968.

Methodology: NCHS is responsible for compiling and publishing annual national statistics on causes of death. In carrying out this responsibility, NCHS adheres to the World Health Organization (WHO) Nomenclature Regulations. These regulations require (a) that cause of death be coded in accordance with the applicable revision of the *International*

Classification of Diseases (ICD) (see [Appendix II, International Classification of Diseases](#); and [Table IV](#)); and (b) that underlying cause of death be selected in accordance with international rules. Traditionally, national mortality statistics have been based on a count of deaths, with one underlying cause assigned for each death.

Prior to 1968, mortality medical data were based on manual coding of an underlying cause of death for each certificate, in accordance with WHO rules. Starting with 1968, NCHS converted to computerized coding of the underlying cause and manual coding of all causes (multiple causes) on the death certificate. In this system, called Automated Classification of Medical Entities (ACME), multiple cause codes serve as inputs to the computer software that employs WHO rules to select the underlying cause. All cause-of-death data in this report are coded using ACME. ACME is used to select the underlying cause of death for all death certificates in the United States. In addition, NCHS has developed two computer systems as inputs to ACME. Beginning with 1990 data, the Mortality Medical Indexing, Classification, and Retrieval system (MICAR), was introduced to automate coding multiple causes of death. In addition, MICAR provides more detailed information on the conditions reported on death certificates than is available through the ICD code structure. Then, beginning with data year 1993, SuperMICAR, an enhancement of MICAR, was introduced. SuperMICAR allows for literal entry of the multiple cause-of-death text as reported by the certifier. This information is then processed automatically by the MICAR and ACME computer systems. Records that cannot be processed automatically by MICAR or SuperMICAR are manually multiple-cause coded and then further processed through ACME. In 2006, SuperMICAR was used to process all of the Nation's death records.

Issues Affecting Interpretation: The ICD, by which cause of death is coded and classified, is revised approximately every 10 to 15 years. Revisions of the ICD may cause discontinuities in trend data by cause of death; therefore, comparison of death rates by cause of death across ICD revisions should be done with caution and with reference to the comparability ratio. (See [Appendix II, Comparability ratio](#).) Data were obtained from all certificates for 1968–1971, 1973–1980, and 1983–present. Data were obtained from a 50% sample of certificates for 1972. Multiple-cause data for 1981 and 1982 were obtained from a 50% sample of certificates from 19 registration areas. For the other states, data were obtained from all certificates.

Reference:

NCHS. Multiple causes of death in the United States. Monthly vital statistics report; vol 32 no 10, suppl 2. Hyattsville, MD: NCHS; 1984. Available from: http://www.cdc.gov/nchs/data/mvsr/supp/mv32_10s2.pdf.

For More Information: See the Mortality Multiple Cause-of-Death data file website:

http://www.cdc.gov/nchs/products/elec_prods/subject/mortmcd.htm.

Linked Birth/Infant Death Data Set

Overview: National linked files of live births and infant deaths are used for research on infant mortality.

Selected Content: The Linked Birth/Infant Death data set includes all variables on the natality (Birth) file, including racial and ethnic information, birthweight, and maternal smoking, as well as variables on the Mortality file, including cause of death and age at death.

Data Years: National linked files of live births and infant deaths were first produced for the 1983 birth cohort. Birth cohort linked file data are available for 1983–1991, and both period linked files and birth cohort linked files are available starting with 1995. National linked files do not exist for 1992–1994.

Coverage: To be included in the U.S. linked file, both the birth and death must have occurred in the 50 states or the District of Columbia.

Methodology: Infant mortality rates are based on infant deaths per 100,000 live births. Infant deaths are defined as a death before the infant's first birthday. About 97%–99% of files can be linked. The linkage makes available extensive information about the pregnancy, maternal risk factors, infant characteristics, and health items at birth that can be used in analyses of infant mortality.

Starting with data year 1995, more timely linked file data are produced in a period data format preceding the release of the corresponding birth cohort format. The 2005 period linked file contains a numerator file that consists of all infant deaths occurring in 2005 that have been linked to their corresponding birth certificates, whether the birth occurred in 2004 or 2005. In contrast, the 2005 birth cohort linked file will contain a numerator file that consists of all infant deaths to babies born in 2005, whether the death occurred in 2005 or 2006. Starting with 1995 data, period linked files are used for infant mortality rates tables, using the linked file data in *Health, United States*. For the 2005 file, NCHS accepted birth records that could be linked to infant deaths even if the births were registered after the closure of the 2005 Birth file (fewer than 100 cases). This improved the infant birth/death linkage and made the denominator file distinctly different from the official 2005 Birth file.

Other changes to the data set starting with 1995 data include addition of record weights to correct for the 1.0%–1.41% of records that could not be linked in 2000–2005 (2% in 1995–1999) and for the addition of an imputation for not

stated birthweight. The 1995–2005 weighted mortality rates range from less than 1% to 4% higher than the unweighted rates for the same period. The 1995–2005 weighted mortality rates with imputed birthweights are less than 1.0%–7.1% higher than unweighted rates with imputed birthweight for the same period.

Issues Affecting Interpretation: Period linked file data starting with 1995 are not strictly comparable with birth cohort data for 1983–1991. Although birth cohort linked files have methodological advantages, their production incurs substantial delays in data availability because it is necessary to wait until the close of a second data year to include all infant deaths to the birth cohort. Data on mother's educational attainment, tobacco use during pregnancy, and prenatal care based on the 2003 revision are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Live Birth and are currently excluded from the *Health, United States* statistics on infant mortality by mother's educational attainment. States that have implemented the 2003 revision include two states in 2003, seven additional states in 2004, and four states in 2005. (See [Appendix II, Education](#).)

Reference:

Mathews TJ, MacDorman MF. Infant mortality statistics from the 2005 period linked birth/infant death data set. National vital statistics report; vol 57 no 2. Hyattsville, MD: NCHS; 2008. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf.

For More Information: See the NCHS Linked Birth and Infant Death Data website: <http://www.cdc.gov/nchs/linked.htm>.

Compressed Mortality File (CMF)

Overview: The CMF is a county-level national mortality and population database.

Selected Content: The CMF contains mortality data derived from the detailed Mortality files of the National Vital Statistics System and estimates of U.S. national, state, and county resident populations from the U.S. Census Bureau. For 1968–1998, number of deaths, crude death rates, and age-adjusted death rates can be obtained by place of residence (total U.S., state, and county), age group, race (white, black, and other), sex, year of death, and underlying cause of death. For 1999–2006, mortality statistics can be obtained by place of residence, by age group and expanded race groups (white, black, American Indian or Alaska Native, Asian or Pacific Islander), and by Hispanic origin.

Data Years: The CMF spans the years 1968–2006. On CDC WONDER, data are available starting with 1979.

Methodology: In *Health, United States*, the CMF is used to compute death rates by urbanization level of the decedent's county of residence. Counties are categorized according to level of urbanization based on the 2006 NCHS Urban–Rural Classification Scheme for Counties. This scheme assigns counties and county equivalents to one of six urbanization levels: four metropolitan and two nonmetropolitan.

For More Information: See the CMF website: http://www.cdc.gov/nchs/products/elec_prods/subject/mcompres.htm; and the CDC WONDER website: <http://wonder.cdc.gov/>. (Also see [Appendix II, Urbanization](#).)

Occupational Employment Statistics (OES)

Bureau of Labor Statistics (BLS)

Overview: The OES program conducts a semiannual survey designed to produce estimates of employment and wages for specific occupations.

Selected Content: The OES survey produces estimates of occupational employment and wages for most sector, three-, four-, and five-digit industrial groups in these industrial sectors: Forestry and logging; Mining; Utilities; Construction; Manufacturing; Wholesale trade; Retail trade; Transportation and warehousing; Information; Finance and insurance; Real estate and rental and leasing; Professional, scientific, and technical services; Management of companies and enterprises; Administrative and support and waste management and remediation services; Educational services; Health care and social assistance; Arts, entertainment, and recreation; Accommodation and food services; Other services (except public administration); and Government.

Data Years: Prior to 1996, the OES program collected only occupational employment data for selected industries in each year of the 3-year survey cycle and produced only industry-specific estimates of occupational employment. The 1996 survey round was the first year that the OES program began collecting occupational employment and wage data in every state. In addition, the program's 3-year survey cycle was modified to collect data from all covered industries each year. 1997 is the earliest year available for which the OES program produced estimates of cross-industry as well as industry-specific occupational employment and wages.

Coverage: The OES survey covers all full-time and part-time wage and salary workers in nonfarm industries. Surveys collect data for the payroll period including the 12th day of May or November, depending on the industry surveyed. The survey does not cover the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers.

Methodology: The OES survey is a federal–state cooperative program between the BLS and state workforce agencies (SWAs). The OES program surveys approximately 200,000 establishments per panel (every 6 months), taking 3 years to fully collect the sample of 1.2 million establishments. Mail surveys collect data for the payroll period including the 12th day of May or November, depending on the industry surveyed. The estimates for occupations in nonfarm establishments are based on OES data collected for the reference months of May and November. BLS provides the procedures and technical support, draws the sample, and produces the survey materials, while SWAs collect the data. SWAs from all 50 states plus the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands participate in the survey. Occupational employment and wage rate estimates at the national level are produced by BLS using data from the 50 states and the District of Columbia. Employers who respond to states' requests to participate in the OES survey make these estimates possible. The nationwide response rate for the May 2008 survey was 78% for establishments, covering 74% of employment. The survey included establishments sampled in the May 2008, November 2007, May 2007, November 2006, May 2006, and November 2005 semiannual panels.

Issues Affecting Interpretation: The OES survey began using the North American Industrial Classification System (NAICS) in 2002. Data prior to 2002 are based on the Standard Industrial Classification system. In 1999, the OES survey began using the new Office of Management and Budget (OMB) Standard Occupational Classification (SOC) system. The new SOC system, which will be used by all federal statistical agencies for reporting occupational data, consists of 821 detailed occupations, grouped into 449 broad occupations, 96 minor groups, and 23 major groups. The OES program provides occupational employment and wage estimates at the major group and detailed occupation level. Because of the OES survey's transition to the SOC system, 1999 and 2000 OES estimates are not directly comparable with previous years' OES estimates, which were based on a classification system having seven major occupational groups and 770 detailed occupations. Approximately one-half of the detailed occupations were unchanged under the new SOC system, with the other half being SOC occupations or occupations that are slightly different from similar occupations in the old OES classification system. Guam, Puerto Rico, and the U.S. Virgin Islands were surveyed, but their data were not included in the May 2008 survey.

Reference:

Bureau of Labor Statistics. Occupational employment and wages, May 2008. Washington, DC: U.S. Department of Labor; May 2009.

For More Information: See the OES website:
<http://www.bls.gov/OES/>.

Online Survey Certification and Reporting Database (OSCAR)

Centers for Medicare & Medicaid Services (CMS)

Overview: OSCAR is an administrative database containing detailed information on all Medicare- and Medicaid-certified institutional health care providers, including all currently and previously certified Medicare and Medicaid nursing homes in the United States and territories. (Data for the territories are not shown in *Health, United States*.) The purpose of the nursing home survey certification process is to ensure that nursing facilities meet the current CMS care requirements and thus can be reimbursed for services furnished to Medicare and Medicaid beneficiaries.

Selected Content: OSCAR contains information on facility and patient characteristics and health deficiencies issued by the government during state surveys.

Data Years: OSCAR has been maintained by CMS, formerly the Health Care Financing Administration (HCFA), since 1992. OSCAR is an updated version of the Medicare and Medicaid Automated Certification System that had been in existence since 1972.

Coverage: All nursing homes in the United States that receive Medicare or Medicaid payments are included. Nursing homes that are intermediate care facilities for the mentally retarded are excluded.

Methodology: Information on the number of beds and other facility characteristics comes from HCFA form 671, and information on residents and resident characteristics is collected on HCFA form 672. A nursing home representative fills out the forms, which are submitted to CMS. The information provided on HCFA forms 671 and 672 can be audited at any time.

All certified nursing homes are inspected by representatives of the state survey agency (generally the department of health) at least once every 15 months. Therefore, a complete census must be based on a 15-month reporting cycle rather than a 12-month cycle. Some nursing homes are inspected twice, or more often, during any given reporting cycle. To avoid overcounting, the data must be edited and duplicates removed. Data editing and compilation were performed by Cowles Research Group (CRG) and published in the group's *Nursing Home Statistical Yearbook* series.

References:

Cowles CM, ed. Nursing home statistical yearbooks for 1995, 1996, and 1997. Anacortes, WA: Cowles Research Group (CRG); published 1995, 1997, and 1998, respectively.

Cowles CM, ed. Nursing home statistical yearbooks for 1998, 1999, 2000, 2001, and 2002. Washington, DC: American Association of Homes and Services for the Aging (AAHSA); published 1999, 2000, 2001, 2002, and 2003, respectively.

Cowles CM, ed. Nursing home statistical yearbooks for 2003, 2004, 2005, 2006, 2007, and 2008. McMinnville, OR: Cowles Research Group (CRG); published 2004, 2005, 2006, 2007, 2008, and 2009, respectively.

For More Information: See the CRG website:

<http://www.longtermcareinfo.com/index.html>; and the CMS website: <http://www.cms.hhs.gov/NonIdentifiableDataFiles/>.

Organ Procurement and Transplantation Network (OPTN)

United Network for Organ Sharing (UNOS), under contract with the Health Resources and Services Administration (HRSA)

Overview: OPTN is a unique public-private partnership that links all professionals involved in the U.S. organ donation and transplantation system. The primary goals of OPTN are (a) to increase the effectiveness and efficiency of organ sharing and equity in the national system of organ allocation and (b) to increase the supply of donated organs available for transplantation.

Selected Content: In April 2007, the organ allocation system in the United States underwent a dramatic change with the OPTN-mandated conversion to what is known as the DonorNetC system. The transplant information database contains information pertaining to transplant candidates on the waiting list, donor/recipient matching, deceased and living donors, histocompatibility, and transplant recipients. The Patient Waiting List contains information used by the computer system to match potential organ recipients with available organ donors. Additional data collected as part of the Transplant Recipient Follow-Up form include patient status (at time of follow-up), information about organ rejection, immunosuppressive medication, graft status, cause of graft loss, patient status, and cause of death.

Data Years: This system contains data regarding every organ donation and transplant event occurring in the U.S. since 1987.

Coverage: The database covers 100% of transplants occurring in the United States.

Methodology: Initial confirmation that a transplant has been performed occurs during the feedback process. The Feedback Record is an online electronic data file created after the match run. During the feedback process, the organ procurement organization (OPO) or its representative enters information regarding the donor and the organs recovered for transplantation. For each organ, the recipient transplant center or its representative enters data pertaining to the actual organ recipient. Once these data are entered, UNOS uses them to generate forms for collection of additional data about the transplants. Data collection forms, generated as a result of the feedback process, are mailed to the appropriate members: OPOs are sent forms pertaining to donors, and transplant centers are sent forms pertaining to recipients.

Data are collected on organ-specific Transplant Recipient Registration forms and Transplant Recipient Follow-Up forms. After a transplant has been performed and the feedback process is complete, the organ-specific Transplant Recipient Registration form is generated. Additional follow-up data are collected at 6 months and 1 year post-transplant and annually thereafter. For a discussion of different outcome measures, see:

Dickinson DM, Arrington CJ, Fant G, Levine GN, Schaubel DE, Pruett TL, et al. SRTR program-specific reports on outcomes: A guide for the new reader. *Am J Transplant* 2008;8(part 2):1012-26. Available from: http://www.ustransplant.org/pdf/Dickinson_PSRs_ROTSTOT_07.pdf.

Sample Size and Response Rates: All transplants are included (100% response rate).

Issues Affecting Interpretation: Transplant centers may have difficulty following transplant patients over time for a variety of reasons. For example, patients may move away or transfer their care to other medical professionals, or centers may have a difficult time allocating staff to report on all patients.

Reference:

Organ Procurement and Transplantation Network. OPTN/SRTR annual report. Rockville, MD: Health Resources and Services Administration; [published annually]. Available from: <http://optn.transplant.hrsa.gov/data/annualReport.asp>.

For More Information: See the HRSA/OPTN website: <http://optn.transplant.hrsa.gov/>.

Population Census and Population Estimates

U.S. Census Bureau

Decennial Census

The census of population (decennial census) has been held in the United States every 10 years since 1790. It has enumerated the resident population as of April 1 of the census year since 1930. Data on sex, race, Hispanic origin, age, and marital status are collected from 100% of the enumerated population. More detailed information such as income, education, housing, occupation, and industry are collected from a representative sample of the population.

Race Data on the 1990 Census

The question on race on the 1990 census was based on the Office of Management and Budget's (OMB) 1977 Race and Ethnic Standards for Federal Statistics and Administrative Reporting (Statistical Policy Directive 15). This document specified rules for the collection, tabulation, and reporting of race/ethnicity data within the federal statistical system. The 1977 Standards required federal agencies to report race-specific tabulations using four single-race categories: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. Under the 1977 Standards, race and ethnicity were considered to be two separate and distinct concepts. Thus, persons of Hispanic origin may be of any race.

Race Data on the 2000 Census

The question on race on the 2000 census was based on OMB's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity (Fed Regist 1997 October 30;62:58781-90). (Also see [Appendix II, Race](#).) The 1997 Standards incorporated two major changes in the collection, tabulation, and presentation of race data. First, the 1997 Standards increased from four to five the minimum set of categories to be used by federal agencies for identification of race: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white. Second, the 1997 Standards included the requirement that federal data collection programs allow respondents to select one or more race categories when responding to a query on their racial identity. This provision means that there are potentially 31 race groups, depending on whether an individual selects one, two, three, four, or all five of the race categories. The 1997 Standards continue to call for use, when possible, of a separate question on Hispanic or Latino ethnicity and specify that the ethnicity question should appear before the question on race. Thus,

under the 1997 Standards, as under the 1977 Standards, Hispanics may be of any race.

Modified Decennial Census Files

For several decades the U.S. Census Bureau has produced Modified Decennial Census files. These modified files incorporate adjustments to the 100% April 1 count data for (a) errors in the census data discovered subsequent to publication, (b) misreported age data, and (c) nonspecified race.

For the 1990 census, the U.S. Census Bureau modified the age, race, and sex data on the census and produced the Modified Age Race Sex (MARS) file. The differences between the population counts in the original census file and the MARS file are primarily due to modification of the race data. Of the 248.7 million persons enumerated in 1990, 9.8 million persons did not specify their race (over 95% were of Hispanic origin). For the 1990 MARS file, these persons were assigned the race reported by a nearby person with an identical response to the Hispanic origin question.

For the 2000 census, the U.S. Census Bureau modified the race data on the census and produced the Modified Race Data Summary file. For this file, persons who reported the category Some Other Race as part of their race response were assigned to one of the 31 race groups, which are the single- and multiple-race combinations of the five race categories specified in the 1997 race and ethnicity standards. Persons who did not specify their race were assigned to one of the 31 race groups by imputation. Of the 18.5 million persons who reported the category Some Other Race as part of their race response, or who did not specify their race, 16.8 million (90.4%) were of Hispanic origin.

Bridged-Race Population Estimates for Census 2000

Race data on the 2000 census are not comparable with race data on other data systems that are continuing to collect data using the 1977 Standards on race and ethnicity during the transition to full implementation of the 1997 Standards. For example, states are implementing the revised birth and death certificates, which have race and ethnicity items that are compliant with the 1997 OMB Standards, at different times, and to date, many states are still using the 1989 certificates that collect race and ethnicity data in accordance with the 1977 Standards. Thus, population estimates for 2000 and beyond with race categories comparable to the 1977 categories are needed so that race-specific birth and death rates can be calculated. To meet this need, NCHS, in collaboration with the U.S. Census Bureau, developed methodology to bridge the 31 race groups in Census 2000 to

the four single-race categories specified under the 1977 Standards.

The bridging methodology was developed using information from the 1997–2000 National Health Interview Survey (NHIS). The NHIS provides a unique opportunity to investigate multiple-race groups because, since 1982, it has allowed respondents to choose more than one race but has also asked respondents reporting multiple races to choose a primary race. The bridging methodology developed by NCHS involved the application of regression models relating person-level and county-level covariates to the selection of a particular primary race by the multiple-race respondents. Bridging proportions derived from these models were applied by the U.S. Census Bureau to the Census 2000 Modified Race Data Summary file. This application resulted in bridged counts of the April 1, 2000, resident single-race populations for four racial groups: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. As bridged-race population estimates continue to be needed for the calculation of vital rates, the Census Bureau annually produces postcensal bridged-race estimates of the July 1 resident single-race populations.

Reference:

Ingram DD, Parker JD, Schenker N, Weed JA, Hamilton B, Arias E, Madans JH. United States Census 2000 population with bridged race categories. *Vital Health Stat* 2(135). Hyattsville, MD: NCHS; 2003. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_135.pdf.

For More Information: See the NCHS website for U.S. Census Populations with Bridged Race Categories: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Postcensal Population Estimates

Postcensal population estimates are estimates made for the years following a census, before the next census has been taken. National postcensal population estimates are derived annually by updating the resident population enumerated in the decennial census using a components of population change approach. Each annual series includes estimates for the current data year and revised estimates for the earlier years in the decade. The following formula is used to derive the estimates for a given year from those for the previous year, starting with the decennial census enumerated resident population as the base:

- Resident population
- + Births to U.S. resident women

- – Deaths to U.S. residents
- + Net international migration.

The postcensal estimates are consistent with official decennial census figures and do not reflect estimated decennial census underenumeration.

Estimates for the earlier years in a given series are revised to reflect changes in the components of change data sets (for example, births to U.S. resident women from a preliminary natality file are replaced with counts from a final natality file). To help users keep track of which postcensal estimate is being used, each annual series is referred to as a vintage and the last year in the series is used to name the series. For example, the Vintage 2001 postcensal series has estimates for July 1, 2000, and July 1, 2001, and the Vintage 2002 postcensal series has revised estimates for July 1, 2000, and July 1, 2001, as well as estimates for July 1, 2002. The estimates for July 1, 2000, and for July 1, 2001, from the Vintage 2001 and Vintage 2002 postcensal series, differ.

The U.S. Census Bureau also produces postcensal estimates of the resident population for each state and county by using a component of population change method at the county level. An additional component of population change, net internal migration, is involved. The state population estimates are produced by summing all county populations within each state.

The Census Bureau has annually produced a postcensal series of estimates of the July 1 resident population of the United States based on Census 2000 by applying the components of change methodology to the Modified Race Data Summary file. These series of postcensal estimates have race data for 31 race groups, in accordance with the 1997 race and ethnicity standards. So that the race data for 2000-based postcensal estimates will be comparable with race data on vital records, the Census Bureau has applied the NHIS bridging methodology to each 31-race-group postcensal series of population estimates to obtain bridged-race postcensal estimates (estimates for the four single-race categories: American Indian or Alaska Native, Asian or Pacific Islander, black, and white). Bridged-race postcensal population estimates are available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Vital rates for 2000 were calculated using the bridged-race April 1, 2000, census counts, and vital rates for 2001 and beyond were calculated using bridged-race estimates of the July 1 population from the corresponding postcensal vintage.

Intercensal Population Estimates

Intercensal population estimates are estimates made for the years between two censuses and are produced once the decennial census at the end of the decade has been completed. They replace the postcensal estimates that were produced prior to the completion of the census at the end of the decade. Intercensal estimates are more accurate than postcensal estimates because they are based on both the census at the beginning and the census at the end of the decade and thus correct for the error of closure (the difference between the estimated population at the end of the decade and the census count for that date). The error of closure at the national level was quite small for the 1960s (379,000). However, for the 1970s it amounted to almost 5 million; for the 1980s, 1.5 million; and for the 1990s, about 6 million. The error of closure differentially affects age, race, sex, and Hispanic origin subgroup populations, as well as the rates based on these populations. Vital rates that were calculated using postcensal population estimates are routinely revised when intercensal estimates become available.

Intercensal estimates for the 1990s with race data comparable to the 1977 Standards have been derived so that vital rates for the 1990s could be revised to reflect Census 2000. Calculation of the intercensal population estimates for the 1990s was complicated by the incomparability of the race data on the 1990 and 2000 censuses. The Census Bureau, in collaboration with National Cancer Institute and NCHS, derived race-specific intercensal population estimates for the 1990s using the 1990 MARS file as the beginning population base and the bridged-race population estimates for April 1, 2000, as the ending population base. Bridged-race intercensal population estimates are available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

For More Information: See the U.S. Census Bureau website: <http://www.census.gov/>.

Sexually Transmitted Disease (STD) Surveillance

CDC/National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)

Overview: Surveillance information on the incidence and prevalence of STDs is used to inform public and private health efforts to control these diseases.

Selected Content: Case reporting data are available for nationally notifiable chancroid, chlamydia, gonorrhea, and

syphilis. Surveillance of other STDs, such as genital herpes simplex virus, genital warts or other human papillomavirus infections, and trichomoniasis are based on estimates of office visits in physicians' office practices provided by the National Disease and Therapeutic Index.

Data Years: STD national surveillance data have been collected since 1941.

Coverage: Case reports of STDs are reported to CDC by STD surveillance systems operated by state and local STD control programs and health departments in 50 states, the District of Columbia, selected cities, 3,140 U.S. counties, and outlying areas consisting of U.S. dependencies, possessions, and independent nations in free association with the United States. Data from outlying areas are not included in *Health, United States*.

Methodology: Information is obtained from the following data sources: (a) case reports from STD project areas; (b) prevalence data from the Regional Infertility Prevention Project, the National Job Training Program (formerly the Job Corps), the Corrections STD Prevalence Monitoring Projects, and the Men Who Have Sex With Men (MSM) Prevalence Monitoring Project; (c) sentinel surveillance of gonococcal antimicrobial resistance from the Gonococcal Isolate Surveillance Project (GISP); and (d) national sample surveys implemented by federal and private organizations. STD data are submitted to CDC on a variety of hard-copy summary reporting forms (monthly, quarterly, and annually) and in electronic summary or individual case-specific (line-listed) formats via the National Electronic Telecommunications System for Surveillance.

Issues Affecting Interpretation: Because of incomplete diagnosis and reporting, the number of STD cases reported to CDC undercounts the actual number of cases occurring among the U.S. population.

Reference:

CDC. Sexually transmitted diseases surveillance, 2007. Atlanta, GA: CDC; 2008. Available from: <http://www.cdc.gov/std/stats07/toc.htm>.

For More Information: See the STD Surveillance Report website: <http://www.cdc.gov/std/stats/>; and the STD website: <http://www.cdc.gov/std/default.htm>.

Surveillance, Epidemiology, and End Results Program (SEER)

National Cancer Institute (NCI)

Overview: SEER tracks the incidence of persons diagnosed with cancer during the year and collects follow-up information on all previously diagnosed patients until their death.

Selected Content: SEER registries routinely collect data on patient demographics, primary tumor site, morphology, stage at diagnosis, first course of treatment, and follow-up for vital status.

Data Years: Case ascertainment for SEER began January 1, 1973, and has continued for more than 30 years. The most recent data available are for 2006.

Coverage: SEER cancer registries were initiated in 1973 in Connecticut, Iowa, New Mexico, Utah, Hawaii, Detroit, and San Francisco–Oakland. Registries were added as follows: in 1974–1975, Atlanta and Seattle–Puget Sound; in 1978, 10 predominantly black rural counties in Georgia; in 1980, American Indians in Arizona; New Orleans, Louisiana (1974–1977, rejoined 2001); New Jersey (1979–1989, rejoined 2001); Puerto Rico (1973–1989); in 1992, Los Angeles and San Jose–Monterey counties and Alaska Native populations in Alaska; in 2001, Kentucky, Greater California, New Jersey, and Louisiana. The SEER Program currently collects and publishes cancer incidence and survival data from 17 population-based cancer registries covering approximately 26% of the U.S. population.

To ensure continuity in reporting areas for trend data, the following combination of SEER registries is commonly used for statistical analyses and is used for analysis of cancer survival rates in *Health, United States*: the SEER 9 registries of Atlanta, Connecticut, Detroit, Hawaii, Iowa, New Mexico, San Francisco–Oakland, Seattle–Puget Sound, and Utah. Analysis of cancer incidence by expanded racial and ethnic groups covers residents in the following SEER 13 registries: the SEER 9 registries plus Los Angeles and San Jose–Monterey in California; rural Georgia; and the Alaska Native Tumor Registry.

Methodology: A cancer registry (or tumor registry) collects and stores data on cancers diagnosed in a specific hospital or medical facility (hospital-based registry) or in a defined geographic area (population-based registry). A population-based registry includes, but is not limited to, a number of hospital-based registries. In SEER registry areas, trained coders abstract medical records using *International Classification of Diseases for Oncology*, third edition (ICD–O–3), which provides a coding system for site and tumor morphology. The third edition, implemented in 2001, is the first complete review and revision of the text and

guidelines since the original publication in 1988. The major staging systems used by cancer registries are American Joint Committee on Cancer TNM staging and SEER Summary Stage. SEER Extent of Disease (EOD) and TNM stage include schemes for all sites and morphologies and are used by the NCI to derive SEER Summary Stage and Collaborative Staging.

Population estimates used to calculate incidence rates are obtained from the U.S. Census Bureau. NCI uses estimation procedures as needed to obtain estimates for years and races not included in data provided by the U.S. Census Bureau. Life tables used to determine general population life expectancy when calculating relative survival rates were obtained from NCHS and in-house calculations. Separate life tables are used for each race-sex-specific group included in SEER.

Issues Affecting Interpretation: Because of the addition of registries over time, analysis of long-term incidence and survival trends is limited to those registries that have been in SEER for similar lengths of time. Analysis of Hispanic and American Indian and Alaska Native data is limited to shorter trends. Starting with *Health, United States, 2006*, the North American Association of Central Cancer Registries (NAACCR) Hispanic Identification Algorithm was used on a combination of variables to classify cases as Hispanic for analytic purposes. Starting with *Health, United States, 2007*, Hispanic incidence data exclude data for Alaska. Earlier editions of *Health, United States* also excluded Hispanic data for Hawaii and Seattle. Starting with *Health, United States, 2007*, incidence estimates for the American Indian or Alaska Native population are limited to contract health service delivery area (CHSDA) counties within SEER reporting areas. This change is believed to produce estimates that more accurately reflect the incidence rates for this population group. More information on CHSDA is available from: <http://www.ihs.gov/NonMedicalPrograms/dqwg/dqwg-section1-home.asp>. For more information on SEER estimates by race/ethnicity, see: http://seer.cancer.gov/seerstat/variables/seer/yr1973_2006/race_ethnicity/. Rates presented in this report may differ somewhat from previous reports due to revised population estimates and the addition and deletion of small numbers of incidence cases.

Reference:

Horner MJ, Ries LAG, Krapcho M, Neyman N, Aminou R, Howlader N, et al., eds. SEER cancer statistics review, 1975–2006. (Based on November 2008 SEER data submission.) Bethesda, MD: National Cancer Institute. 2009. Available from: http://seer.cancer.gov/csr/1975_2006/.

For More Information: See the SEER website: <http://www.seer.cancer.gov>.

Survey of Mental Health Organizations (SMHO)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Overview: SMHO/General Hospital Mental Health Services (GHMHS) collects data on the number and characteristics of specialty mental health organizations in the United States.

Selected Content: This inventory collects basic information such as types of mental health organizations, ownership, number of additions and residents, and number of beds. The sample survey is a more detailed questionnaire that covers types of services provided, revenues and expenditures, staffing, and many items relating to managed behavioral health care.

Data Years: The Inventory of Mental Health Organizations (IMHO/GHMHS) was conducted biannually from 1986 until 1994. SMHO replaced IMHO/GHMHS in 1998. SMHO and the inventory used as its sampling frame have been conducted biannually, starting in 1998.

Coverage: Organizations included are state and county mental hospitals, private psychiatric hospitals, nonfederal general hospitals with separate psychiatric services, Department of Veterans Affairs medical centers, residential treatment centers for emotionally disturbed children, freestanding outpatient psychiatric clinics, partial care organizations, freestanding day–night organizations, and multiservice mental health organizations not elsewhere classified.

Methodology: IMHO was an inventory of all mental health organizations. Its core questionnaire included a version designed for specialty mental health organizations and another for nonfederal general hospitals with separate psychiatric services. The data system was based on questionnaires mailed every other year to mental health organizations in the United States. In 1998, IMHO was replaced by SMHO. SMHO is made up of two parts. A complete inventory is done by postcard, gathering a limited amount of information. The inventory is then used as a sampling frame for SMHO, which contains most of the information from the IMHO core questionnaire as well as new items about managed behavioral health care.

Sample Size and Response Rate: In Phase I, all organizations (about 10,000) were inventoried by postcard. A complete enumeration was needed to define the sampling frame for the sample survey. In Phase II, general hospitals without separate mental health units, community residential organizations, and managed behavioral health care organizations are dropped from the sampling frame. From this

number, approximately 1,600–2,200 organizations are drawn for the sample survey and are sent a questionnaire, with a response rate of approximately 90%.

Issues Affecting Interpretation: Revisions to definitions of providers include phasing out Community Mental Health Centers as a category after 1981–1982; increasing the number of multiservice mental health organizations from 1981–1986; increasing the number of psychiatric outpatient clinics in 1981–1982 but decreasing the number in 1983–1984, 1986, 1990, and 1992; and increasing the number of partial care services in 1983–1984. These changes should be noted when interyear comparisons for the affected organizations and service types are made. The increase in the number of general hospitals with separate psychiatric services was partially due to a more concerted effort to identify these organizations. Forms had been sent only to those hospitals previously identified as having a separate psychiatric service. Beginning in 1980–1981, a screener form was sent to general hospitals not previously identified as providing a separate psychiatric service, to determine whether they had such a service.

Reference:

Center for Mental Health Services. Mental health, United States, 2004. Manderscheid RW, Berry JT, eds. DHHS pub no (SMA) 06–4195. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2006. Available from: <http://mentalhealth.samhsa.gov/publications/allpubs/SMA06-4195/>.

For More Information: See the Center for Mental Health Services website: <http://mentalhealth.samhsa.gov/cmhs>.

Survey of Occupational Injuries and Illnesses (SOII)

Bureau of Labor Statistics (BLS)

Overview: SOII is a federal/state program that collects statistics used to identify problems with workplace safety and to develop programs to improve workplace safety. Occupational Safety and Health Administration (OSHA) regulations require the recording and reporting by employers of occupational fatalities, injuries, and illnesses. Each January, a sample of employers is selected by BLS to participate in a mandatory SOII for that calendar year.

Selected Content: Data include the number of new nonfatal injuries and illnesses by industry. The case and demographic data provide additional details on workers injured, the nature of the disabling condition, and the event and source producing that condition for those cases that involve one or more days away from work.

Data Years: BLS has conducted an annual survey since 1971.

Coverage: The data represent persons employed in private industry establishments in the United States. The survey excludes the self-employed, farms with fewer than 11 employees, private households, federal government agencies, and state and local government agencies. The BLS produces annual estimates of injuries and illnesses for many of the two-, three-, four-, five-, and six-digit private-sector industries as defined by the 2002 North American Industry Classification System (NAICS).

Methodology: Survey estimates of occupational injuries and illnesses are based on a scientifically selected probability sample of establishments, rather than a census of all establishments. Each January, an independent sample of establishments is selected for each state and the District of Columbia to participate in the mandatory SOII. BLS includes all the state samples in the national sample.

Establishments included in the survey are instructed to maintain lists of injuries and illnesses and to track days away from work, restricted, or transferred for the calendar year, using the OSHA Summary of Work-Related Injuries and Illnesses form (OSHA no 300A). In January following the year of data collection, BLS mails this sample of employers the SOII. An occupational injury is any injury, such as a cut, fracture, sprain, or amputation, that results from a work-related event or from a single instantaneous exposure in the work environment. An occupational illness is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. Prior to 2002, injury and illness cases involved days away from work, days of restricted work activity, or both (lost workday cases). Starting in 2002, injury and illness cases may involve days away from work, job transfer, or restricted work activity. Restriction may involve shortened hours, a temporary job change, or temporary restrictions on certain duties (for example, no heavy lifting) of a worker's regular job.

Sample Size and Response Rates: Employer reports were collected from about 205,900 private industry establishments in 2007. The survey response rate was 92% in 2007.

Issues Affecting Interpretation: The number of new injuries and illnesses reported in any given year can be influenced by the level of economic activity, working conditions and work practices, worker experience and training, and number of hours worked. Long-term latent illnesses caused by exposure to carcinogens are believed to be understated in the survey's illness measures. In contrast, new illnesses such as contact

dermatitis and carpal tunnel syndrome are easier to relate directly to workplace activity.

Effective January 1, 2002, OSHA revised its requirement for recording occupational injuries and illnesses. Because of the revised recordkeeping rule, the estimates from the 2002 survey and beyond are not comparable with those from previous years. See <http://www.osha.gov/recordkeeping/index.html> for details on the revised recordkeeping requirements.

Data for the mining industry and for railroad activities are provided by the Department of Labor's Mine Safety and Health Administration and the Department of Transportation's Federal Railroad Administration. Neither of these agencies adopted the revised OSHA recordkeeping requirements for 2002. Therefore, estimates for these industries for 2002 and beyond are not comparable with estimates for other industries but are comparable with estimates for prior years. Excluded from the survey are self-employed individuals, farmers with fewer than 11 employees, private households, federal government agencies, and employees in state and local government agencies.

Starting with 2003 data, SOII began using NAICS to classify industries. Prior to 2003, the program used the Standard Industrial Classification (SIC) system and the Bureau of the Census occupational classification system. Although some titles in SIC and NAICS are similar, there is limited compatibility because industry groupings are defined differently in the two systems. (See [Appendix II, Industry of employment.](#))

Reference:

Bureau of Labor Statistics. Workplace injuries and illnesses in 2007. Washington, DC: U.S. Department of Labor; March 2009.

For More Information: See the BLS website: <http://www.bls.gov/iif/home.htm>.

United States Renal Data System (USRDS)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), in conjunction with the Centers for Medicare & Medicaid Services (CMS)

Overview: USRDS is a national data system that collects, analyzes, and distributes information about end-stage renal disease (ESRD) in the United States. USRDS staff collaborate with staff from CMS, the United Network for Organ Sharing (UNOS), and the ESRD networks, sharing data sets and actively working to improve the accuracy of ESRD patient information. USRDS has five goals: (a) to

characterize the ESRD population; (b) to describe the prevalence and incidence of ESRD, along with trends in mortality and disease rates; (c) to investigate relationships among patient demographics, treatment modalities, and morbidity; (d) to identify new areas for special renal studies and support investigator-initiated research; and (e) to provide data sets and samples of national data to support research by the Special Studies Centers.

Selected Content: USRDS maintains a standalone database with data on the diagnoses and demographic characteristics of ESRD patients, along with biochemical data, dialysis claims, and information on treatment and payor histories, hospitalization events, deaths, physician/supplier services, and providers.

Data Years: Data have been compiled annually since 1988.

Coverage: The primary source of ESRD identification is the CMS Medical Evidence form (CMS-2728), which is filled out for all persons in the United States needing dialysis or transplantation. Individuals with ESRD who are entitled to receive Social Security benefits, regardless of age, are eligible for Medicare and account for the majority of patients in the USRDS database. Patient treatment histories compiled by USRDS rely on a combination of ESRD network patient tracking systems, Social Security mortality records, UNOS transplant files, and Medicare billing records.

Methodology: Data for the USRDS database are compiled from existing data sources including the CMS Renal Management Information System (REMIS), CMS claims data, facility survey data, CDC survey data (NHANES), Standard Information Management System (SIMS), Medicare Evidence form (CMS-2728), ESRD Death Notification form (CMS-2746), and UNOS transplant and wait-list data. The CMS data files are supplemented by CMS with enrollment, payer history, and other administrative data, to provide utilization and demographic information on ESRD patients.

Sample Size and Response Rate: Response or coverage rates are 100% of people treated for ESRD since May 1995 because the amended ESRD entitlement policy requires a Medicare Evidence form to be submitted for all ESRD patients, regardless of their insurance and eligibility status. However, the payment data for non-Medicare ESRD patients may be absent during the 30-month coordination period. Ascertainment of incident cases may also be incomplete because the data are for persons receiving ESRD treatment as reported to CMS and do not include patients who die of ESRD before receiving treatment and those who are not reported to CMS.

For More Information: See the USRDS website: <http://www.usrds.org/>.

Youth Risk Behavior Survey (YRBS)

CDC/National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

Overview: YRBS monitors health risk behaviors among students in grades 9–12 that contribute to morbidity and mortality in both adolescence and adulthood.

Selected Content: Data are collected on tobacco use, dietary behaviors, physical activity, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases including HIV infection, and behaviors that contribute to unintentional injuries and violence.

Data Years: The national YRBS of high school students was conducted in 1990, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, and 2007.

Coverage: Data are representative of high school students in public and private schools in the United States.

Methodology: The national YRBS school-based surveys employ a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12 attending public and private high schools. The first-stage sampling frame contains primary sampling units (PSUs) consisting of large counties or groups of smaller, adjacent counties. The PSUs are then stratified based on degree of urbanization and relative percentage of black and Hispanic students in the PSU. The PSUs are selected from these strata with probability proportional to school enrollment size. At the second sampling stage, schools are selected with probability proportional to school enrollment size. To enable separate analysis of data for black and Hispanic students, schools with substantial numbers of black and Hispanic students are sampled at higher rates than all other schools. The third stage of sampling consists of randomly selecting one or two intact classes of a required subject from grades 9–12 at each chosen school. All students in the selected classes are eligible to participate in the survey. A weighting factor is applied to each student record to adjust for nonresponse and for the varying probabilities of selection, including those resulting from the oversampling of black and Hispanic students.

Sample Size and Response Rate: The sample size for the 2007 YRBS was 14,041 students in 157 schools. The school response rate was 81%, and the student response rate was 84%, for an overall response rate of 68%.

Issues Affecting Interpretation: National YRBS data are subject to at least two limitations. First, these data apply only to adolescents who attend regular high school. These students may not be representative of all persons in this age group because those who have dropped out of high school or

attend an alternative high school are not surveyed. Second, the extent of underreporting or overreporting cannot be determined, although the survey questions demonstrate good test–retest reliability.

Estimates of substance use for youth based on the YRBS differ from the National Survey on Drug Use & Health (NSDUH) and Monitoring the Future (MTF). Rates are not directly comparable across these surveys because of differences in populations covered, sample design, questionnaires, and interview setting. NSDUH collects data in residences, whereas MTF and YRBS collect data in school classrooms. In addition, NSDUH estimates are tabulated by age, whereas MTF and YRBS estimates are tabulated by grade, representing different ages as well as different populations.

References:

Brener ND, Kann L, Kinchen SA, Grunbaum JA, Whalen L, Eaton D, et al. Methodology of the Youth Risk Behavior Surveillance System. *MMWR* 2004;53(RR-12):1–13.

Eaton DK, Kann L, Kinchen S, Ross J, Hawkins J, Harris WA, et al. Youth Risk Behavior Surveillance—United States, 2005. In: *Surveillance Summaries*, 9 Jun 2006. *MMWR* 2006;55(SS-05):1–108.

Cowan CD. Coverage, sample design, and weighting in three federal surveys. *J Drug Issues* 2001;31(3):599–614.

For More Information: See the YRBS website: <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

Private and Global Sources

American Association of Colleges of Nursing (AACN)

AACN was established in 1969 to serve the need for a national organization dedicated exclusively to furthering nursing education in America's universities and colleges. Annually, the AACN Research Center reports the most current statistics available on student enrollment, graduations, and faculty salaries. In 2006, survey forms and instructions for accessing the survey website were mailed to 722 institutions with baccalaureate and higher degree programs in nursing. Responses to the enrollment and graduation surveys were received from 628 institutions, for an overall response rate of 87% in 2006.

Reference:

American Association of Colleges of Nursing. 2008–2009 Enrollment and graduations in baccalaureate and

graduate programs in nursing. Washington, DC: American Association of Colleges of Nursing; 2009.

For More Information: Contact American Association of Colleges of Nursing, One Dupont Circle, NW, Suite 530, Washington, DC 20036; or see the AACN website: <http://www.aacn.nche.edu>.

American Association of Colleges of Osteopathic Medicine (AACOM)

AACOM, founded in 1898, compiles data on various aspects of osteopathic medical education for distribution to the profession, the government, and the public. Questionnaires are sent annually to schools of osteopathic medicine requesting information on characteristics of applicants, students and graduates, faculty, curriculum, contract and grant activity, revenues and expenditures, and clinical facilities. The response rate is 100%.

Reference:

American Association of Colleges of Osteopathic Medicine. 2006 Annual statistical report on osteopathic medical education. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2007.

For More Information: Contact American Association of Colleges of Osteopathic Medicine, 5550 Friendship Boulevard, Suite 310, Chevy Chase MD 20815–7231; or see the AACOM website: <http://www.aacom.org>.

American Association of Colleges of Pharmacy (AACP)

AACP compiles data on colleges of pharmacy, including information on student enrollment and types of degrees conferred. Data are collected through an annual survey. In 2006, the response rate was 99%.

Reference:

American Association of Colleges of Pharmacy. Profile of pharmacy students: Fall 2008. Alexandria, VA: American Association of Colleges of Pharmacy. 2009. Available from: http://www.aacp.org/resources/research/institutionalresearch/Documents/2008_PPS_Intro.pdf.

For More Information: Contact American Association of Colleges of Pharmacy, 1727 King Street, Alexandria, VA 22314; or see the AACP website: <http://www.aacp.org>.

American Association of Colleges of Podiatric Medicine (AACPM)

AACPM compiles data on colleges of podiatric medicine, including information on the schools and enrollment. Data are collected annually through written questionnaires. The response rate is 100%.

For More Information: Contact American Association of Colleges of Podiatric Medicine, 15850 Crabbs Branch Way, Suite 320, Rockville, MD 20855; or see the AACPM website: <http://www.aacpm.org>.

American Dental Association (ADA)

ADA's Division of Educational Measurement conducts annual surveys of predoctoral dental educational institutions. A questionnaire, mailed to all dental schools, collects information on academic programs, admissions, enrollment, attrition, graduates, educational expenses and financial assistance, patient care, advanced dental education, and faculty positions.

Reference:

American Dental Association. 2007–2008 Survey of dental education, vol 1, Academic programs, enrollments, and graduates. Chicago, IL: American Dental Association; 2009.

For More Information: Contact American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611–2678; or see the ADA website: <http://www.ada.org>.

American Hospital Association (AHA) Annual Survey of Hospitals

Data from the AHA's annual survey are based on questionnaires sent to all AHA-registered and nonregistered hospitals in the United States and its associated areas. U.S. government hospitals located outside the United States are excluded. Overall, the average response rate over the past 5 years has been approximately 85%. For nonreporting hospitals and for the survey questionnaires of reporting hospitals on which some information was missing, estimates are made for all data except those on beds, bassinets, and facilities. Data for beds and bassinets of nonreporting hospitals are based on the most recent information available from those hospitals. Data for facilities and services are based only on reporting hospitals.

Estimates of other types of missing data are based on data reported the previous year, if available. When unavailable, estimates are based on data furnished by reporting hospitals

similar in size, control, major service provided, length of stay, and geographic and demographic characteristics.

For More Information: Contact AHA Annual Survey of Hospitals, Health Forum, LLC, an American Hospital Association Company, One North Franklin Street, Chicago, IL 60606; or see the AHA website: <http://www.aha.org>.

American Medical Association (AMA) Physician Masterfile

A master file of physicians has been maintained by the AMA since 1906. The Physician Masterfile contains data on all physicians in the United States, both members and nonmembers of the AMA, and on those graduates of American medical schools temporarily practicing overseas. The file also includes information on international medical graduates (IMGs) who are graduates of foreign medical schools, who reside in the United States, and who meet U.S. educational standards for primary recognition as physicians.

A file is initiated on each individual upon entry into medical school or, in the case of IMGs, upon entry into the United States. Between 1965 and 1985, a mail questionnaire survey was conducted every 4 years to update the file information on professional activities, self-designated area of specialization, and present employment status. Since 1985, approximately one-fourth of all physicians are surveyed each year.

Reference:

American Medical Association, Division of Survey and Data Resources. Physician characteristics and distribution in the U.S., 2009. Chicago, IL: American Medical Association; 2009.

For More Information: Contact American Medical Association, 515 North State Street, Chicago, IL 60654; or see the AMA website: <http://www.ama-assn.org/>.

American Osteopathic Association (AOA)

AOA was established to promote the public health, to encourage scientific research, and to maintain and improve high standards of medical education in osteopathic colleges. The AOA Department of Educational Affairs sets the standards for and accredits osteopathic medical colleges and hospitals, postdoctoral training, and board certification programs. AOA publishes both professional and public informational materials. Professional publications include information on osteopathic education, accreditation of hospitals and other health care delivery facilities, and physician licensing. Public information materials include introductory materials on osteopathic medicine, brochures on

osteopathic physicians and osteopathic medicine, and patient education materials. AOA compiles the number of osteopathic physicians (DOs); the number of active DOs by gender, age, and specialty and by 50 states and the District of Columbia; and the number of osteopathic medical students by selected characteristics. Statistics for 2006 are available from: http://www.osteopathic.org/pdf/ost_factsheet.pdf.

For More Information: Contact American Osteopathic Association, 142 East Ontario Street, Chicago, IL 60611; or see the AOA website: <http://www.osteopathic.org>.

Association of American Medical Colleges (AAMC)

AAMC collects information on student enrollment in medical schools through its annual Liaison Committee on Medical Education questionnaire, the fall enrollment questionnaire, and the American Medical College Application Service (AMCAS) data system. Other data sources are the Medical School Profile System, the Pre-MCAT questionnaire (PMQ), the Minority Student Opportunities in Medicine questionnaire, the Faculty Roster system, data from the Medical College Admission Test, and one-time surveys developed for special projects.

The AAMC Data Warehouse (DW) stores two sections of data relevant to applicants and students: AAMC DW: AMF (Applicant Matriculant file) and AAMC DW: Student. From these two source files, AAMC derives summary statistics about applicants, accepted applicants, matriculants, enrollees, and graduates. AAMC DW: AMF compiles applicant and matriculant data from AMCAS and other medical school application processes. AAMC DW: Student compiles enrollee and graduate data from the AAMC Student Records System (SRS). Applicant, enrollment, and graduate statistical data are arranged by academic year, which begins July 1 and ends June 30.

Reference:

Association of American Medical Colleges. Statistical information related to medical schools and teaching hospitals. Washington, DC: Association of American Medical Colleges; 2008.

For More Information: Contact Association of American Medical Colleges, 2450 N Street, NW, Washington, DC 20037-1126; or see the AAMC website: <http://www.aamc.org>.

Association of Schools and Colleges of Optometry (ASCO)

ASCO compiles data on various aspects of optometric education, including data on schools and enrollment. Questionnaires are sent annually to all schools and colleges of optometry. The response rate is 100%.

Reference:

Association of Schools and Colleges of Optometry. Annual survey of optometric educational institutions: July 1992–June 1993. Rockville, MD: Association of Schools and Colleges of Optometry; 1994.

For More Information: Contact Association of Schools and Colleges of Optometry, 6110 Executive Boulevard, Suite 420, Rockville, MD 20852; or see the ASCO website: <http://www.opted.org>.

Association of Schools of Public Health (ASPH)

ASPH compiles data on schools of public health in the United States and Puerto Rico. Questionnaires are sent annually to all member schools. The response rate is 100%.

Unlike health professional schools that emphasize specific clinical occupations, schools of public health offer study in specialty areas such as biostatistics, epidemiology, environmental health, occupational health, health administration, health planning, nutrition, maternal and child health, social and behavioral sciences, and other population-based sciences.

For More Information: Contact the Association of Schools of Public Health, 1101 15th Street, NW, Suite 910, Washington, DC 20005; or see the ASPH website: <http://www.asph.org>.

Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census

The CT/MRI Census is a biennial telephone survey that queries all hospital and nonhospital sites in the United States performing CT and MRI procedures. The census details the types of procedures being performed, procedure volumes, staffing and productivity, installed equipment, planned equipment purchases, and annual budgets for consumables, including contrast media.

Candidate sites for MRI/CT procedures are identified in the American Hospital Association's *AHA Guide*. U.S. territories are not included.

References:

American Hospital Association. AHA guide, 2010. Chicago, IL: American Hospital Association; 2009.

IMV, Medical Information Division. 2006 Computed tomography (CT) and magnetic resonance imaging (MRI) census, Benchmark report: Installed base of CT scanners; Installed base of MRI scanners. DesPlaines, IL: IMV Ltd., Medical Information Division; 2007.

For More Information: Contact IMV, 6301 Ivy Lane, Suite 204, Greenbelt, MD 20770; or see the IMV website: <http://www.imvinfo.com/index.aspx?sec=def>.

Dartmouth Atlas of Health Care

The Dartmouth Institute

Overview: The Dartmouth Atlas Project (DAP) began in 1993 as a study of health care markets in the United States, measuring variations in health care resources and their utilization by geographic areas: local hospital market areas, regional referral regions, and states. More recently, the research agenda has expanded to reporting on the resources and utilization among patients at specific hospitals. DAP research uses very large claims databases from the Medicare program and other sources to define where Americans seek care, what kind of care they receive, and to correlate increasing expenditures and the supply of health providers and services with health outcomes.

Selected Content: The database contains information on Medicare spending and on Medicare utilization of selected services, providers, and facilities, by state, local, and regional market areas; by selected subpopulations of Medicare beneficiaries, including decedents and chronically ill beneficiaries; and by providers. The database also allows users to compare quality measures across hospitals.

Data Years: Dartmouth Atlas data are available for 1994 onward.

Coverage: Medicare beneficiaries between the ages of 65 and 99 years with full Part A and Part B entitlement are included in the database. Persons enrolled in managed care organizations are excluded from the analysis.

Methodology: Data reported in *Health, United States*, as computed by DAP, use Medicare claims and administrative data (see [Appendix I, Medicare Administrative Data](#)). The percentage of Medicare deaths occurring in a hospital was computed using “death in a hospital” (discharge status B in the Medicare Provider Analysis and Review (MEDPAR) file) as the numerator event. For the percentage of Medicare deaths who were admitted to an intensive care unit (ICU) in

the last 6 months of life, the numerator event was “death in a hospital with admission to an ICU within 6 months of the death date,” using MEDPAR files. Rates were age, sex, and race adjusted and were expressed as a percentage of deaths. Medicare decedents are identified by their ZIP code of residence.

Total ICU days measures intensive care days (which includes medical, surgical, trauma, and burn care) and coronary care days to produce a total ICU days measure. Intermediate care or step-down units are also included.

Sample Size and Response Rate: The data are from the MEDPAR file, a 100% sample of inpatient claims. The file includes one record for each hospital stay by a Medicare beneficiary, including data on dates of admission and discharge, diagnoses, procedures, and Medicare reimbursements to the hospital.

Issues Affecting Interpretation: The data do not include Medicare enrollees enrolled in managed care organizations under Medicare Advantage.

For More Information: Contact Dartmouth Atlas of Health Care, c/o The Dartmouth Institute for Health Policy and Clinical Practice, 35 Centerra Parkway, Suite 202, Lebanon, NH 03766; or see the Dartmouth Atlas of Health Care website: <http://www.dartmouthatlas.org/faq.shtm>.

Guttmacher Institute Abortion Provider Census

Overview: The Guttmacher Institute (previously called The Alan Guttmacher Institute, or AGI) is a not-for-profit organization for reproductive health research, policy analysis, and public education. The institute’s abortion provider surveillance program documents the number of legal induced abortions, monitors unintended pregnancy, and assists in efforts to identify and reduce preventable causes of morbidity and mortality associated with abortions.

Selected Content: Guttmacher reports the number of induced abortions; number, types, and locations of providers; and types of procedures performed by state and region. *Health, United States* presents the total number of abortions reported by Guttmacher for each data year.

Data Years: Guttmacher has collected or estimated national abortion data since 1973. Fourteen provider surveys have been conducted for selected data years 1973–2005. No data were collected for 1983, 1986, 1989, 1990, 1993, 1994, 1997, 1998, 2001, 2002, and 2003.

Coverage: The abortion data reported to Guttmacher include women of all ages, including adolescents, who obtain legal induced abortions, and includes both surgical and medication

(e.g., using mifepristone, misoprostol, or methotrexate) abortion procedures. Data are collected from three major categories of providers that were identified as potential providers of abortion services: clinics, physicians, and hospitals.

Methodology: For 1999–2000 and 2004–2005, a version of the survey questionnaire was created for each of the three major categories of providers, modeled on the survey questionnaire used for Guttmacher's data collection in 1997. Questionnaires were mailed to all potential providers, with two additional mailings and telephone follow-up for nonresponse. All surveys asked the number of induced abortions performed at the provider's location. State health statistics agencies were also contacted, requesting all available data reported by providers to each state health agency on the number of abortions performed in the survey year. For states that provided data to The Guttmacher Institute, the health agency figures were used for providers who did not respond to the survey. Estimates of the number of abortions performed by some providers were ascertained from knowledgeable sources in the community.

To estimate the number of abortions performed in 2001, 2002, and 2003, The Guttmacher Institute first estimated the change in the number of abortions between 2000 and 2001, beginning with the number of abortions occurring in each state, as reported by the CDC, in each of those 2 years (see [Appendix I, Abortion Surveillance](#)). The three states without reporting systems were excluded. Guttmacher also eliminated the states with very incomplete or inconsistent reporting (Arizona, Maryland, Nevada, and the District of Columbia) and summed the number of abortions that took place in the 44 remaining states for each year. The percentage change between 2000 and 2001 was then applied to Guttmacher's more complete nationwide count of 1,312,990 abortions in 2000 to arrive at the national estimate for 2001. The same procedure was used to estimate the change in the number of abortions between 2001 and 2002 and between 2002 and 2003, except that the data for both years were collected directly from state health departments because the CDC abortion surveillance report for the latest year was not yet available. The states without reporting systems were not included, and, as before, Guttmacher excluded states with incomplete or inconsistent reporting. Further adjustments were made after the 2004–2005 Guttmacher survey results became available.

Sample Size and Response Rate: Of the 2,310 potential providers surveyed for 2004–2005 data, 1,552 responded directly or in follow-up; health department data were used for 274 providers; knowledgeable sources were used for 59 providers; and Guttmacher made its own estimates for 330 facilities. The level of internal estimation was higher than in

previous years because health department data from New York and California were less complete.

Issues Affecting Interpretation: The drug mifepristone for medical abortion was approved in September 2000 by the U.S. Food and Drug Administration (FDA) for distribution and use in the United States. For the 2004–2005 data, the distributor of mifepristone also mailed surveys to all facilities and medical professionals that had ever purchased mifepristone.

The CDC national count of abortions was 15% lower than The Guttmacher survey in 1977 and 1978, 12% lower in 1987, 11% lower in 1991 and 1992, and 12% lower in 1995. Beginning in 1998, CDC reported totals for only 48 states and the District of Columbia; since then, the total number of abortions reported to CDC has been about 34% less than the total estimated by Guttmacher. The three reporting areas that did not report abortions to CDC in 2005 (the largest of which was California) accounted for 18% of all abortions tallied by Guttmacher's 2005 survey. (See [Appendix I, Abortion Surveillance](#).)

References:

Finer LB, Henshaw SK. Abortion incidence and services in the United States in 2000. *Perspect Sex Reprod Health* 2003;35(1):6–15. Available from: <http://www.guttmacher.org/pubs/psrh/full/3500603.pdf>.

Jones RK, Zolna MRS, Henshaw SK, Finer LB. Abortion in the United States: Incidence and access to services, 2005. *Perspect Sex Reprod Health* 2008;40(1):6–16. Available from: <http://www.guttmacher.org/pubs/journals/4000608.pdf>.

For More Information: Contact The Guttmacher Institute, 125 Maiden Lane, 7th floor, New York, NY 10038; or see The Guttmacher Institute website: <http://www.guttmacher.org>.

Organisation for Economic Co-operation and Development (OECD) Health Data

OECD provides annual data on statistical indicators for health and health systems collected from 30 member countries, with some time series going back to 1960. The international comparability of health expenditure estimates depends on the quality of national health accounts in OECD member countries. In recent years, an increasing number of countries have adopted the standards for health accounting defined by OECD, greatly increasing the comparability of national health expenditure data reporting. Additional limitations in international comparisons include differing boundaries between health care and other social care, particularly for the disabled and elderly, and underestimation of private expenditures on health.

OECD was established in 1961 with a mandate to promote policies to achieve the highest sustainable economic growth and a rising standard of living among member countries. The organization now comprises 30 member countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

As part of its mission, OECD has developed a number of activities related to health and health care systems. The main aim of OECD work on health policy is to conduct cross-national studies of the performance of OECD health systems and to facilitate exchanges between member countries regarding their experiences in financing, delivering, and managing health services. To support this work, each year OECD compiles cross-country data in the OECD Health Data database, one of the most comprehensive sources of comparable health-related statistics. OECD Health Data is an essential tool for conducting comparative analyses and drawing lessons from international comparisons of diverse health care systems. This international database now incorporates the first results arising from implementation of the OECD manual, *A System of Health Accounts*, which provides a standard framework for producing a set of comprehensive, consistent, and internationally comparable data on health spending. OECD collaborates with other international organizations such as the World Health Organization.

Reference:

Organisation for Economic Co-operation and Development. A system of health accounts, version 1.0. Paris, France: Organisation for Economic Co-operation and Development; 2000. Available from: <http://www.oecd.org/dataoecd/41/4/1841456.pdf>.

For More Information: Contact OECD Washington Center, 2001 L Street, NW, Suite 650, Washington, DC 20036-4922; or see the OECD website: <http://www.oecd.org/health>.

Appendix II

Definitions and Methods

This appendix contains an alphabetical listing of terms used in *Health, United States*, and these definitions are specific to the data presented in this report. The methods used for calculating age-adjusted rates, average annual rates of change, relative standard errors, birth rates, death rates, and years of potential life lost are described. Included are standard populations used for age-adjustment (Tables I–III); *International Classification of Diseases* (ICD) codes for cause of death from the sixth through tenth revisions of ICD (Table V) and the years when the revisions were in effect (Table IV); comparability ratios between the ninth and tenth revisions (ICD–9 and ICD–10) for selected causes (Table VI); an analysis of the effect of added probe questions for Medicare and Medicaid coverage on health insurance rates in the National Health Interview Survey (NHIS) (Table VII); industry codes from the North American Industry Classification System (NAICS) (Table VIII); ICD–9–Clinical Modification (CM) codes for external causes of injury, diagnostic, and procedure categories (Tables IX–XI); and classification of generic analgesic drugs (Table XII). Standards for presenting federal data on race and ethnicity are described, and sample tabulations of NHIS data comparing the 1977 and 1997 Office of Management and Budget Standards for the Classification of Federal Data on Race and Ethnicity are presented in Tables XIII and XIV.

Acquired immunodeficiency syndrome (AIDS)—Human immunodeficiency virus (HIV) is the pathogen that causes AIDS, and HIV disease is the term that encompasses all the condition's stages—from infection to the deterioration of the immune system and the onset of opportunistic diseases. However, AIDS is still the name most people use to refer to the immune deficiency caused by HIV. An AIDS diagnosis (indicating that the person has reached the late stages of the disease) is given to people with HIV who have CD4⁺ cell (also known as T cells or T4 cells, which are the main target of HIV) counts below 200 cells per cubic millimeter or who have been diagnosed with at least one of a set of opportunistic diseases. All 50 states and the District of Columbia report AIDS cases to CDC using a uniform surveillance case definition and case report form. The case reporting definitions were expanded in 1985 (see *Morbidity and Mortality Weekly Report* (MMWR) 1985;34:373–5); 1987 (MMWR 1987; 36(SS–01):1S–15S); 1993 for adults and adolescents (MMWR 1992;41(RR–17):1–19); and 1994 for pediatric cases (MMWR 1994;43(RR–12):1–19). The revisions

incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. The 1993 expansion of the case definition caused a temporary distortion of AIDS incidence trends. In 1996, regimens of proven combinations of drugs, known as highly active antiretroviral therapy (HAART), became the standard of care for HIV and AIDS. These therapies have prevented or delayed the onset of AIDS and premature death among many HIV-infected persons, and this should be considered when interpreting trend data. AIDS surveillance data are published annually by CDC in the *HIV/AIDS Surveillance Report*. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm>. (Also see Appendix II, [Human immunodeficiency virus \(HIV\) disease](#)).

Active physician—See [Physician](#).

Activities of daily living (ADLs)—ADLs are activities related to personal care and include bathing or showering, dressing, getting into or out of bed or a chair, using the toilet, and eating. In the National Health Interview Survey, respondents were asked whether they or family members 3 years of age and over need the help of another person with personal care because of a physical, mental, or emotional problem. Persons were considered to have an ADL limitation if any condition(s) causing the respondent to need help with the specific activities was chronic.

In the Medicare Current Beneficiary Survey, if a sample person had any difficulty performing an activity by him or herself and without special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of interview. Sampled people who were administered a community interview answered questions about health status and functioning themselves, if able to do so. For persons in a long-term care facility, a proxy such as a nurse answered questions about the sample person's health status and functioning. Beginning in 1997, interview questions for people residing in long-term care facilities were changed slightly from those administered to people living in the community, to differentiate residents who were independent from those who received supervision or assistance with transferring, locomotion on unit, dressing, eating, toilet use, and bathing. (Also see [Appendix II, Complex activity limitation; Condition; Instrumental activities of daily living; Limitation of activity](#).)

Addition—See [Admission](#).

Table I. United States year 2000 standard population and age groups used to age-adjust data

<i>Data system and age</i>	<i>Population</i>
DVS mortality data	
Total	274,633,642
Under 1 year	3,794,901
1–4 years	15,191,619
5–14 years	39,976,619
15–24 years	38,076,743
25–34 years	37,233,437
35–44 years	44,659,185
45–54 years	37,030,152
55–64 years	23,961,506
65–74 years	18,135,514
75–84 years	12,314,793
85 years and over	4,259,173
NHIS, NAMCS, NHAMCS, NNHS, and NHDS	
All ages	274,633,642
18 years and over	203,852,188
25 years and over	177,593,760
40 years and over	118,180,367
65 years and over	34,709,480
Under 18 years	70,781,454
2–17 years	63,227,991
18–44 years	108,151,050
18–24 years	26,258,428
25–34 years	37,233,437
35–44 years	44,659,185
45–64 years	60,991,658
45–54 years	37,030,152
55–64 years	23,961,506
65–74 years	18,135,514
75 years and over	16,573,966
18–49 years	127,956,843
40–64 years:	
40–49 years	42,285,022
50–64 years	41,185,865
NHES and NHANES	
20 years and over	195,850,985
20–74 years	179,277,019
20–34 years	55,490,662
35–44 years	44,659,185
45–54 years	37,030,152
55–64 years	23,961,506
65–74 years	18,135,514
or	
65 years and over	34,709,480
NHANES (Tables 51 and 67)	
20–39 years	77,670,618
40–59 years	72,816,615
60 years and over	45,363,782

See footnotes at end of table.

Table I. United States year 2000 standard population and age groups used to age-adjust data—Con.

<i>Data system and age</i>	<i>Population</i>
NHANES (Table 95 only)	
Under 18 years	70,781,454
18–44 years	108,151,050
45–64 years	60,991,658
65 years and over	34,709,480

NOTES: DVS is Division of Vital Statistics. NHIS is National Health Interview Survey. NAMCS is National Ambulatory Medical Care Survey. NHAMCS is National Hospital Ambulatory Medical Care Survey. NNHS is National Nursing Home Survey. NHDS is National Hospital Discharge Survey. NHES is National Health Examination Survey. NHANES is National Health and Nutrition Examination Survey. SOURCE: National Institutes of Health/National Cancer Institute. Surveillance, Epidemiology, and End Results (SEER). Standard populations—single ages. Available from: <http://seer.cancer.gov/stdpopulations>.

Admission—The American Hospital Association defines admissions as persons—excluding newborns—accepted for inpatient services during the survey reporting period. (Also see [Appendix II, Days of care](#); [Discharge](#); [Inpatient](#).)

An admission (also sometimes referred to as an addition) to a mental health organization is defined by the Substance Abuse and Mental Health Services Administration's Center for Mental Health Services as a new admission, a readmission, a return from long-term leave, or a transfer from another service of the same organization or another organization. (Also see [Appendix II, Mental health organization](#); [Mental health service type](#).)

Age—Age is reported as age at last birthday (i.e., age in completed years), often calculated by subtracting the date of birth from the reference date, with the reference date being the date of the examination, interview, or other contact with an individual.

Mother's (maternal) age is reported on the birth certificate by all states. Birth statistics are presented for mothers 10–49 years of age through 1996 and 10–54 years of age starting in 1997, based on mother's date of birth or age as reported on the birth certificate. The age of the mother is edited for upper and lower limits. When the age of the mother is computed to be under 10 years or 55 years and over (50 years and over in 1964–1996), it is considered not stated and is imputed according to the age of the mother from the previous birth record of the same race and total birth order (total of fetal deaths and live births). Before 1963, not stated ages were distributed in proportion to the known ages for each racial group. Beginning in 1997, the birth rate for the maternal age group 45–49 years has included data for mothers 50–54 years of age in the numerator and has been based on the population of women 45–49 years of age in the denominator.

Age adjustment—Age adjustment is used to compare risks for two or more populations at one point in time or for one population at two or more points in time. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, to eliminate differences in observed rates that result from age differences in population composition. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk.

Age-adjusted rates are calculated by the direct method, as follows:

$$\sum_{i=1}^n r_i \times (p_i/P)$$

where r_i = rate in age group i in the population of interest

p_i = standard population in age group i

$$P = \sum_{i=1}^n p_i$$

n = total number of age groups over the age range of the age-adjusted rate.

Age adjustment by the direct method requires the use of a standard age distribution. The standard for age-adjusting death rates and estimates from surveys in *Health, United States* is the projected year 2000 U.S. resident population. Starting with *Health, United States, 2000*, the year 2000 U.S. standard population replaced the 1970 civilian noninstitutionalized population for age-adjusting estimates from most NCHS surveys; and starting with *Health, United States, 2001*, it was used uniformly and replaced the 1940 U.S. population for age-adjusting mortality statistics and the 1980 U.S. resident population, which previously had been used for age-adjusting estimates from the National Health and Nutrition Examination Survey.

Changing the standard population has implications for racial and ethnic differentials in mortality. For example, the mortality ratio for the black to white populations is reduced from 1.6 using the 1940 standard to 1.4 using the 2000 standard, reflecting the greater weight the 2000 standard gives to the older population, in which race differentials in mortality are smaller.

Age-adjusted estimates from any data source presented in *Health, United States* may differ from age-adjusted estimates based on the same data presented in other reports, if different age groups are used in the adjustment procedure.

For more information on implementing the 2000 population standard for age-adjusting death rates, see: Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. National vital statistics reports; vol 47 no 3. Hyattsville, MD: NCHS; 1998. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_03.pdf. For more information on the derivation of age-adjustment weights for use with NCHS survey data, see: Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy People 2010 statistical notes, no 20. Hyattsville, MD: NCHS; 2001. Available from: <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>. The year 2000 U.S. standard population is available from the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program: <http://seer.cancer.gov/stdpopulations/stdpop.singleages.html>.

Mortality data—Death rates are age-adjusted to the year 2000 U.S. standard population (Table I). Prior to 2003 data, age-adjusted rates were calculated using standard million proportions based on rounded population numbers (Table II). Starting with 2003 data, unrounded population numbers are used to age-adjust. Adjustment is based on 11 age groups, with two exceptions. First, age-adjusted death rates for black males and black females in 1950 are based on nine age groups, with under 1 year and 1–4 years of age combined as one group and 75–84 years and 85 years of age and over combined as one group. Second, age-adjusted death rates by educational attainment for the age group 25–64 years are based on four 10-year age groups (25–34 years, 35–44 years, 45–54 years, and 55–64 years).

Age-adjusted rates for years of potential life lost before 75 years of age also use the year 2000 standard population and are based on eight age groups: under 1 year, 1–14 years, 15–24 years, and 10-year age groups through 65–74 years.

Maternal mortality rates for pregnancy, childbirth, and the puerperium are calculated as the number of maternal deaths per 100,000 live births. Maternal deaths are those with ICD–10 codes A34, O00–O95, and O98–O99. These rates are age-adjusted to the 1970 distribution of live births by mother's age in the United States, as shown in Table III. (Also see Appendix II, Rate: Death and related rates.)

National Health and Nutrition Examination Survey (NHANES)—Estimates based on the National Health Examination Survey and NHANES are generally age-adjusted to the year 2000 U.S. standard population by using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65–74 years or 65 years

Table II. United States year 2000 standard population and proportion distribution by age, for age-adjusting death rates prior to 2003

Age	Population	Proportion distribution (weight)	Standard million
Total	274,634,000	1.000000	1,000,000
Under 1 year	3,795,000	0.013818	13,818
1–4 years	15,192,000	0.055317	55,317
5–14 years	39,977,000	0.145565	145,565
15–24 years.	38,077,000	0.138646	138,646
25–34 years.	37,233,000	0.135573	135,573
35–44 years.	44,659,000	0.162613	162,613
45–54 years.	37,030,000	0.134834	134,834
55–64 years.	23,961,000	0.087247	87,247
65–74 years.	18,136,000	0.066037	66,037
75–84 years.	12,315,000	*0.044842	44,842
85 years and over.	4,259,000	0.015508	15,508

* Figure is rounded up instead of down to force total to 1.0.

SOURCE: CDC/NCHS. Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. National vital statistics reports; vol 47 no 3. Hyattsville, MD: NCHS; 1998. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_03.pdf.

and over (see Table I). Prior to *Health, United States, 2001*, these estimates were age-adjusted to the 1980 U.S. resident population.

National Health Care Surveys—Estimates based on the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, the National Hospital Ambulatory Medical Care Survey, and the National Nursing Home Survey are age-adjusted to the year 2000 U.S. standard population (Table I). Information on the age groups used in the age-adjustment procedure is contained in the footnotes to the specific tables.

National Health Interview Survey (NHIS)—Estimates based on NHIS are age-adjusted to the year 2000 U.S. standard population (Table I). Prior to *Health, United States, 2000*, NHIS estimates were age-adjusted to the 1970 civilian noninstitutionalized population. Information on the age groups used in the age-adjustment procedure is contained in the footnotes to the specific tables.

AIDS—See [Acquired immunodeficiency syndrome](#).

Alcohol consumption—Alcohol consumption is measured differently in the following data systems. (Also see [Appendix II, Binge drinking](#).)

Monitoring the Future (MTF)—This school-based survey of secondary school students collects information on alcohol use by using self-completed questionnaires. Information on consumption of alcoholic beverages (defined as beer, wine, liquor, and any other beverage that contains alcohol) is based on the following question: “On how many occasions (if any) have you had alcohol

to drink—more than just a few sips—in the last 30 days?” Students who indicate that they have tried alcohol in the past year are then asked “How many times have you had five or more drinks in a row in the last 2 weeks?” For this question, a drink means a 12-oz can (or bottle) of beer, a 4-oz glass of wine, a 12-oz bottle or can of wine cooler, a mixed drink, a shot of liquor, or the equivalent.

National Health Interview Survey (NHIS)—Starting with the 1997 NHIS, information on alcohol consumption has been collected in the sample adult questionnaire. Adult respondents are asked two screening questions about their lifetime alcohol consumption: “In any one year, have you had at least 12 drinks of any type of alcoholic beverage?” and “In your entire life, have you had at least 12 drinks of any type of alcoholic beverage?” Persons who report at least 12 drinks in a lifetime are then asked several questions about alcohol consumption in the past year: “In the past year, how often did you drink any type of alcoholic beverage?” and “In the past year, on those days that you drank alcoholic beverages, on the average, how many drinks did you have?” Adult respondents were also asked “In the past year, on how many days did you have five or more drinks of any alcoholic beverage?”

Levels of alcohol consumption are defined as follows: light drinkers, three drinks or fewer per week; moderate drinkers, more than three drinks and up to 14 drinks per week for men and more than three drinks and up to seven drinks per week for women; heavier drinkers, more than 14 drinks per week for men and more than seven drinks per week for women, on average.

Table III. Number of live births and mother's age group used to adjust maternal mortality rates to live births: United States, 1970

Mother's age	Live births
All ages	3,731,386
Under 20 years	656,460
20–24 years	1,418,874
25–29 years	994,904
30–34 years	427,806
35 years and over	233,342

SOURCE: CDC/NCHS. Summary report: Final natality statistics, 1970. Monthly vital statistics report; vol 22 no 12 suppl. Hyattsville, MD: NCHS; 1974. Available from: http://www.cdc.gov/nchs/data/mvsvr/supp/mv22_12sacc.pdf.

National Survey on Drug Use & Health (NSDUH)—Starting in 1999, NSDUH information about the frequency of the consumption of alcoholic beverages in the past 30 days has been obtained for all persons surveyed who are 12 years of age and over. An extensive list of examples of the kinds of beverages covered is given to respondents prior to question administration. A drink is defined as a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. Those times when the respondent had only a sip or two from a drink are not considered consumption. Alcohol use is based on the following questions: “During the past 30 days, on how many days did you drink one or more drinks of an alcoholic beverage?”, “On the days that you drank during the past 30 days, how many drinks did you usually have?”, and “During the past 30 days, on how many days did you have five or more drinks on the same occasion?”

Any-listed diagnosis—See [Diagnosis](#).

Average annual rate of change (percent change)—In *Health, United States*, average annual rates of change, or growth rates, are calculated as follows:

$$[(P_n / P_o)^{1/N} - 1] \times 100$$

where P_n = later time period

P_o = earlier time period

N = number of years in interval.

This geometric rate of change assumes that a variable increases or decreases at the same rate during each year between the two time periods.

Average length of stay—In the National Health Interview Survey, average length of stay in a hospital per discharged inpatient is computed by dividing the total number of hospital

days for a specified group by the total number of discharges for that group. Similarly, in the National Hospital Discharge Survey, average length of stay is computed by dividing the total number of hospital days of care (counting the date of admission but not the date of discharge) by the number of patients discharged. The American Hospital Association computes average length of stay by dividing the number of inpatient days by the number of admissions. (Also see [Appendix II, Days of care; Discharge; Inpatient](#).)

Basic actions difficulty—Basic actions difficulty captures limitations or difficulties in movement, emotional, sensory, or cognitive functioning associated with a health problem. Persons with more than one of these difficulties are counted only once in the estimates. The full range of functional areas cannot be assessed on the basis of National Health Interview Survey (NHIS) questions; however, the available questions can identify difficulty in the following core areas of functioning:

- Movement (walking, standing, sitting, bending or kneeling, reaching overhead, grasping objects with fingers, and lifting).
- Selected elements of emotional functioning, in particular, feelings that interfere with accomplishing daily activities. Respondents were classified based on responses to a series of questions that measure psychological distress.
- Sensory functioning, based on difficulties seeing or hearing.
- Selected elements in cognitive functioning, specifically difficulties with remembering or experiencing confusion.

For more information on how this measure was constructed using NHIS data, including the specific questions asked, see: Altman B, Bernstein A. Disability and health in the United States, 2001–2005. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/misc/disability2001-2005.pdf>.

(Also see [Appendix II, Complex activity limitation; Hearing trouble](#).)

Bed, health facility—The American Hospital Association defines bed count as the number of beds, cribs, and pediatric bassinets that are set up and staffed for use by inpatients on the last day of the reporting period. In the Center for Medicare & Medicaid Service's Online Survey Certification and Reporting (OSCAR) database, all beds in certified facilities are counted on the day of certification inspection. The Center for Mental Health Services within the Substance Abuse and Mental Health Services Administration counts the number of beds set up and staffed for use in inpatient and residential treatment services on the last day of the survey reporting period. (Also see [Appendix II, Hospital; Mental health organization; Mental health service type; Occupancy rate](#).)

Binge drinking—Binge drinking is measured in the following data systems. (Also see [Appendix II, Alcohol consumption.](#))

Monitoring the Future (MTF)—This school-based survey of secondary school students collects information on alcohol use by using self-completed questionnaires. To determine whether they have tried alcohol in the past year, students are asked: “On how many occasions (if any) have you had alcohol to drink—more than just a few sips—in the last 30 days?” Alcoholic beverages are defined as beer, wine, liquor, and any other beverage that contains alcohol. Among students who answer in the affirmative, information on binge drinking is obtained for high school seniors (starting in 1975) and for 8th and 10th graders (starting in 1991) based on the following question referring to the prior 2-week period: “How many times have you had five or more drinks in a row?” For this question, a drink means a 12-oz can (or bottle) of beer, a 4-oz glass of wine, a 12-oz bottle or can of wine cooler, a mixed drink, a shot of liquor, or the equivalent.

National Survey on Drug Use & Health (NSDUH)—In NSDUH, binge alcohol use is defined as “Five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) at least once in the past 30 days.” Heavy alcohol use is defined as “Five or more drinks on the same occasion (binge drinking) on at least 5 different days in the past 30 days.” (Also see [Appendix II, Alcohol consumption.](#))

Birth cohort—A birth cohort consists of all persons born within a given period of time, such as a calendar year.

Birth rate—See [Rate: Birth and related rates.](#)

Birthweight—Birthweight is the first weight of the newborn obtained after birth. Low birthweight is defined as weighing less than 2,500 grams (5 lb 8 oz). Very low birthweight is defined as weighing less than 1,500 grams (3 lb 4 oz). Before 1979, low birthweight was defined as weighing 2,500 grams or less, and very low birthweight as 1,500 grams or less.

Blood pressure, elevated—In *Health, United States*, elevated blood pressure is defined as having an average systolic blood pressure reading of at least 140 mmHg or diastolic reading of at least 90 mmHg, which is consistent with the following: National Heart, Lung, and Blood Institute. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. NIH pub no 04–5230. Bethesda, MD: National Institutes of Health; 2004. Available from: <http://www.nhlbi.nih.gov/guidelines/hypertension/jnc7full.pdf>.

Those with elevated blood pressure also may be taking prescribed medicine for high blood pressure. Data on hypertension also are presented in *Health, United States*. People are considered to have hypertension if they have measured elevated blood pressure or if they report that they are taking a prescription medicine for high blood pressure, even if their blood pressure readings are within the normal range.

Blood pressure is measured by averaging the blood pressure readings taken. Blood pressure readings of 0 mmHg are assumed to be in error and are not included in the estimates. The methods used to measure the blood pressure of National Health and Nutrition Examination Survey (NHANES) participants have changed over the different NHANES survey years. Changes include the following:

- Number of blood pressure measurements taken (increased from 1 to 4).
- Equipment maintenance procedures.
- Training of persons taking readings (physician, nurse, interviewer).
- Proportion zero end digits for systolic and diastolic readings.
- Published diastolic definition.
- Location where the measurements were taken (mobile examination center (MEC) or home).

In 1999 and subsequent years, blood pressure has been measured in the NHANES MEC by one of the MEC physicians. For people 20 years of age and over, three consecutive blood pressure readings are obtained using the same arm. If a blood pressure measurement was interrupted or the measurer was unable to get one or more of the readings, a fourth attempt may be made. Both systolic and diastolic measurements are recorded to the nearest even number.

In NHANES III, three sets of blood pressure measurements were taken in the MEC for examinees 5 years of age and over. Blood pressure measurements were also taken by trained interviewers during the household interview, on sample persons 17 years of age and over. Systolic and diastolic average blood pressures were computed as the arithmetic mean of six or fewer measurements obtained at the household interview (maximum of three) and the MEC examination (maximum of three). If the examinee did not have blood pressure measurements taken in the MEC, this variable was calculated from measurements taken at the household interview. Both systolic and diastolic measurements were recorded to the nearest even number.

For more information on changes in blood pressure measurement in NHANES up to 1991, see: Burt VL,

Cutler JA, Higgings M, Horan MJ, Labarthe D, Whelton P, et al. Trends in the prevalence, awareness, treatment, and control of hypertension in the adult US population: Data from the health examination surveys, 1960 to 1991. *Hypertension* 1995;26(1):60–9.

Body mass index (BMI)—BMI is a measure that adjusts bodyweight for height. It is calculated as weight in kilograms divided by height in meters squared. Overweight for children and adolescents is defined as a BMI at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts (<http://www.cdc.gov/growthcharts/>). Healthy weight for adults is defined as a BMI of 18.5 to less than 25; overweight, as greater than or equal to a BMI of 25; and obesity, as greater than or equal to a BMI of 30. BMI cut points are defined in the following: U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary guidelines for Americans, 2005, 6th ed.* Washington, DC: U.S. Government Printing Office, January 2005. Available from: <http://www.health.gov/dietaryguidelines/dga2005/document/default.htm>; National Heart, Lung, and Blood Institute. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults: The evidence report.* NIH pub no 98–4083. Bethesda, MD: National Institutes of Health; 1998. Available from: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm; and U.S. Department of Health and Human Services. *Tracking healthy people 2010, Part B, Operational definitions, ch 19, Nutrition and overweight, Objectives 19–1 to 19–3.* Washington, DC: U.S. Government Printing Office; 2000. Available from: <http://www.healthypeople.gov/document/html/volume2/19nutrition.htm>.

Cause of death—For the purpose of national mortality statistics, every death is attributed to one underlying condition, based on information reported on the death certificate and using the international rules for selecting the underlying cause of death from the conditions stated on the certificate. The underlying cause is defined by the World Health Organization (WHO) as “the disease or injury that initiated the train of events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury.” Generally, more medical information is reported on death certificates than is directly reflected in the underlying cause of death. Conditions that are not selected as underlying cause of death constitute the nonunderlying causes of death, also known as multiple cause of death.

Cause of death is coded according to the appropriate revision of the *International Classification of Diseases* (ICD) (see [Table IV](#)). Effective with deaths occurring in 1999, the United States began using the tenth revision of the ICD (ICD–10); during the period 1979–1998, causes of death were coded and classified according to the ninth revision (ICD–9). [Table V](#)

lists ICD codes for the sixth through tenth revisions for causes of death shown in *Health, United States*.

Each ICD revision has produced discontinuities in cause-of-death trends. These discontinuities are measured by using comparability ratios that are essential to the interpretation of mortality trends. For further discussion, see the Mortality Technical Appendix page on the NCHS website. Available from: <http://www.cdc.gov/nchs/dataawh/statab/pubd/ta.htm>. (Also see [Appendix II, Comparability ratio](#); [International Classification of Diseases](#); and [Appendix I, National Vital Statistics System; Multiple Cause-of-Death File](#).)

Cause-of-death ranking—Selected causes of death of public health and medical importance are compiled into tabulation lists and are ranked according to the number of deaths assigned to these causes. The top-ranking causes determine the leading causes of death. Certain causes on the tabulation lists are not ranked if, for example, the category title represents a group title (such as “Major cardiovascular diseases” and “Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified”) or the category title begins with the words “Other” or “All other.” In addition, when one of the titles that represents a subtotal (such as malignant neoplasms) is ranked, its component parts are not ranked. The tabulation lists used for ranking in the tenth revision of the *International Classification of Diseases* (ICD) include the List of 113 Selected Causes of Death, which replaces the ICD–9 List of 72 Selected Causes, HIV Infection and Alzheimer’s Disease; and the ICD–10 List of 130 Selected Causes of Infant Death, which replaces the ICD–9 List of 60 Selected Causes of Infant Death and HIV Infection. Causes that are tied receive the same rank; the next cause is assigned the rank it would have received had the lower-ranked causes not been tied, that is, a rank is skipped. For more information, see: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek, KD, Tejada-Vera B. *Deaths: Final data for 2006.* National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf. (Also see [Appendix II, International Classification of Diseases](#).)

Children’s Health Insurance Program (CHIP)—Title XXI of the Social Security Act, sometimes referred to as the Children’s Health Insurance Program (CHIP), is a program originally enacted by the Balanced Budget Act of 1997 (BBA). The Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA, P.L. 111–3) reauthorized CHIP. CHIPRA appropriated funding for CHIP through FY 2013. CHIP provides federal funds for states to provide health care coverage to eligible low-income, uninsured children who do not qualify for Medicaid. CHIP gives states broad flexibility in

Table IV. Revision of the *International Classification of Diseases (ICD)*, by year of conference by which adopted and years in use in the United States

<i>ICD revision</i>	<i>Year of conference by which adopted</i>	<i>Years in use in United States</i>
First	1900	1900–1909
Second	1909	1910–1920
Third	1920	1921–1929
Fourth	1929	1930–1938
Fifth	1938	1939–1948
Sixth	1948	1949–1957
Seventh	1955	1958–1967
Eighth	1965	1968–1978
Ninth	1975	1979–1998
Tenth	1990	1999–present

SOURCE: CDC/NCHS. Available from: <http://www.cdc.gov/nchs/icd.htm>.

program design within a federal framework that includes important beneficiary protections. Funds from CHIP may be used for a separate child health program or to expand Medicaid. Although CHIP is not part of Medicaid, in some instances in *Health, United States*, data on CHIP and Medicaid are presented together. For additional information, see: <http://www.cms.hhs.gov/chipra/>. (Also see [Appendix II, Health insurance coverage; Medicaid](#).)

Cholesterol, serum—Serum cholesterol is a measure of total blood cholesterol. Elevated total blood cholesterol, which is a combination of high-density lipoproteins (HDL), low-density lipoproteins (LDL), and very-low-density lipoproteins (VLDL), is a risk factor for cardiovascular disease. According to the National Cholesterol Education Program, high serum cholesterol is defined as being greater than or equal to 240 mg/dL (6.20 mmol/L). Borderline high serum cholesterol is defined as greater than or equal to 200 mg/dL and less than 240 mg/dL. Assessments of the components of total cholesterol, or lower thresholds for high total cholesterol, may be used for individuals with other risk factors for cardiovascular disease. For more information on high cholesterol guidelines, see: National Cholesterol Education Program (NCEP). Third report of the NCEP Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III): Final report. NIH pub no 02–5215. Bethesda, MD: National Institutes of Health, National Heart, Lung, and Blood Institute; 2002. Available from: <http://www.nhlbi.nih.gov/guidelines/cholesterol/atp3full.pdf>. In *Health, United States*, the conservative threshold of 240 mg/dL is used to define high total serum cholesterol. Individuals who take medication to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cutoffs for high and borderline high cholesterol are not defined as having high or borderline cholesterol, respectively.

Venous blood serum samples collected from National Health and Nutrition Examination Survey (NHANES) participants at mobile examination centers were frozen and shipped on dry ice to the laboratory conducting the lipid analyses. Serum total cholesterol was measured on all examined adults regardless of whether they had fasted, and data were analyzed regardless of fasting status. Cholesterol measurements are standardized according to the criteria of the CDC—and later the CDC–National Heart, Lung, and Blood Institute Cholesterol Standardization Program—to ensure comparable and accurate measurements. For more information, see: Myers GL, Cooper GR, Winn CL, Smith SJ. The Centers for Disease Control–National Heart, Lung, and Blood Institute Lipid Standardization Program: An approach to accurate and precise lipid measurements. *Clin Lab Med* 1989;9(1):105–35. A detailed summary of the procedures used for measurement of total cholesterol in the earlier NHANES survey years has been published in: Johnson CL, Rifkind BM, Sempos CT, Carroll MD, Bachorik PS, Briefel RR, et al. Declining serum total cholesterol levels among U.S. adults: The National Health and Nutrition Examination Surveys. *JAMA* 1993;269(23):3002–8. A description of the laboratory procedures for the total cholesterol measurement for different NHANES survey years is published by NCHS. Available from: <http://www.cdc.gov/nchs/nhanes.htm>.

Chronic condition—See [Condition](#).

Cigarette smoking—Cigarette smoking and related tobacco use are measured in the following data systems.

Birth file—With the 1989 revision of the U.S. Standard Certificate of Live Birth, information on cigarette smoking by the mother during pregnancy became available for the first time. Data from the 1989 revision are based on “Yes/No” responses to the birth certificate item: “Other

Table V. Cause-of-death codes, by applicable revision of the *International Classification of Diseases (ICD)*

<i>Cause of death (tenth revision titles)</i>	<i>Sixth and seventh revisions</i>	<i>Eighth revision</i>	<i>Ninth revision</i>	<i>Tenth revision</i>
Communicable diseases . . . . .	...	...	001–139, 460–466, 480–487, 771.3	A00–B99, J00–J22
Chronic and noncommunicable diseases . . . . .	...	...	140–459, 470–478, 490–799	C00–I99, J30–R99
Meningococcal infection . . . . .	...	...	036	A39
Septicemia . . . . .	...	...	038	A40–A41
Human immunodeficiency virus (HIV) disease ¹ . . . . .	...	...	*042–*044	B20–B24
Malignant neoplasms	140–205	140–209	140–208	C00–C97
Colon, rectum, and anus	153–154	153–154	153, 154	C18–C21
Trachea, bronchus, and lung	162–163	162	162	C33–C34
Breast	170	174	174–175	C50
Prostate	177	185	185	C61
In situ neoplasms and benign neoplasms . . . . .	...	...	210–239	D00–D48
Diabetes mellitus	260	250	250	E10–E14
Anemias . . . . .	...	...	280–285	D50–D64
Meningitis . . . . .	...	...	320–322	G00, G03
Alzheimer's disease . . . . .	...	...	331	G30
Diseases of heart	400–402, 410–443	390–398, 402, 404, 410–429	390–398, 402, 404, 410–429	I00–I09, I11, I13, I20–I51
Ischemic heart disease . . . . .	...	...	410–414, 429.2	I20–I25
Cerebrovascular diseases	330–334	430–438	430–434, 436–438	I60–I69
Atherosclerosis . . . . .	...	...	440	I70
Influenza and pneumonia	480–483, 490–493	470–474, 480–486	480–487	J10–J18
Chronic lower respiratory diseases	241, 501, 502, 527.1	490–493, 519.3	490–494, 496	J40–J47
Chronic liver disease and cirrhosis	581	571	571	K70, K73–K74
Nephritis, nephrotic syndrome, and nephrosis . . . . .	...	...	580–589	N00–N07, N17–N19, N25–N27
Pregnancy, childbirth, and the puerperium	640–689	630–678	630–676	A34, O00–O95, O98–O99
Congenital malformations, deformations, and chromosomal abnormalities . . . . .	...	...	740–759	Q00–Q99
Certain conditions originating in the perinatal period . . . . .	...	...	760–779	P00–P96
Newborn affected by maternal complications of pregnancy . . . . .	...	...	761	P01
Newborn affected by complications of placenta, cord, and membranes . . . . .	...	...	762	P02
Disorders related to short gestation and low birthweight, not elsewhere classified . . . . .	...	...	765	P07
Birth trauma . . . . .	...	...	767	P10–P15
Intrauterine hypoxia and birth asphyxia . . . . .	...	...	768	P20–P21
Respiratory distress of newborn . . . . .	...	...	769	P22
Sudden infant death syndrome . . . . .	...	...	798.0	R95
Injuries ² . . . . .	...	...	E800–E869, E880–E929, E950–E999	*U01–*U03, V01–Y36, Y85–Y87, Y89

See footnotes at end of table.

Table V. Cause-of-death codes, by applicable revision of the *International Classification of Diseases (ICD)*—Con.

<i>Cause of death (tenth revision titles)</i>	<i>Sixth and seventh revisions</i>	<i>Eighth revision</i>	<i>Ninth revision</i>	<i>Tenth revision</i>
Unintentional injuries ³	E800–E936, E960–E965	E800–E929, E940–E946	E800–E869, E880–E929	V01–X59, Y85–Y86
Motor vehicle-related injuries ³	E810–E835	E810–E823	E810–E825	V02–V04, V09.0, V09.2, V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V79, V80.3–V80.5, V81.0– V81.1, V82.0–V82.1, V83–V86, V87.0–V87.8, V88.0–V88.8, V89.0, V89.2
Poisoning.	E870–E888, E890–E895	E850–E877	E850–E869	X40–X49
Suicide ²	E963, E970–E979	E950–E959	E950–E959	*U03, X60–X84, Y87.0
Homicide ²	E964, E980–E983	E960–E969	E960–E969	*U01–*U02, X85–Y09, Y87.1
Injury by firearms		E922, E955, E965, E970, E985	E922, E955.0–E955.4, E965.0–E965.4, E970, E985.0–E985.4	*U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24, Y35.0

. . . Cause-of-death codes are not provided for causes not shown in *Health, United States*.

¹Categories for coding human immunodeficiency virus (HIV) infection were introduced in 1987. The asterisk (*) indicates codes that are not part of the ninth revision.

²Starting with 2001 data, NCHS introduced categories *U01–*U03 for classifying and coding deaths due to acts of terrorism. The asterisk (*) indicates codes that are not part of the tenth revision.

³In the public health community, the term unintentional injuries is preferred to accidents, and the term motor vehicle-related injuries is preferred to motor vehicle accidents.

SOURCES: CDC/NCHS. Advance report: Final mortality statistics, 1974. Monthly vital statistics report; vol 24 no 11 suppl. Hyattsville, MD: NCHS; 1976.

Available from: http://www.cdc.gov/nchs/data/mvsr/supp/mv24_11sacc.pdf.

Hoyert DL, Kochanek KD, Murphy SL. Deaths: Final data for 1997. National vital statistics reports; vol 47 no 19. Hyattsville, MD: NCHS; 1999. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_19.pdf.

Hoyert DL, Heron MP, Murphy SL, Kung H-C. Deaths: Final data for 2003. National vital statistics reports; vol 54 no 13. Hyattsville, MD: NCHS; 2006. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_13.pdf.

risk factors for this pregnancy: Tobacco use during pregnancy” and the average number of cigarettes per day with no specificity on timing during pregnancy. In 1989, 43 states and the District of Columbia (D.C.) collected data on tobacco use. The following states did not require the reporting of tobacco use in the standard format on the birth certificate: California, Indiana, Louisiana, Nebraska, New York, Oklahoma, and South Dakota. In 1990, information on tobacco use became available from Louisiana and Nebraska, increasing the number of reporting states to 45 and D.C. In 1991–1993, with the addition of Oklahoma to the reporting area, information on tobacco use was available for 46 states and D.C.; in 1994–1998, 46 states, D.C., and New York City reported tobacco use. In 1999, information on tobacco use became available from Indiana and New York, increasing the number of reporting states to 48 and D.C.; starting in 2000, with the addition of South Dakota, the reporting area included 49 states and D.C. During 1989–2006, California did not require the reporting of tobacco use. The area reporting tobacco use encompassed 87% of U.S. births in 1999–2002.

Starting in 2003, some states implemented the 2003 revision of the U.S. Standard Certificate of Live Birth, which asked for the number of cigarettes smoked at different intervals before and during pregnancy. Data on mother’s tobacco use during pregnancy from the 2003 revision of the birth certificate are not comparable with data from the 1989 revision. Therefore, 2005 and 2006 data on smoking are shown separately for the 33 reporting areas (31 states, D.C., and New York City) that used the 1989 revision in 2005 and 2006 and for the 11 reporting areas that used the 2003 revision in 2005 and 2006, in order to provide 2 years of comparable data. The states that used the 2003 revision of the U.S. Standard Certificate of Live Birth for data on smoking in 2005 and 2006 were Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, and Washington state. Data were not shown for one state that implemented the 2003 revision midyear in 2005 and five states that implemented the 2003 revision in 2006: Delaware, North Dakota, Ohio, South Dakota, Vermont (midyear), and Wyoming. Florida also implemented the

2003 revision in 2005, but the birth certificate question on smoking is not comparable with either the 1989 or 2003 revision item on smoking and was therefore excluded. California did not report mother's tobacco use during pregnancy.

Monitoring the Future (MTF)—Information on current cigarette smoking was obtained for high school seniors (starting in 1975) and for 8th and 10th graders (starting in 1991), based on the following question: "How frequently have you smoked cigarettes during the past 30 days?"

National Health Interview Survey (NHIS)—Information about cigarette smoking is obtained for adults 18 years of age and over. Starting in 1993, current smokers are identified by asking the following two questions: "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Persons who smoked 100 cigarettes and who now smoke every day or some days were defined as current smokers. Before 1992, current smokers were identified based on positive responses to the following two questions: "Have you smoked 100 cigarettes in your entire life?" and "Do you smoke now?" (traditional definition). In 1992, the definition of current smoker in NHIS was modified to specifically include persons who smoked on some days (revised definition). In 1992, cigarette smoking data were collected for a half-sample with half the respondents (one-quarter sample) using the traditional smoking questions and the other half of respondents (one-quarter sample) using the revised smoking question ("Do you smoke every day, some days, or not at all?"). An unpublished analysis of the 1992 traditional smoking measure revealed that the crude percentage of current smokers 18 years of age and over remained the same as for 1991. The estimates for 1992 shown in *Health, United States* combine data collected using both the traditional and revised questions.

In 1993–1995, estimates of cigarette smoking prevalence were based on a half-sample. Smoking data were not collected in 1996. Starting in 1997, smoking data were collected in the sample adult questionnaire. For further information on survey methodology and sample sizes pertaining to NHIS cigarette smoking data, see the NHIS tobacco information website: <http://www.cdc.gov/nchs/nhis/tobacco.htm>.

National Survey on Drug Use & Health (NSDUH)—Information on current cigarette smoking is obtained for all persons surveyed who were 12 years of age and over, based on the following question: "During the past 30 days, have you smoked part or all of a cigarette?"

Civilian noninstitutionalized population; Civilian population—See [Population](#).

Community hospital—See [Hospital](#).

Comparability ratio—About every 10 to 20 years, the *International Classification of Diseases (ICD)* is revised to stay abreast of advances in medical science and changes in medical terminology. Each of these revisions produces breaks in the continuity of cause-of-death statistics because of changes in classification and in the rules for selecting an underlying cause of death. Classification and rule changes affect cause-of-death trend data by shifting deaths away from some cause-of-death categories and into others. Comparability ratios measure the effect of changes in classification and coding rules. For the causes shown in [Table VI](#), comparability ratios range between 0.6974 and 1.0365. Influenza and pneumonia had the lowest comparability ratio (0.6974), indicating that this cause is about 30% less likely to be selected as the underlying cause of death in ICD–10 than in ICD–9. Unintentional poisoning had the highest comparability ratio (1.0365), indicating that unintentional poisoning was is more than 3% more likely to be selected as the underlying cause when ICD–10 coding is used.

For selected causes of death, the ICD–9 codes used to calculate death rates for 1980–1998 differ from the ICD–9 codes most nearly comparable with the corresponding ICD–10 cause-of-death category, which also affects the ability to compare death rates across ICD revisions. Examples of these causes are ischemic heart disease; cerebrovascular diseases; trachea, bronchus and lung cancer; unintentional injuries; and homicide. To address this source of discontinuity, mortality trends for 1980–1998 were recalculated using ICD–9 codes that are more comparable with codes for corresponding ICD–10 categories. [Table V](#) shows the ICD–9 codes used for these causes. This modification may lessen the discontinuity between the ninth and tenth revisions, but the effect on the discontinuity between the eighth and ninth revisions is not measured.

Comparability ratios shown in [Table VI](#) are based on a comparability study in which the same deaths were coded using both the ninth and tenth revisions. The comparability ratio was calculated by dividing the number of deaths classified by ICD–10 by the number of deaths classified by ICD–9. The resulting ratios represent the net effect of the tenth revision on cause-of-death statistics and can be used to adjust mortality statistics for causes of death classified by the ninth revision to be comparable with cause-specific mortality statistics classified by the tenth revision.

The application of comparability ratios to mortality statistics helps make the analysis of change between 1998 and 1999 more accurate and complete. The 1998 comparability-modified death rate is calculated by multiplying the comparability ratio by the 1998 death rate. Comparability-modified rates should be used to estimate mortality change between 1998 and 1999.

Caution should be used when applying the comparability ratios presented in [Table VI](#) to age-, race-, and sex-specific mortality data. Demographic subgroups may sometimes differ with regard to their cause-of-death distribution, and this would result in demographic variation in cause-specific comparability ratios.

For more information, see: Anderson RN, Miniño AM, Hoyert DL, Rosenberg HM. Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates. National vital statistics reports; vol 49 no 2. Hyattsville, MD: NCHS; 2001; and Kochanek KD, Smith BL, Anderson RN. Deaths: Preliminary data for 1999. National vital statistics reports; vol 49 no 3. Hyattsville, MD: NCHS; 2001. Final ratios for 113 selected causes of death. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Comparability/icd9_icd10/. (Also see [Appendix II, Cause of death; International Classification of Diseases.](#))

Compensation—See [Employer costs for employee compensation.](#)

Complex activity limitation—Complex activity limitation is a construct used to measure disability as defined by the inability to function successfully in certain social roles. Complex activities consist of the tasks and organized activity that make up numerous social roles like working, maintaining a household, living independently, or participating in community activities. Complex activity performance requires the execution of a combination of core areas of functioning. Complex activity limitation describes limitations or restrictions in an individual's ability to participate fully in social role activities. Complex activities include the following:

- Maintaining independence, including self care and the ability to carry out activities associated with maintaining a household, such as shopping, cooking, and taking care of bills (measures are based on questions commonly known as activities of daily living (ADLs) and instrumental activities of daily living (IADLs)). Limitations in these activities usually reflect severe restrictions and are associated with limitations in other complex activities.
- Difficulties experienced with social and leisure activities—represented in this measure by using questions about attending movies or sporting events, visiting with friends, or pursuing hobbies or relaxation activities.

Table VI. Comparability of selected causes of death between the ninth and tenth revisions of the *International Classification of Diseases (ICD)*

<i>Cause of death</i> ¹	<i>Final comparability ratio</i> ²
Human immunodeficiency virus (HIV) disease . . .	1.0821
Malignant neoplasms	1.0093
Colon, rectum, and anus	0.9988
Trachea, bronchus, and lung	0.9844
Breast	1.0073
Prostate	1.0144
Diabetes mellitus	1.0193
Alzheimer's disease	1.5812
Diseases of heart	0.9852
Ischemic heart diseases	1.0006
Essential (primary) hypertension and hypertensive renal disease	1.1162
Cerebrovascular diseases	1.0502
Influenza and pneumonia	0.6974
Chronic lower respiratory diseases	1.0411
Chronic liver disease and cirrhosis	1.0321
Nephritis, nephrotic syndrome, and nephrosis . . .	1.2555
Pregnancy, childbirth, and the puerperium	1.1404
Unintentional injuries	1.0251
Motor vehicle-related injuries	0.9527
Poisoning	1.0365
Suicide	1.0022
Homicide	1.0020
Injury by firearms	1.0012
Chronic and noncommunicable diseases	1.0100
Injuries	1.0159

¹See [Table V](#) for ICD-9 and ICD-10 cause-of-death codes.

²Ratio of number of deaths classified by ICD-10 to number of deaths classified by ICD-9.

SOURCES: CDC/NCHS. Final comparability ratios for 113 selected causes of death. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Comparability/icd9_icd10/Comparability_Ratio_tables.xls. Miniño M, Anderson RN, Fingerhut LA, Boudreault MA, Warner M. Deaths: Injuries, 2002. National vital statistics reports; vol 54 no 10. Hyattsville, MD: NCHS; 2006. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_10.pdf.

- Perceived limitation in the ability to work (a core aspect of social participation for the majority of the U.S. population) represented by the respondent's self-defined limitation in the kind or amount of work they can do or their inability to work at a job or business.

For more information on how this measure was constructed using data from the National Health Interview Survey, including the specific questions asked, see: Altman B, Bernstein A. Disability and health in the United States, 2001-2005. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/misc/disability2001-2005.pdf>. (Also see [Appendix II, Activities of daily living; Basic actions difficulty; Instrumental activities of daily living.](#))

Computed tomography (CT) scanner—A CT, or computed axial tomography (CAT), scanner is an x-ray machine that combines many x-ray images, with the aid of a computer, to generate cross-sectional views and, if needed, three-dimensional images of the internal organs and structures of the body.

Condition—A health condition is a departure from a state of physical or mental well-being. In the National Health Interview Survey, each condition reported as a cause of an individual's activity limitation has been classified as chronic, not chronic, or unknown if chronic, based on the nature and duration of the condition. Conditions that are not cured once acquired (such as heart disease, diabetes, and birth defects in the original response categories, and amputee and old age in the ad hoc categories) are considered chronic, whereas conditions related to pregnancy are never considered chronic. Other conditions must have been present for 3 months or longer to be considered chronic. An exception is made for children less than 1 year of age who have had a condition since birth because such conditions are always considered chronic.

Consumer Price Index (CPI)—The CPI, prepared by the U.S. Bureau of Labor Statistics, is a monthly measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The medical care component of the CPI shows trends in medical care prices based on specific indicators of hospital, medical, and drug prices. A revision of the definition of the CPI has been in use since January 1988. (Also see [Appendix II, Gross domestic product; Health expenditures, national](#); and [Appendix I, Consumer Price Index](#).)

Contraception—The National Survey of Family Growth collects information on contraceptive use during heterosexual vaginal intercourse, as reported by women 15–44 years of age. For current contraceptive use, women were asked about contraceptive use during the month of interview. Women were classified by whether they reported using each of 19 methods of contraception at any time in the month of interview. Contraceptive methods listed as “other methods” included the following: for 2002, the female condom, foam, cervical cap, Today Sponge, suppository or insert, jelly or cream, or other method; for 1995, the female condom or vaginal pouch, foam, cervical cap, Today Sponge, suppository or insert, jelly or cream, or other method; for 1988, foam, douche, Today Sponge, suppository or insert, jelly or cream, or other method; and for 1982, foam, douche, suppository or insert, or other method.

Crude birth rate; Crude death rate—See [Rate: Birth and related rates](#); [Rate: Death and related rates](#).

Days of care—Days of care is defined similarly in several data systems, as discussed below. (Also see [Appendix II, Admission](#); [Average length of stay](#); [Discharge](#); [Hospital; Hospital utilization](#); [Inpatient](#).)

American Hospital Association—Days, hospital days, or inpatient days are the number of adult and pediatric days of care rendered during the entire reporting period. Days of care for newborns are excluded.

National Health Interview Survey (NHIS)—Hospital days during the year refer to the total number of hospital days occurring in the 12-month period before the interview week. A hospital day is a night spent in the hospital (excluding a night spent in the emergency department) for persons admitted as inpatients. Starting in 1997, hospitalization data from NHIS are for all inpatient stays, whereas estimates for prior years published in previous editions of *Health, United States* excluded hospitalizations for deliveries and newborns.

National Hospital Discharge Survey (NHDS)—Days of care refers to the total number of patient days accumulated by inpatients at the time of discharge from nonfederal short-stay hospitals during a reporting period. All days from and including the date of admission, but not including the date of discharge, are counted.

Death rate—See [Rate: Death and related rates](#).

Dental caries—Dental caries is evidence of dental decay on any surface of a tooth. Untreated dental caries was determined by an oral examination conducted by a trained dentist as part of the National Health and Nutrition Examination Survey. In *Health, United States*, untreated dental caries refers to coronal caries, that is, caries on the crown or enamel surface of the tooth. Treated dental caries and root caries are not included. Study participants 2 years of age and over were eligible for the examination, as long as they did not meet other exclusion criteria. Both permanent and primary (baby) teeth were evaluated, depending on the age of the participant. For children 2–5 years of age, only caries in primary teeth was included. For children 6–11 years of age, caries in both primary and permanent teeth was included. For children 12 years of age and over, and for adults, only caries in permanent teeth was included. Because of significant methodological changes in the collection of 2005–2006 data on dental caries, these data are not comparable with earlier years and, therefore, are not presented in *Health, United States*.

For more information, see http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/ohx_d.pdf.

Dental visit—Starting in 1997, National Health Interview Survey respondents were asked “About how long has it been since you last saw or talked to a dentist? Include all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists as well as hygienists.” Starting in 2001, the question was modified slightly to ask respondents how long it had been since they last saw a dentist. Questions about dental visits were not asked for children under 2 years of age for years 1997–1999 and under 1 year of age for years 2000 and beyond. Starting with 1997 data, estimates are presented for people with a dental visit in the past year. Prior to 1997, dental visit estimates were based on a 2-week recall period.

Diagnosis—Diagnosis is the act or process of identifying or determining the nature and cause of a disease or injury through evaluation of patient history, examination, and review of laboratory data. Diagnoses in the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, the National Hospital Ambulatory Medical Care Survey, and the National Nursing Home Survey are abstracted from medical records and coded to the *International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM). For a given medical care encounter, the first-listed diagnosis can be used to categorize the visit, or, if more than one diagnosis is recorded on the medical record, the visit can be categorized based on all diagnoses recorded. Analyzing first-listed diagnoses avoids double-counting events such as visits or hospitalizations; the first-listed diagnosis is often, but not always, considered the most important or dominant condition among all comorbid conditions. However, the choice of the first-listed diagnosis by the medical facility may be influenced by reimbursement or other factors. A hospital discharge would be considered a first-listed stroke discharge if the ICD–9–CM diagnosis code for stroke was recorded in the first diagnosis field on the hospital record. An any-listed stroke discharge would classify all diagnoses of stroke recorded on the hospital face sheet, regardless of the order in which they are listed. Any-listed diagnoses double-count events such as visits or hospitalizations with more than one recorded diagnosis but provide information on the burden a specific diagnosis presents to the health care system. (Also see [Appendix II, External cause of injury; Injury; Injury-related visit.](#))

Diagnostic and other nonsurgical procedure—See [Procedure.](#)

Dietary supplement—A dietary supplement is a product that contains one or more dietary ingredients, such as vitamins, minerals, botanicals, or amino acids. Data on dietary supplement use come from the National Health and Nutrition Examination Survey (NHANES). During the in-person household interviews, participants were asked about their use

of vitamins, minerals, herbals, or other dietary supplements (including prescription and nonprescription products) in the past month. Participants reporting supplement use were asked to show the supplement containers to the interviewer. If no container was available, the interviewer asked the participant for a detailed name of the supplement. For each supplement reported, the interviewer recorded the supplement's name and manufacturer. Trained nutritionists at NCHS matched the product names entered by the interviewer to a known dietary supplement product. NCHS attempts to obtain a label for each supplement reported by a participant from sources such as the manufacturer or retailer, the Internet, company catalogs, and the *Physician's Desk Reference*. In *Health, United States*, three measures of dietary supplement use are included: (a) taking any supplement, (b) taking any supplement containing folate or folic acid, and (c) taking any supplement containing vitamin D (or cholecalciferol, calciferol, ergocalciferol, or calcitriol).

For more information on dietary supplement data in NHANES, see: <http://www.cdc.gov/nchs/nhanes.htm> and http://www.cdc.gov/nchs/data/nhanes/nhanes_01_02/dsq_b_doc.pdf.

For more information on dietary supplements, see the web page for the National Institutes of Health Office of Dietary Supplements: <http://ods.od.nih.gov/index.aspx>.

Discharge—The National Health Interview Survey defines a hospital discharge as the completion of any continuous period of stay of one night or more in a hospital as an inpatient. According to the National Hospital Discharge Survey, a discharge is a completed inpatient hospitalization. A hospitalization may be completed by death or by releasing the patient to the customary place of residence, a nursing home, another hospital, or other locations. (Also see [Appendix II, Admission; Average length of stay; Days of care; Inpatient.](#))

Domiciliary care home—See [Long-term care facility; Nursing home.](#)

Drug—Drugs are pharmaceutical agents, by any route of administration, for the prevention, diagnosis, or treatment of medical conditions or diseases. Data on specific drug use are collected in three NCHS surveys.

National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS)—In the NAMCS and NHAMCS outpatient and emergency department components, data are collected from the medical record of an in-person physician office visit or a hospital outpatient or emergency department visit, rather than from the patient. Information on generic or brand name drugs is abstracted from the medical record, including prescription and over-the-counter drugs, immunizations, allergy shots, and anesthetics that were

prescribed, ordered, supplied, administered, or continued during the visit. Prior to 1995, up to five drugs per visit could be reported on the patient record form; in data years 1995 and beyond, up to six drugs could be reported. Starting with data year 2003, up to eight drugs could be reported, as well as a count of the total number of drugs prescribed, ordered, supplied, administered, or continued during the visit.

For more information on drugs collected by NAMCS and NHAMCS, see the NAMCS website and the drug database. Available from: <http://www.cdc.gov/nchs/ahcd.htm> or ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NAMCS/. For more information on how drugs are classified into therapeutic use categories, see the National Drug Code Directory therapeutic class. Available from: <http://www.fda.gov/Drugs/InformationOnDrugs/ucm142438.htm>. (Also see [Appendix I, National Ambulatory Medical Care Survey](#) and [National Hospital Ambulatory Medical Care Survey](#).)

National Health and Nutrition Examination Survey (NHANES)—Drug information from NHANES III and 2003–2006 NHANES was collected during an in-person interview conducted in the participant's home. Participants were asked whether they had taken a medication in the past month for which they needed a prescription. Those who answered “yes” were asked to produce the prescription medication containers for the interviewer. For each medication reported, the interviewer entered the product's complete name from the container. If no container was available, the interviewer asked the participant to verbally report the name of the medication. In addition, participants were asked how long they had been taking the medication and the main reason for use.

All reported medication names were converted to their standard generic ingredient name. For multi-ingredient products, the ingredients were listed in alphabetical order and counted as one drug (e.g., Tylenol #3 was listed as acetaminophen; codeine). No trade or proprietary names were provided on the data file.

Drug data from NHANES provide a snapshot of all prescribed drugs reported by a sample of the civilian noninstitutionalized population for a 1-month period. Drugs taken on an irregular basis, such as every other day, once per week, or for a 10-day period, were captured in the 1-month recall period. Data shown in *Health, United States* for the percentage of the population reporting three or more prescription drugs during the past month include a range of drug utilization patterns—for example, persons who took three or more drugs daily during the past month or persons who took a different

drug three separate times—as long as at least three different drugs were taken during the past month.

For more information on prescription drug data collection and coding in NHANES 2003–2006, see: http://www.cdc.gov/nchs/data/nhanes/nhanes_03_04/rxq_rx_c.pdf and http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/rxq_rx_d.pdf. For more information on NHANES III prescription drug data collection and coding, see: <http://www.cdc.gov/nchs/data/nhanes/nhanes3/PUPREMED-acc.pdf>. (Also see [Appendix I, National Health and Nutrition Examination Survey](#).)

Drug abuse—See [Illicit drug use](#).

Education—Several approaches to defining educational categories are used in *Health, United States*.

Birth file—Information on educational attainment of mother is based on number of years of school completed, as reported by the mother on the birth certificate. Between 1970 and 1992, the reporting area for maternal education expanded.

Mother's education was reported on the birth certificate by 38 states in 1970. Data were not available from Alabama, Arkansas, California, Connecticut, Delaware, the District of Columbia (D.C.), Georgia, Idaho, Maryland, New Mexico, Pennsylvania, Texas, and Washington state. In 1975, these data became available from Connecticut, Delaware, Georgia, Maryland, and D.C., increasing the number of states reporting mother's education to 42 and D.C. Between 1980 and 1988, only three states—California, Texas, and Washington—did not report mother's education. In 1988, mother's education was also missing for New York state outside New York City. In 1989–1991, mother's education was missing only from Washington state and New York state outside New York City. During 1992–2002, mother's education was reported by all 50 states and D.C.

Starting in 2003, some states implemented the 2003 revision of the U.S. Standard Certificate of Live Birth. The education item on the 2003 revision asks for the highest degree or level of school completed, whereas the education item on the 1989 revision asks for highest grade completed. Data on mother's education from the 2003 revision of the birth certificate are not comparable with data from the 1989 revision. Therefore, 2005 and 2006 data on mother's education are shown separately for the 33 reporting areas (31 states, D.C., and New York City) that used the 1989 revision in 2005 and 2006 and for the 12 reporting areas that used the 2003 revision in 2005 and 2006, in order to provide 2 years of

comparable data. The states that used the 2003 revision of the U.S. Standard Certificate of Live Birth for data on mother's education were: Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York (except for New York City), Pennsylvania, South Carolina, Tennessee, Texas, and Washington. Data are not shown in *Health, United States* for one state that implemented the 2003 revision midyear in 2005 and six states that implemented the 2003 revision in 2006: California, Delaware, North Dakota, Ohio, South Dakota, Vermont (midyear), and Wyoming.

Mortality file—Information on the educational attainment of decedents became available for the first time in 1989 because of a revision of the U.S. Standard Certificate of Death. Decedent's educational attainment is reported on the death certificate by the funeral director, based on information provided by an informant such as next of kin. Mortality data by educational attainment for 1989 were based on data from 20 states; by 1994–1996, this increased to 45 states and the District of Columbia (D.C.). In 1994–1996, either the following states did not report educational attainment on the death certificate or the information was more than 20% incomplete: Georgia, Kentucky, Oklahoma, Rhode Island, and South Dakota. In 1997–2000, information on decedent's education was available from Oklahoma, increasing the reporting area to 46 states and D.C. With the addition of Kentucky, the reporting area increased to 47 states and D.C. in 2001 and 2002.

The U.S. Standard Certificate of Death was revised in 2003, and states are adopting this new certificate on a rolling basis. Educational attainment data from the revised death certificate, which focuses on degrees attained, are not comparable with educational attainment data collected using the 1989 revision, which focused on years of school completed. In 2006, D.C. and the following 20 states used the 2003 question: California, Connecticut, Florida, Idaho, Kansas, Michigan, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Utah, Washington, and Wyoming. The unrevised education item continued to be used by the following 28 states: Alabama, Alaska, Arizona, Arkansas, Colorado, Delaware, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nevada, North Carolina, North Dakota, Ohio, Pennsylvania, Tennessee, Vermont, Virginia, Wisconsin, and West Virginia. For mortality data by educational attainment and for more information on the revised educational attainment item, see: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek, KD, Tejada-Vera B. Deaths: Final data for

2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

Calculation of unbiased death rates by educational attainment based on the National Vital Statistics System requires that the reporting of education on the death certificate be complete and consistent with the reporting of education on the Current Population Survey (CPS)—the source of population estimates for denominators for death rates. Death records that are missing information about decedent's education are not included in the calculation of rates. Therefore, the levels of death rates by educational attainment shown in *Health, United States* are underestimated by approximately the percentage with not stated education, which ranges from 2% to 9%.

The validity of information about the decedent's education was evaluated by comparing self-reported education obtained in the CPS with education reported on the death certificate for decedents in the National Longitudinal Mortality Survey (NLMS), a prospective study of persons in the CPS. (See: Sorlie PD, Johnson NJ. Validity of education information on the death certificate. *Epidemiology* 1996;7(4):437–9.) Another analysis compared self-reported education collected in the first National Health and Nutrition Examination Survey (NHANES I) with education on the death certificate for decedents in the NHANES I Epidemiologic Follow-up Study. (See: Makuc DM, Feldman JJ, Mussolino ME. Validity of education and age as reported on death certificates. In: 1996 Proceedings of the American Statistical Association Social Statistics Section. Alexandria, VA: American Statistical Association; 1997:102–6.) Results of both studies indicated that there is a tendency for some people who did not graduate from high school to be reported as high school graduates on the death certificate. This tendency results in overstating the death rate for high school graduates and understating the death rate for the group with less than 12 years of education. The bias was greater among older than younger decedents and somewhat greater among black than white decedents.

In addition, educational gradients in death rates based on the National Vital Statistics System were compared with those based on the NLMS. Results of these comparisons indicate that educational gradients in death rates based on the National Vital Statistics System were reasonably similar to those based on NLMS for white persons 25–64 years of age and black persons 25–44 years of age. The number of deaths for persons of Hispanic origin in NLMS was too small to permit comparison for this ethnic group.

For further information on measurement of education, see: Kominski R, Siegel PM. Measuring education in the Current Population Survey. *Mon Labor Rev* 1993;116: 34–8.

National Health Interview Survey (NHIS)—Starting in 1997, the NHIS questionnaire was changed to ask “What is the highest level of school [person] has completed or the highest degree received?” Responses were used to categorize adults according to educational credentials (e.g., no high school diploma or general educational development high school equivalency diploma (GED); high school diploma or GED; some college, no bachelor’s degree; bachelor’s degree or higher).

Prior to 1997, the education variable in NHIS was measured by asking, “What is the highest grade or year of regular school [person] has ever attended?” and “Did [person] finish the grade/year?” Responses were used to categorize adults according to years of education completed (e.g., less than 12 years, 12 years, 13–15 years, and 16 or more years).

Data from the 1996 and 1997 NHIS were used to compare distributions of educational attainment for adults 25 years of age and over, using categories based on educational credentials (1997) and categories based on years of education completed (1996). A larger percentage of persons reported some college than 13–15 years of education, and a correspondingly smaller percentage reported high school diploma or GED than 12 years of education. In 1997, 19% of adults reported no high school diploma, 31% a high school diploma or GED, 26% some college, and 24% a bachelor’s degree or higher. In 1996, 18% of adults reported less than 12 years of education, 37% 12 years of education, 20% 13–15 years, and 25% 16 or more years of education.

Emergency department—According to the National Hospital Ambulatory Medical Care Survey, an emergency department is a hospital facility that is staffed 24 hours a day and provides unscheduled outpatient services to patients whose condition requires immediate care. Off-site emergency departments open fewer than 24 hours are included if staffed by the hospital’s emergency department. (Also see [Appendix II, Emergency department or emergency room visit; Outpatient department.](#))

Emergency department or emergency room visit—Starting with the 1997 National Health Interview Survey, respondents to the sample adult and sample child questionnaires (generally a parent) were asked about the number of visits to hospital emergency rooms during the past 12 months, including visits that resulted in hospitalization. In the National Hospital Ambulatory Medical Care Survey, an emergency

department visit is a direct personal exchange between a patient and a physician or other health care providers working under the physician’s supervision, for the purpose of seeking care and receiving personal health services. (Also see [Appendix II, Emergency department; Injury-related visit.](#))

Employer costs for employee compensation—Employer costs for employee compensation is a measure of the average cost per employee hour worked to employers for wages, salaries, and benefits. Wages and salaries are defined as the hourly straight-time wage rate or, for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases. Production bonuses, incentive earnings, commission payments, and cost-of-living adjustments are included in straight-time wage and salary rates. Benefits covered are paid leave (paid vacations, holidays, sick leave, and other leave), supplemental pay (premium pay for overtime and work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases), insurance benefits (life, health, and short- and long-term disability), retirement and savings benefits (pension and other retirement plans and savings and thrift plans), legally required benefits (Social Security, Medicare, federal and state unemployment insurance, workers’ compensation, and other benefits required by law, such as state temporary disability insurance), and other benefits (severance pay and supplemental unemployment plans). As of June 2008, other leave benefit includes only paid personal leave. (Also see [Appendix I, National Compensation Survey.](#))

End-stage renal disease (ESRD)—ESRD is a complete or near complete failure of the kidneys to function to excrete wastes, concentrate urine, and regulate electrolytes. ESRD occurs when the kidneys are no longer able to function at the level necessary for day-to-day life. It usually occurs as chronic renal failure worsens to the point where kidney function is less than 10% of normal. At that point, kidney function is so low that without dialysis or kidney transplantation, complications are multiple and severe, and death will occur from accumulation of fluids and waste products in the body. Without treatment, the loss of kidney function in ESRD is usually irreversible and permanent, and death follows.

Although the Medicare program covers the majority of ESRD-certified patients, not all individuals with ESRD are eligible for Medicare. In addition to being medically determined to have ESRD, filing an application, and meeting

any applicable waiting period, an individual must meet one of the following criteria:

- The individual has earned the required work credits under Social Security, Railroad Retirement, or as a government employee,
- The individual is receiving Social Security or Railroad Retirement benefits, or
- The individual is the spouse or dependent child of a person who has earned the required work credits or is receiving Social Security or Railroad Retirement benefit.

The United States Renal Data Network has tracked both Medicare-eligible and ineligible ESRD patients since May 1995. See [Appendix I, United States Renal Data System](#).

Ethnicity—See [Hispanic origin](#).

Exercise—See [Physical activity, leisure-time](#).

Expenditures—See [Health expenditures, national](#). (Also see [Appendix I, National Health Expenditure Accounts](#).)

External cause of injury—The external cause of injury is used for classifying the circumstances in which injuries occur. The *International Classification of Diseases, ninth revision* (ICD-9), External Cause of Injury Matrix is a two-dimensional array describing both the mechanism or external cause of the injury (e.g., fall, motor vehicle traffic) and the manner or intent of the injury (e.g., unintentional, self-inflicted, or assault). Although this matrix was originally developed for mortality, it has been adapted for use with the ICD-9–Clinical Modification. For more information, see the NCHS website: <http://www.cdc.gov/nchs/about/otheract/injury/tools.htm>; and see: Bergen G, Chen LH, Warner M, Fingerhut LA. Injury in the United States: 2007 chartbook. Hyattsville, MD: NCHS; 2008. Available from: <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>.

Family income—For the National Health Interview Survey and the National Health and Nutrition Examination Survey, all people within a household who are related to each other by blood, marriage, or adoption constitute a family. Each member of a family is classified according to the total income of the family. Unrelated individuals are classified according to their own income.

National Health Interview Survey (NHIS)—Prior to 1997, family income was the total income received by members of a family (or by an unrelated individual) in the 12 months before interview. Family income included wages, salaries, rents from property, interest, dividends, profits and fees from their own businesses, pensions, and help from relatives. Starting in 1997, NHIS collected family income data for the calendar year prior to interview (e.g.,

2007 family income data were based on calendar year 2006 information). The 1997–2006 instrument allowed the respondent to supply a specific dollar amount (up to \$999,995). Any family income responses greater than \$999,995 were entered as \$999,996. Respondents who did not know or refused to give a dollar amount in response to this question were asked if their total combined family income for the previous year was \$20,000 or more, or less than \$20,000. If the respondent answered this question, he/she was then given one of two flash cards and asked to indicate which income group listed on the card best represented the family's combined income during the previous calendar year. One flash card listed incomes that were \$20,000 or more, and the other flash card listed incomes that were less than \$20,000. Starting with the 2007 NHIS, the income amount follow-up questions that had been in place since 1997 were replaced with a series of unfolding bracket questions. The unfolding bracket method asked a series of closed-ended income range questions (e.g., "Is it less than \$50,000?") if the respondent did not provide an answer to the exact income amount question. The closed-ended income range questions were constructed so that each successive question establishes a smaller range for the amount of the family's income. For more information on the current income questions, see: 2007 NHIS public-use data release [online]. NCHS. 2008. Available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2007/srvydesc.pdf. Also see: Pleis JR, Cohen RA. Impact of income bracketing on poverty measures used in the National Health Interview Survey's Early Release Program: Preliminary data from the 2007 NHIS [online]. NCHS. 2007. Available from: <http://www.cdc.gov/nchs/data/nhis/income.pdf>.

Family income data are used in the computation of poverty level. Starting with *Health, United States, 2004*, a new methodology for imputing family income data for NHIS was implemented for data years 1997 and beyond. Multiple imputations were performed for survey years 1997 and beyond, with five sets of imputed values created to allow for the assessment of variability caused by imputation. Family income was missing for 24%–29% of persons in 1997–1998 and 31%–34% in 1999–2007. A detailed description of the multiple imputation procedure, and data files for 1997 and beyond, are available from: http://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm via the data release or the imputed income files link under that year. For data years 1990–1996, about 16%–18% of persons had missing data for family income. In those years, missing values were imputed for family income by using a sequential hot deck within

matrix cells imputation approach. A detailed description of the imputation procedure and data files, with imputed annual family income for 1990–1996, is available from: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NHIS/1990-96_Family_Income/; and ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1990-96_Family_Income/.

National Health and Nutrition Examination Survey (NHANES)—In NHANES 1999 and onward, family income is asked in a series of questions about possible sources of income, including wages, salaries, interest and dividends, federal programs, child support, rents, royalties, and other possible sources. After the information about sources of income was obtained in the family interview income section of the questionnaire, the respondent was asked to report total combined family income for themselves and the other members of their family, in dollars. If the respondent did not provide an answer or did not know the total combined family income, he/she was asked if the total family income was less than \$20,000 or \$20,000 or more. If the respondent answered, a follow-up question asked the respondent to select an income range from a list on a printed hand card. The midpoint of the income range was then used as the total family income value. Family income values were used to calculate the poverty income ratio. NHANES II did include questions on components of income. NHANES III did not ask the detailed components of income questions but asked respondents to identify their income based on a set of ranges provided on a flash card. Family income was not imputed for individuals or families with no reported income information in any of the NHANES survey years. (Also see [Appendix II, Poverty](#).)

Federal hospital—See [Hospital](#).

Fee-for-service health insurance—Fee-for-service health insurance is private (commercial) health insurance that reimburses health care providers on the basis of a fee for each health service provided to the insured person. It is also known as indemnity health insurance. In addition, fee-for-service is a term often applied to original Medicare, before Medicare managed-care plans or other new payment systems were introduced. (Also see [Appendix II, Health insurance coverage](#); [Managed care](#); [Medicare](#).)

Fertility rate—See [Rate: Birth and related rates](#).

General hospital—See [Hospital](#).

General hospital providing separate psychiatric services—See [Mental health organization](#).

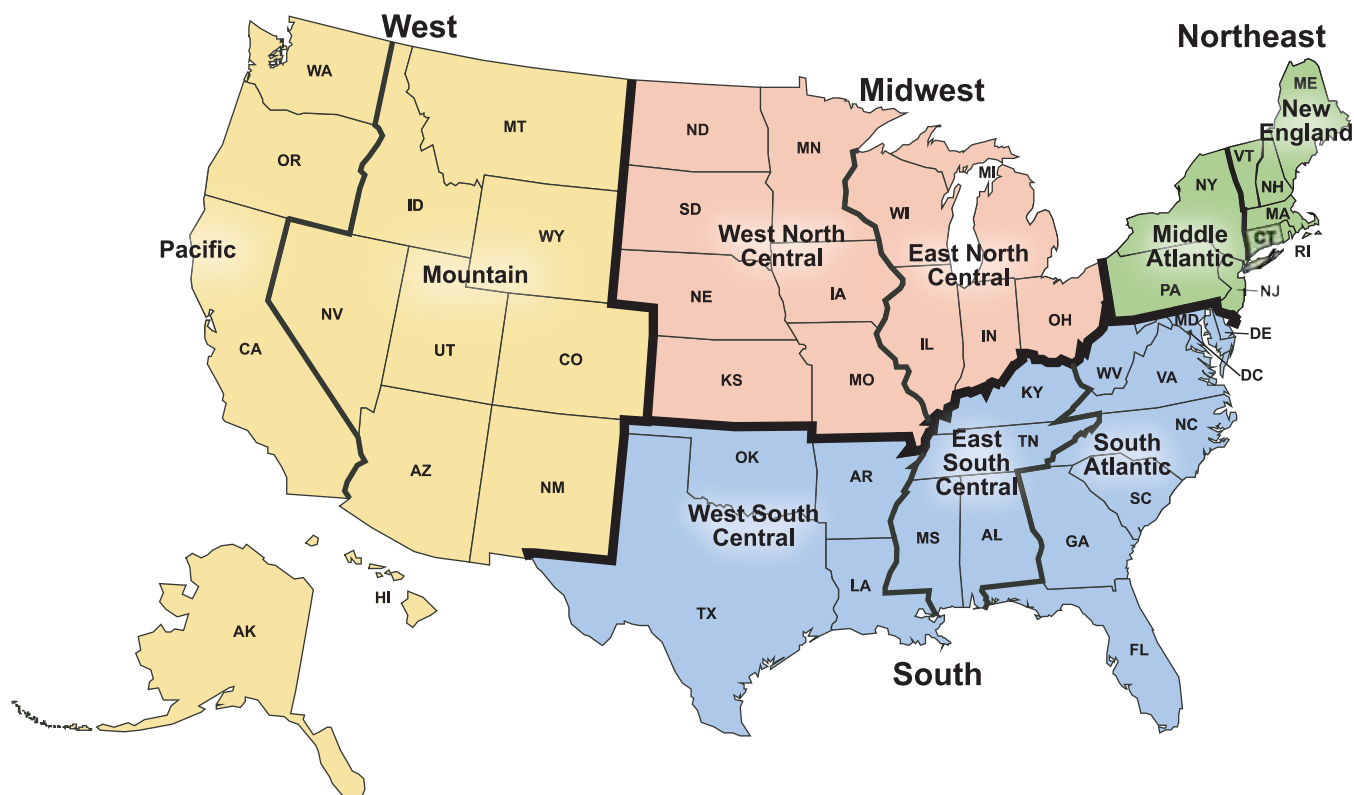
Geographic region—The U.S. Census Bureau groups the 50 states and the District of Columbia, for statistical purposes, into four geographic regions—Northeast, Midwest, South, and West—and nine divisions, based on geographic proximity. (See [Figure I](#).)

Gestation—For the National Vital Statistics System and CDC’s Abortion Surveillance, the period of gestation is defined as beginning with the first day of the last normal menstrual period and ending with the day of birth or day of termination of pregnancy. Data on gestational age are subject to error for several reasons, including imperfect maternal recall or misidentification of the last menstrual period because of post-conception bleeding, delayed ovulation, or intervening early miscarriage.

Gross domestic product (GDP)—The GDP is the market value of the goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers (i.e., the workers and, for property, the owners) may be U.S. residents or residents of other countries. (Also see [Appendix II, Consumer Price Index](#); [Health expenditures, national](#).)

Health care contact—Starting in 1997, the National Health Interview Survey has collected information on health care contacts with doctors and other health care professionals by using the following questions: “During the past 12 months, how many times have you gone to a hospital emergency room about your own health?”, “During the past 12 months, did you receive care at home from a nurse or other health care professional? What was the total number of home visits received?”, and “During the past 12 months, how many times have you seen a doctor or other health care professional about your own health at a doctor’s office, a clinic, or some other place? Do not include times you were hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls.” Starting with 2000 data, this question was amended to exclude dental visits. For 1997–1999, for each question, respondents were shown a flash card with response categories of 0, 1, 2–3, 4–9, 10–12, or 13 or more visits. Starting with 2000 data, response categories were expanded to 0, 1, 2–3, 4–5, 6–7, 8–9, 10–12, 13–15, or 16 or more. Analyses of the percentage of persons with health care visits were conducted as follows: For tabulation of the 1997–1999 data, responses of 2–3 were recoded to 2, and responses of 4–9 were recoded to 6. Starting with 2000 data, tabulation of responses of 2–3 were recoded to 2, and other responses were recoded to the midpoint of the range. A summary measure of health care visits was constructed by adding recoded responses for these questions and categorizing the sum as none, 1–3, 4–9, or 10 or more health care visits in the past 12 months.

Figure I. Census Bureau: Four Geographic Regions and Nine Divisions of the United States



Analyses of the percentage of children without a health care visit are based on the following question: “During the past 12 months, how many times has [person] seen a doctor or other health care professional about (his/her) health at a doctor’s office, a clinic, or some other place? Do not include times [person] was hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls.” (Also see [Appendix II, Emergency department or emergency room visit; Home visit.](#))

Health expenditures, national—National health expenditures are estimated by the Centers for Medicare & Medicaid Services (CMS) and measure spending for health care in the United States by type of service delivered (e.g., hospital care, physician services, nursing home care) and source of funding for those services (e.g., private health insurance, Medicare, Medicaid, out-of-pocket spending). CMS produces both historical and projected estimates of health expenditures by category. (Also see [Appendix II, Consumer Price Index; Gross domestic product.](#)) Types of national health expenditures include:

Health services and supplies expenditures are outlays for goods and services relating directly to patient care, plus expenses for administering health insurance programs and government public health activities. This category is

equivalent to total national health expenditures minus expenditures for research and construction.

National health expenditures estimates the amount spent for all health services and supplies, and health-related research and construction activities, consumed in the United States during the calendar year. Detailed estimates are available by source of expenditure (e.g., out-of-pocket payments, private health insurance, and government programs) and by type of expenditure (e.g., hospital care, physician services, and prescription drugs) and are in current dollars for the year of report. Data are compiled from a variety of sources.

Nursing home expenditures cover care rendered in (a) establishments primarily engaged in providing inpatient nursing and rehabilitative services and continuous personal care services to persons requiring nursing care (e.g., skilled nursing and intermediate care facilities, including those for the mentally retarded) and (b) continuing care retirement communities with on-site nursing care facilities. The costs of long-term care provided by hospitals are excluded.

Personal health care expenditures are outlays for goods and services relating directly to patient care. The expenditures in this category are total national health

expenditures minus expenditures for research and construction, health insurance program administration, and government public health activities.

Private expenditures are outlays for services provided or paid for by nongovernmental sources: consumers, insurance companies, private industry, and philanthropic and other nonpatient care sources.

Public expenditures are outlays for services provided or paid for by federal, state, and local government agencies or expenditures required by governmental mandate (such as worker's compensation insurance payments).

Health insurance coverage—Health insurance is broadly defined to include both public and private payors who cover medical expenditures incurred by a defined population in a variety of settings.

National Health Interview Survey (NHIS)—For point-in-time health insurance estimates, NHIS respondents were asked about their coverage at the time of interview. For 1993–1996, respondents were asked about their coverage in the previous month. Questions on health insurance coverage were expanded starting in 1993 compared with previous years. In 1997, the entire questionnaire was redesigned and data were collected using a computer-assisted personal interview (CAPI). In 2007, questions on health insurance coverage were expanded again to include three new questions on high deductible health plans, health savings accounts, and flexible spending accounts.

Respondents were considered to be covered by private health insurance if they indicated private health insurance or, prior to 1997, if they were covered by a single-service hospital plan. Private health insurance includes managed care such as health maintenance organizations (HMOs).

Private insurance obtained through the workplace was defined as any private insurance that was originally obtained through a present or former employer or union, or, starting in 1997, through the workplace, self-employment, or a professional association.

Until 1996, persons were defined as having Medicaid or other public assistance coverage if they indicated that they had either Medicaid or other public assistance or if they reported receiving Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI). After welfare reform in late 1996, Medicaid was delinked from AFDC and SSI. Starting in 1997, persons were considered to be covered by Medicaid if they reported Medicaid or a state-sponsored health program. Starting in 1999, persons were considered covered by Medicaid if they reported coverage by the Children's Health

Insurance Program (CHIP). Medicare or military health plan coverage was also determined in the interview, and, starting in 1997 other government-sponsored program coverage was determined as well.

If respondents did not report coverage under one of the above types of plans and they had unknown coverage under either private health insurance or Medicaid, they were considered to have unknown coverage.

The remaining respondents without any indicated coverage were considered uninsured. The uninsured were persons who did not have coverage under private health insurance, Medicare, Medicaid, public assistance, a state-sponsored health plan, other government-sponsored programs, or a military health plan. Persons with only Indian Health Service coverage were considered uninsured. Estimates of the percentage of persons who were uninsured based on NHIS may differ slightly from those based on the March Current Population Survey (CPS) because of differences in survey questions, recall period, and other aspects of survey methodology.

In NHIS, on average, less than 2% of people 65 years of age and over reported no current health insurance coverage, but the small sample size precludes the presentation of separate estimates for this population. Therefore, the term uninsured refers only to the population under age 65.

Two additional questions were added to the health insurance section of NHIS beginning with the third quarter of 2004 (Table VII). One question was asked of persons 65 years of age and over who had not indicated that they had Medicare: "People covered by Medicare have a card which looks like this. [Are/Is] [person] covered by Medicare?" The other question was asked of persons under 65 years of age who had not indicated any type of coverage: "There is a program called Medicaid that pays for health care for persons in need. In this state it is also called [state name]. [Are/Is] [person] covered by Medicaid?"

Respondents who originally classified themselves as uninsured, but whose classification was changed to Medicare or Medicaid on the basis of a "yes" response to either question, subsequently received appropriate follow-up questions concerning periods of noncoverage for insured respondents. Of the 892 people (unweighted) who were eligible to receive the Medicare probe question in the third and fourth quarters of 2004, 55% indicated that they were covered by Medicare. Of the 9,146 people (unweighted) who were eligible to receive the Medicaid probe question in the third and fourth quarters of 2004, 3% indicated that they were covered by Medicaid.

Table VII. Percentage of persons under 65 years of age with Medicaid or who are uninsured, by selected demographic characteristics, using Method 1 and Method 2 estimation procedures: United States, 2004

Characteristic	Medicaid ¹		Uninsured ²	
	Method 2 ³	Method 1 ³	Method 2 ³	Method 1 ³
	Percent (standard error)			
Age				
Under 65 years	12.0 (0.24)	11.8 (0.24)	16.4 (0.23)	16.6 (0.23)
Under 18 years	25.4 (0.49)	24.9 (0.49)	9.2 (0.30)	9.7 (0.29)
18–64 years	6.6 (0.17)	6.5 (0.17)	19.3 (0.26)	19.4 (0.26)
Percent of poverty level ⁴				
Below 100%	47.5 (1.03)	46.6 (1.03)	29.6 (0.89)	30.5 (0.92)
100%–less than 200%	22.0 (0.59)	21.5 (0.60)	28.9 (0.66)	29.4 (0.66)
200% or more	2.9 (0.13)	2.8 (0.13)	9.4 (0.23)	9.5 (0.23)
Age and percent of poverty level ⁴				
Under 18 years				
Below 100%	71.9 (1.35)	70.2 (1.35)	14.5 (1.15)	16.2 (1.22)
100%–less than 200%	39.2 (1.13)	38.4 (1.14)	15.0 (0.81)	15.8 (0.82)
200% or more	6.2 (0.33)	6.1 (0.33)	4.9 (0.30)	4.9 (0.30)
18–64 years				
Below 100%	31.2 (1.02)	30.8 (1.02)	39.7 (1.09)	40.1 (1.09)
100%–less than 200%	12.0 (0.48)	11.8 (0.48)	37.0 (0.72)	37.2 (0.72)
200% or more	1.7 (0.11)	1.7 (0.10)	11.0 (0.26)	11.1 (0.26)
Hispanic origin and race ⁵				
Hispanic or Latino	22.2 (0.55)	21.5 (0.55)	34.4 (0.64)	35.1 (0.65)
Mexican	22.0 (0.63)	21.5 (0.63)	37.6 (0.82)	38.1 (0.83)
Not Hispanic or Latino	10.2 (0.25)	10.1 (0.25)	13.2 (0.23)	13.3 (0.23)
White only	7.4 (0.26)	7.4 (0.26)	12.0 (0.25)	12.1 (0.25)
Black or African American only	23.9 (0.80)	23.5 (0.79)	17.3 (0.58)	17.8 (0.58)

¹The category Medicaid includes persons who do not have private coverage but who have Medicaid or other state-sponsored health plans, including the Children's Health Insurance Program (CHIP).

²The category uninsured includes persons who have not indicated that they are covered at the time of interview under private health insurance, Medicare, Medicaid, CHIP, a state-sponsored health plan, other government programs, or a military health plan (includes VA, TRICARE, and CHAMP-VA). This category includes persons who are only covered by Indian Health Service (IHS) or only have a plan that pays for one type of service, such as accidents or dental care.

³Starting with the third quarter of 2004, two additional questions were added to the National Health Interview Survey (NHIS) insurance section to reduce potential errors in reporting of Medicare and Medicaid status. Persons 65 years of age and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons under 65 years of age with no reported coverage were asked explicitly about Medicaid coverage. Estimates calculated without using the additional information from these questions are noted as Method 1. Estimates calculated using the additional information from these questions are noted as Method 2.

⁴Percent of poverty level is based on family income and family size and composition, using the U.S. Census Bureau's poverty thresholds. The percentage of respondents with unknown poverty level was 28.2% in 2004. See the NHIS Survey Description Document for 2004. Available from: <http://www.cdc.gov/nchs/data/nhis/srvydesc.pdf>.

⁵Persons of Hispanic origin may be of any race or combination of races. Similarly, the category Not Hispanic or Latino refers to all persons who are not of Hispanic or Latino origin, regardless of race.

SOURCE: CDC/NCHS, National Health Interview Survey, 2004. Family Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/impact04/impact04.htm>.

Estimates in *Health, United States* were calculated using the responses to the two additional probe questions. For a complete discussion of the effect of the addition of these two probe questions on the estimates for insurance coverage, see: Cohen RA, Martinez ME. Impact of Medicare and Medicaid probe questions on health insurance estimates from the National Health Interview Survey, 2004 [online]. Health E-Stats. NCHS. 2005. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/impact04/impact04.htm>.

Survey respondents may be covered by health insurance at the time of interview but may have experienced one or more lapses in coverage during the 12 months prior to interview. Starting with *Health, United States, 2006*, NHIS estimates have been presented for the following three exhaustive categories: (a) people with health insurance continuously for the full 12 months prior to interview, (b) those who had a period of up to 12 months prior to interview without coverage, and (c) those who were uninsured for more than 12 months prior to interview.

This stub variable has been added to selected tables. Two additional NHIS questions were used to determine the appropriate category for the survey respondents: (a) all persons without known comprehensive health insurance plan were asked, "About how long has it been since [person] last had health care coverage?", and (b) all persons with known health insurance coverage were asked, "In the past 12 months, was there any time when [person] did NOT have ANY health insurance coverage?"

(Also see [Appendix II, Fee-for-service health insurance; Health maintenance organization; Managed care; Medicaid; Medicare; Children's Health Insurance Program; Uninsured.](#))

Health maintenance organization (HMO)—An HMO is a health care system that assumes or shares both the financial risks and the delivery risks associated with providing comprehensive medical services to a voluntarily enrolled population in a particular geographic area, usually in return for a fixed, prepaid fee. Pure HMO enrollees use only the prepaid, capitated health services of the HMO panel of medical care providers. Open-ended HMO enrollees use the prepaid HMO health services but may also receive medical care from providers who are not part of the HMO panel. There is usually a substantial deductible, copayment, or coinsurance associated with use of nonpanel providers. HMO model types are as follows:

Group model HMO is an HMO that contracts with a single multispecialty medical group to provide care to the HMO's membership. The group practice may work exclusively with the HMO, or it may provide services to non-HMO patients as well. The HMO pays the medical group a negotiated per capita rate, which the group distributes among its physicians, usually on a salaried basis.

Staff model HMO is a closed-panel HMO (where patients can receive services only through a limited number of providers) in which physicians are HMO employees. The providers see members in the HMO's own facilities.

Network model HMO is an HMO that contracts with multiple physician groups to provide services to HMO members. It may include single or multispecialty groups.

Individual practice association (IPA) is a health care provider organization composed of a group of independent practicing physicians who maintain their own offices and band together for the purpose of contracting their services to HMOs, preferred provider organizations, and insurance companies. An IPA may contract with and

provide services to both HMO and non-HMO plan participants.

Mixed model HMO is an HMO that combines features of more than one HMO model.

(Also see [Appendix II, Managed care; Preferred provider organization.](#))

Health services and supplies expenditures—See [Health expenditures, national.](#)

Health status, respondent-assessed—Health status was measured in the National Health Interview Survey by asking the family respondent about his or her health or the health of a family member: "Would you say [person's] health in general is excellent, very good, good, fair, or poor?"

Hearing trouble—In the National Health Interview Survey, information about hearing trouble is obtained by asking respondents how well they hear without the use of hearing aids. Prior to 2007 data, respondents were asked, "Which statement best describes your hearing without a hearing aid: good, a little trouble, a lot of trouble, or deaf?" In *Health, United States*, a lot of trouble and deaf are combined into one category: hearing trouble. Starting with 2007 data, the question was revised to expand the response categories. Respondents were asked, "These next questions are about your hearing WITHOUT the use of hearing aids or other listening devices. Is your hearing excellent, good, a little trouble hearing, moderate trouble, a lot of trouble, or are you deaf?" For 2007 data, a lot of trouble and deaf are still combined into the one category, hearing trouble, in *Health, United States*. However, because of the expanded response categories, 2007 data are not strictly comparable with earlier years and caution is urged when interpreting trends. For example, in 2006, 3.5% of adults (18 years of age and over) were classified as having hearing difficulty (response categories: a lot of trouble or deaf). In 2007, 2.3% of adults (18 years and over) were classified as having hearing difficulty (response categories: a lot of trouble or deaf). This more than 30% decline from 2006 to 2007 in the estimate of those with hearing trouble is likely attributable to the addition of the moderate trouble response category, rather than changes in the prevalence of hearing trouble. Although all age groups saw a decline in the percentage reporting hearing trouble between 2006 and 2007, the amount of the decline varied. There was a 50% decline in reported hearing trouble among adults 18–44 years of age (from 0.8% in 2006 to 0.4% in 2007). Among adults 45–64 years, the percentage that reported hearing trouble declined 43%, from 3.5% in 2006 to 2.0% in 2007. Among adults 65 years and over, reported hearing trouble declined 24%, from 11.4% in 2006 to

8.7% in 2007. For all age groups, these declines are likely attributable to the additional response categories in the 2007 hearing question.

For more information, see: Pleis JR, Lucas JW. Summary health statistics for U.S. adults: National Health Interview Survey, 2007. *Vital Health Stat* 10(240). Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/series/sr_10/sr10_240.pdf.

Hispanic origin—Hispanic or Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central and South American, and other or unknown Latin American or Spanish origins. Persons of Hispanic origin may be of any race.

Birth file—The reporting area for an Hispanic-origin item on the birth certificate expanded between 1980 and 1993 (when the Hispanic item was included on the birth certificate in all states and the District of Columbia (D.C.)). Trend data on births of Hispanic and non-Hispanic parentage in *Health, United States* are affected by expansion of the reporting area and by immigration. These two factors affect numbers of events, composition of the Hispanic population, and maternal and infant health characteristics.

In 1980 and 1981, information on births of Hispanic parentage was reported on the birth certificate by the following 22 states: Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Maine, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1982 Tennessee, and in 1983 D.C., began reporting this information. Between 1983 and 1987, information on births of Hispanic parentage was available for 23 states and D.C. In 1988, this information became available for Alabama, Connecticut, Kentucky, Massachusetts, Montana, North Carolina, and Washington state, increasing the number of states reporting information on births of Hispanic parentage to 30 states and D.C. In 1989, this information became available from an additional 17 states, increasing the number of Hispanic-reporting states to 47 and D.C. In 1989, only Louisiana, New Hampshire, and Oklahoma did not report Hispanic parentage on the birth certificate. With the inclusion of Louisiana in 1989 and Oklahoma in 1990 as Hispanic-reporting states, 99% of birth records included information on mother's origin. Hispanic origin of the mother was reported on the birth certificates of 49 states and D.C. in 1991 and 1992; only New Hampshire did not provide this information. Starting in 1993, Hispanic origin of mother was reported by all 50 states and D.C.

Mortality file—The reporting area for an Hispanic-origin item on the death certificate expanded between 1985 and 1997. In 1985, mortality data by Hispanic origin of decedent were based on deaths of residents of the following 17 states and D.C. whose data on the death certificate were at least 90% complete on a place-of-occurrence basis and of comparable format: Arizona, Arkansas, California, Colorado, Georgia, Hawaii, Illinois, Indiana, Kansas, Mississippi, Nebraska, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1986, New Jersey began reporting Hispanic origin of decedent, increasing the number of reporting states to 18 and D.C. in 1986 and 1987. In 1988, Alabama, Kentucky, Maine, Montana, North Carolina, Oregon, Rhode Island, and Washington state were added to the reporting area, increasing the number of states to 26 and D.C. In 1989, an additional 18 states were added, increasing the Hispanic reporting area to 44 states and D.C.; only Connecticut, Louisiana, Maryland, New Hampshire, Oklahoma, and Virginia were not included in the reporting area. Starting with 1990 data in *Health, United States*, the criterion was changed to include states whose data were at least 80% complete. In 1990, Maryland, Virginia, and Connecticut; in 1991 Louisiana; and in 1993 New Hampshire were added, increasing the reporting area for Hispanic origin of decedent to 47 states and D.C. in 1990; 48 states and D.C. in 1991 and 1992; and 49 states and D.C. in 1993–1996. Only Oklahoma did not provide this information in 1993–1996. Starting in 1997, Hispanic origin of decedent was reported by all 50 states and D.C. Based on data from the U.S. Census Bureau, the 1990 reporting area encompassed 99.6% of the U.S. Hispanic population. In 1990, more than 96% of death records included information on Hispanic origin of the decedent.

Starting with 2003 data, some states began using the 2003 revision of the U.S. Standard Certificate of Death, which allows the reporting of more than one race (multiple races) and includes some revisions in the item reporting Hispanic origin. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data, in 2005, 21 states and D.C. reported multiple-race data, and in 2006, 25 states and D.C. reported multiple-race data. The effect of the 2003 revision of the Hispanic origin item on the reporting of Hispanic origin on death certificates is presumed to be minor. For more information, see [Appendix II, Race](#). Also see: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek, KD, Tejada-Vera B. Deaths: Final data for 2006. *National vital statistics reports*; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf;

and NCHS. NCHS procedures for multiple-race and Hispanic origin data: Collection, coding, editing, and transmitting. Hyattsville, MD: NCHS; 2004. Available from: http://www.cdc.gov/nchs/data/dvs/Multiple_race_documentation_5-10-04.pdf.

National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES)—Questions on Hispanic origin are self-reported in NHANES III and subsequent years, and since 1976 in NHIS, and precede questions on race. The NHANES sample was designed to provide estimates specifically for persons of Mexican origin and not for all Hispanic-origin persons in the United States. Persons of Hispanic origin other than Mexican were entered into the sample with different selection probabilities that are not nationally representative of the total U.S. Hispanic population. For more information on race and Hispanic origin in NHIS, see the NHIS Race and Hispanic Origin Information home page. Available from: <http://www.cdc.gov/nchs/nhis/rhoi/rhoi.htm#intro>.

Surveillance, Epidemiology, and End Results (SEER) Program—SEER data are available from the National Institutes of Health, National Cancer Institute. SEER Hispanic data used in *Health, United States* tables exclude data from Alaska. The North American Association of Central Cancer Registries, Inc. (NAACCR) Hispanic Identification Algorithm was used on a combination of variables to classify incidence cases as Hispanic for analytic purposes. See: NAACCR Guideline for Enhancing Hispanic–Latino Identification. Bethesda, MD: National Cancer Institute; 2003. Available from: http://seer.cancer.gov/seerstat/variables/seer/yr1973_2004/race_ethnicity/.

Youth Risk Behavior Survey (YRBS)—Prior to 1999, a single question was asked about race and Hispanic origin, with the option of selecting one of the following categories: white not Hispanic, black not Hispanic, Hispanic or Latino, Asian or Other Pacific Islander, American Indian or Alaska Native, or other. Between 1999 and 2003, respondents were asked a single question about race and Hispanic origin with the option of choosing one or more of the following categories: white, black or African American, Hispanic or Latino, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. In 2005, respondents were asked a question about Hispanic origin (“Are you Hispanic or Latino?”) and a second separate question about race that included the option of selecting one or more of the following categories: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, or white. Because of

the differences between questions, the data about race and Hispanic ethnicity for the years prior to 1999 are not strictly comparable with estimates for the later years. However, analyses of data collected between 1991 and 2003 have indicated that the data are comparable across years and can be used to study trends. See [Appendix II, Race](#); and see: Brener ND, Kann L, McManus T. A comparison of two survey questions on race and ethnicity among high school students. *Public Opin Q* 2003;67(2):227–36.

HIV—See [Human immunodeficiency virus disease](#).

Home visit—Starting in 1997, the National Health Interview Survey has been collecting information on home visits received during the 12 months prior to interview. Respondents are asked “During the past 12 months, did you receive care at home from a nurse or other health care professional? What was the total number of home visits received?” These data are combined with data on visits to doctors’ offices, clinics, and emergency departments to provide a summary measure of health care visits. (Also see [Appendix II, Emergency department or emergency room visit](#); [Health care contact](#).)

Hospital—According to the American Hospital Association (AHA), hospitals are licensed institutions with at least six beds whose primary function is to provide diagnostic and therapeutic patient services for medical conditions; they have an organized physician staff and provide continuous nursing services under the supervision of registered nurses. The World Health Organization (WHO) considers an establishment to be a hospital if it is permanently staffed by at least one physician, can offer inpatient accommodation, and can provide active medical and nursing care. Hospitals may be classified by type of service, ownership, size in terms of number of beds, and length of stay. In the National Hospital Ambulatory Medical Care Survey, hospitals include all those with an average length of stay for all patients of less than 30 days (short-stay) or hospitals whose specialty is general (medical or surgical) or children’s general. Federal hospitals and hospital units of institutions and hospitals with fewer than six beds staffed for patient use are excluded. (Also see [Appendix II, Average length of stay](#); [Bed, health facility](#); [Days of care](#); [Emergency department](#); [Inpatient](#); [Outpatient department](#).)

Community hospital—Community hospitals, based on the AHA definition, include all nonfederal short-term general and special hospitals whose facilities and services are available to the public. Special hospitals include obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; and other specialty services. Short-term general and special children’s hospitals are also

considered to be community hospitals. A hospital may include a nursing-home-type unit and still be classified as short-term, provided the majority of its patients are admitted to units where the average length of stay is less than 30 days. Hospital units of institutions such as prisons and college infirmaries that are not open to the public and are contained within a nonhospital facility are not included in the category of community hospitals. Traditionally, the definition included all nonfederal short-stay hospitals except facilities for the mentally retarded. In a revised definition, the following additional sites were excluded: hospital units of institutions, and alcoholism and chemical dependency facilities.

Federal hospital—Federal hospitals are those operated by the federal government.

For-profit hospital—For-profit hospitals are operated for profit by individuals, partnerships, or corporations.

General hospital—General hospitals provide diagnostic, treatment, and surgical services for patients with a variety of medical conditions. According to the WHO, these hospitals provide medical and nursing care for more than one category of medical discipline (e.g., general medicine, specialized medicine, general surgery, specialized surgery, and obstetrics). Excluded are hospitals, usually in rural areas, that provide a more limited range of care.

Nonprofit hospital—Nonprofit hospitals are those controlled by nonprofit organizations, such as religious organizations and fraternal societies.

Psychiatric hospital—Psychiatric hospital are those whose major type of service is psychiatric care. (Also see [Appendix II, Mental health organization.](#))

Registered hospital—Registered hospitals are those registered with the AHA. About 98% of U.S. hospitals are registered.

Short-stay hospital—In the National Hospital Discharge Survey, short-stay hospitals are those in which the average length of stay is less than 30 days. The National Health Interview Survey defines short-stay hospitals as any hospital or hospital department in which the type of service provided is general; maternity; eye, ear, nose, and throat; children's; or osteopathic.

Specialty hospital—Specialty hospitals are those, such as psychiatric, tuberculosis, chronic disease, rehabilitation, maternity, and alcoholic or narcotic dependency facilities, that provide a particular type of service to the majority of their patients.

Hospital-based physician—See [Physician.](#)

Hospital day—See [Days of care.](#)

Hospital utilization—Estimates of hospital utilization (such as hospital discharge rate, days of care rate, average length of stay, and percentage of the population with a hospitalization) presented in *Health, United States* are based on data from three sources: the National Health Interview Survey (NHIS), the National Hospital Discharge Survey (NHDS), and the American Hospital Association (AHA). NHIS data are based on household interviews of the civilian noninstitutionalized population and thus exclude hospitalizations for institutionalized persons and those who died while hospitalized. NHDS data are based on hospital discharge records of persons who had an inpatient stay in a nonfederal, short-stay hospital. NHDS includes hospital discharge records for persons discharged alive or deceased and for institutionalized persons. NHDS tables shown in *Health, United States* exclude data for newborns. Estimates for average length of stay between the NHDS and AHA data presented in *Health, United States* differ because of different methods for counting days of care. (Also see [Appendix II, Average length of stay](#); [Days of care](#); [Discharge](#); and [Appendix I, National Health Interview Survey, National Hospital Discharge Survey.](#))

Human immunodeficiency virus (HIV) disease—HIV disease is a serious disease caused by a cytopathic retrovirus that is the cause of acquired immunodeficiency syndrome (AIDS). The HIV virus is also called AIDS-related virus, human T-cell leukemia virus type III, human T-cell lymphotropic virus type III, and lymphadenopathy-associated virus. Mortality and morbidity coding for HIV disease are similar and have evolved over time.

Mortality coding—Starting with 1999 data and the introduction of the tenth revision of the *International Classification of Diseases* (ICD-10), the title for this cause of death was changed to HIV disease from HIV infection, and the ICD codes were changed to B20-B24. Starting with 1987 data, NCHS introduced category numbers *042-*044 for classifying and coding HIV infection as a cause of death in ICD, *ninth revision* (ICD-9). The asterisks before the category numbers indicate that these codes were not part of the original ICD-9. HIV infection was formerly referred to as human T-cell lymphotropic virus-III/lymphadenopathy-associated virus (HTLV-III/LAV) infection. Before 1987, deaths involving HIV infection were classified to Deficiency of cell-mediated immunity (ICD-9 279.1) contained in the title All other diseases; to Pneumocystosis (ICD-9 136.3) contained in the title All other infectious and parasitic diseases; to Malignant neoplasms, including neoplasms of

lymphatic and hematopoietic tissues; and to a number of other causes. Therefore, before 1987, death statistics for HIV infection are not strictly comparable with data for 1987 and later years and are not shown in *Health, United States*.

Morbidity coding—The National Hospital Discharge Survey codes diagnosis data using the *International Classification of Diseases, ninth revision, Clinical Modification* (ICD-9-CM). During 1984 and 1985, only data for AIDS (ICD-9-CM 279.19) were included. In 1986–1994, discharges with the following diagnoses were included: AIDS, HIV infection and associated conditions, and positive serological or viral culture findings for HIV (ICD-9-CM 042–044, 279.19, and 795.8). Beginning in 1995, discharges with the following diagnoses were included: HIV disease and asymptomatic HIV infection status (ICD-9-CM 042 and V08).

(Also see [Appendix II, Acquired immunodeficiency syndrome; Cause of death; International Classification of Diseases; International Classification of Diseases, ninth revision, Clinical Modification](#).)

Hypertension—See [Blood pressure, elevated](#).

ICD; ICD codes—See [Cause of death; International Classification of Diseases](#).

Illicit drug use—Illicit drug use refers to the use and misuse of illegal and controlled drugs.

Monitoring the Future (MTF)—In this school-based survey of secondary school students, information on marijuana use is collected using self-completed questionnaires. The information is based on the following questions: “On how many occasions (if any) have you used marijuana in the last 30 days?” and “On how many occasions (if any) have you used hashish in the last 30 days?” Questions on cocaine use include the following: “On how many occasions (if any) have you taken crack (cocaine in chunk or rock form) during the last 30 days?” and “On how many occasions (if any) have you taken cocaine in any other form during the last 30 days?”

National Survey on Drug Use & Health (NSDUH)—Information on illicit drug use is collected for survey participants 12 years of age and over. Information on any illicit drug use includes any use of marijuana or hashish, cocaine, heroin, hallucinogens, or inhalants, and nonmedical use of prescription psychotherapeutic drugs. Current use (within the past month) is based on the question: “How long has it been since you last used (drug name)?” (Also see [Appendix II, Substance use](#).)

Immunization—See [Vaccination](#).

Incidence—Incidence is the number of cases of disease having their onset during a prescribed period of time. It is often expressed as a rate (e.g., the incidence of measles per 1,000 children 5–15 years of age during a specified year). Incidence is a measure of morbidity or other events that occur within a specified period of time. Measuring incidence may be complicated because the population at risk for the disease may change during the period of interest, for example, due to births, deaths, or migration. In addition, determining that a case is new—that is, that its onset occurred during the prescribed period of time—may be difficult. Because of these difficulties in measuring incidence, many health statistics are instead measured in terms of prevalence. (Also see [Appendix II, Prevalence](#).)

Income—See [Family income](#).

Individual practice association (IPA)—See [Health maintenance organization](#).

Industry of employment—For the presentation of data in *Health, United States*, industries are classified according to the North American Industry Classification System (NAICS). For each year of data presented, the most recent version of NAICS was used. NAICS groups establishments into industries based on their production or supply function: establishments using similar raw material inputs, capital equipment, and labor are classified in the same industry. This approach creates homogeneous categories well suited for economic analysis. NAICS uses a six-digit hierarchical coding system to classify all economic activity into 20 industry sectors. The first two digits of the six-digit code designate the highest level of aggregation, into the government and 19 private industry sectors ([Table VIII](#)). With the exception of the agriculture, forestry, farming, and hunting sector, private industry sectors are classified as goods or service-producing. Mining, construction, and manufacturing are primarily goods-producing sectors, and the remaining 15 are entirely service-providing sectors. NAICS allows for the classification of 1,170 industries. For more information on NAICS, see: <http://www.census.gov/epcd/www/naics.html>.

NAICS replaces the Standard Industrial Classification (SIC) system, originally designed in the 1930s and revised and updated periodically to reflect changes in the U.S. economy. The last SIC revision was in 1987. The SIC system focused on the manufacturing sector of the economy and provided significantly less detail for the now-dominant service sector, including newly developed industries in information services, health care delivery, and high-tech manufacturing. Although some titles in SIC and NAICS are similar, there is little comparability between the two systems because industry

Table VIII. Codes for industries, based on the North American Industry Classification System (NAICS)

<i>Private industry</i>	<i>Code</i>
Agriculture, forestry, fishing and hunting	11
Mining	21
Utilities	22
Construction	23
Manufacturing	31–33
Wholesale trade	42
Retail trade	44–45
Transportation and warehousing	48–49
Information	51
Finance and insurance	52
Real estate and rental and leasing	53
Professional, scientific, and technical services	54
Management of companies and enterprises	55
Administrative and support and waste management services	56
Educational services	61
Health care and social assistance	62
Arts, entertainment, and recreation	71
Accommodation and food services	72
Other services, except public administration	81

SOURCE: Bureau of Labor Statistics. Available from: <http://www.census.gov/eos/www/naics/index.html>.

groupings are defined differently. Estimates of deaths, injuries, and illnesses classified by NAICS should not be compared with earlier estimates that used SIC.

Starting with *Health United States, 2005*, health data by industry from the Bureau of Labor Statistics' Census of Fatal Occupational Injuries (CFOI) and Survey of Occupational Injuries and Illnesses (SOII) data systems are classified using the NAICS system and replace trends in occupational health data based on the SIC system in previous editions of *Health, United States*.

Infant death—An infant death is the death of a live-born child before his or her first birthday. Age at death may be further classified as neonatal or postneonatal. Neonatal deaths are those that occur before the 28th day of life; postneonatal deaths are those that occur between 28 and 365 days of age. (Also see [Appendix II, Rate: Death and related rates.](#))

Injury—The International Classification of External Causes of Injuries (ICECI) Coordination and Maintenance Group defines injury as a (suspected) bodily lesion resulting from acute overexposure to energy (this can be mechanical, thermal, electrical, chemical, or radiant) interacting with the body in amounts or rates that exceed the threshold of physiological tolerance. The time between exposure to the energy and the appearance of an injury is short. In some cases, an injury results from an insufficiency of any of the vital elements (i.e., air, water, or warmth), as in strangulation, drowning, or freezing. Acute poisonings and toxic effects, including

overdoses of substances and wrong substances given or taken in error are included, as are adverse effects and complications of therapeutic, surgical, and medical care. Psychological harm is excluded. Injuries can be intentional or unintentional (i.e., accidental). In NCHS data systems, external causes of nonfatal injuries are coded to the *International Classification of Diseases, ninth revision, Clinical Modification*, Supplementary Classification of External Causes of Injury and Poisoning, and the codes are often referred to as E codes. See [Table IX](#) for a list of external causes of injury categories and E codes used in *Health, United States*. See the NCHS injury website: <http://www.cdc.gov/nchs/injury.htm>; and see: ICECI Coordination and Maintenance Group. International Classification of External Causes of Injuries (ICECI), version 1.2. Amsterdam, The Netherlands: Consumer Safety Institute; and Adelaide, Australia: Australian Institute of Health and Welfare National Injury Surveillance Unit, <http://www.who.int/classifications/icd/adaptations/iceci/en/index.html>. Flinders University; 2004. Available <http://www.who.int/classifications/icd/adaptations/iceci/en/index.html>. (Also see [Appendix II, Diagnosis: Injury-related visit.](#))

Injury-related visit—In the National Hospital Ambulatory Medical Care Survey (NHAMCS), an emergency department visit was considered injury-related if the physician's diagnosis was injury-related (*International Classification of Diseases, ninth revision, Clinical Modification* (ICD–9–CM, code 800–999)), an external cause-of-injury code was present (ICD–9–CM E800–E999), or the patient's reason for visit code was injury-related. Starting with *Health, United States, 2008*, the definition of an injury-related visit was redefined as an initial injury visit. In the 2001–2005 NHAMCS, an initial injury visit was the first visit to an emergency department for an injury that was characterized by either the first-listed diagnosis being a valid injury diagnosis or by a valid first-listed external cause of injury code, regardless of the diagnosis code. Visits for which the first-listed diagnosis or the first-listed external-cause code was for a complication of medical care or for an adverse event were not counted as injury visits. For 2001–2004 data, the patient record form had a specific question on whether or not the visit was the initial one for that condition. In the 2005 and 2006 surveys, this variable was dropped, and in its place an imputed variable indicating that the visit was or was not the initial visit was included on the public-use file. For an explanation of the methodology used to create the initial visit variable, see: <http://www.cdc.gov/nchs/data/ahcd/initialvisit.pdf>. In the 2007 survey, the patient record form had a specific question on whether the visit was the initial one for that condition. For more information, see: Fingerhut LA. Recommended definition of initial injury visits to emergency departments for use with the NHAMCS–ED

Table IX. Codes for first-listed external causes of injury, from the *International Classification of Diseases, ninth revision, Clinical Modification*

<i>External cause of injury category</i>	<i>E code</i>
Unintentional	E800–E869, E880–E929
Motor vehicle traffic	E810–E819
Falls	E880–E886, E888
Struck by or against objects or persons	E916–E917
Caused by cutting and piercing instruments or objects	E920
Intentional (suicide and homicide)	E950–E969, E979, E999.1

data [online]. Health E-Stats. NCHS. 2006. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/injury/injury.htm>. (Also see [Appendix II, Emergency department or emergency room visit](#); [External cause of injury](#); [Injury](#).)

Inpatient—An inpatient is a person who is formally admitted to the inpatient service of a hospital for observation, care, diagnosis, or treatment. (Also see [Appendix II, Admission](#); [Average length of stay](#); [Days of care](#); [Discharge](#); [Hospital](#).)

Inpatient care—See [Hospital utilization](#); [Mental health service type](#).

Inpatient day—See [Days of care](#).

Instrumental activities of daily living (IADLs)—IADLs are activities related to independent living and include preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone. In the National Health Interview Survey (NHIS), respondents are asked whether they or family members 18 years of age and over need the help of another person for handling routine IADL needs because of a physical, mental, or emotional problem. Persons are considered to have an IADL limitation in NHIS if any causal condition is chronic.

In the Medicare Current Beneficiary Survey, if a sample person had any difficulty performing an activity by him- or herself and without special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of interview. Sample persons in the community answered health status and functioning questions themselves, if able to do so. For sample persons in a long-term care facility, a proxy such as a nurse answered questions about the sample person's health status and functioning. (Also see [Appendix II, Activities of daily living](#); [Complex activity limitation](#); [Limitation of activity](#).)

Insurance—See [Health insurance coverage](#).

Intermediate care facility—See [Nursing home](#).

International Classification of Diseases (ICD)—The ICD is used to code and classify cause-of-death data. The ICD is developed collaboratively by the World Health Organization and 10 international centers, one of which is housed at NCHS. The purpose of the ICD is to promote international comparability in the collection, classification, processing, and presentation of health statistics. Since 1900, the ICD has been modified about once every 10 years, except for the 20-year interval between the ninth and tenth revisions (ICD-9 and ICD-10) (see [Table IV](#)). The purpose of the revisions is to stay abreast with advances in medical science. New revisions usually introduce major disruptions in time series of mortality statistics (see [Tables V](#) and [VI](#)). For more information, see the NCHS ICD-10 website:

<http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm>. (Also see [Appendix II, Cause of death](#); [Comparability ratio](#); [International Classification of Diseases, ninth revision, Clinical Modification](#).)

International Classification of Diseases, ninth revision, Clinical Modification (ICD-9-CM)—ICD-9-CM is based on, and is compatible with, the World Health Organization's ICD-9. The United States currently uses ICD-9-CM to code morbidity diagnoses and inpatient procedures. ICD-9-CM consists of three volumes. Volumes 1 and 2 contain the diagnosis tabular list and index; Volume 3 contains the procedure classification (tabular list and index combined).

ICD-9-CM is divided into 17 chapters and two supplemental classifications. The chapters are arranged primarily by body system. In addition, there are chapters for Infectious and parasitic diseases; Neoplasms; Endocrine, nutritional, and metabolic diseases; Mental disorders; Complications of pregnancy, childbirth, and puerperium; Certain conditions originating in the perinatal period; Congenital anomalies; and Symptoms, signs, and ill-defined conditions. The two supplemental classifications are for factors influencing health status and contact with health services (V codes), and for external causes of injury and poisoning (E codes).

In *Health, United States*, morbidity data are classified using ICD-9-CM. Diagnostic categories and codes for ICD-9-CM are shown in [Table X](#); ICD-9-CM procedure categories and codes are shown in [Table XI](#). For additional information about ICD-9-CM, see the NCHS Classifications of Diseases and Functioning & Disability website: <http://www.cdc.gov/nchs/icd9.htm>. (Also see [Appendix II, International Classification of Diseases](#).)

Late fetal death rate—See [Rate: Death and related rates](#).

Leading causes of death—See [Cause-of-death ranking](#).

Table X. Codes for diagnostic categories, from the *International Classification of Diseases, ninth revision, Clinical Modification*

<i>Diagnostic category</i>	<i>Code</i>
Childbirth	V27
Septicemia	038
Human immunodeficiency virus (HIV/AIDS) (1990–1994 data)	042–044, 279.19, 795.8
(Starting with 1995 data)	042, V08
Cancer, all	140–208, 230–234
Colorectal cancer	153–154, 197.5, 230.3–230.6
Lung/bronchus/tracheal cancer	162, 176.4, 197.0, 197.3, 231.1–231.2
Breast	174–175, 198.81, 233.0
Prostate	185, 233.4
Uterine fibroids	218
Diabetes	250
Dehydration	276.5
(Starting with 2006 data)	276.50–276.52
Alcohol and drug	291–292, 303–304, 305.0, 305.2–305.9
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses	295–298
Schizophrenia	295
Mood disorders	296
Dementia and Alzheimer’s disease	290, 294, 331.0
Heart disease	391–392.0, 393–398, 402, 404, 410–416, 420–429
Ischemic heart disease	410–414
Heart attack	410
Arrhythmias	427
Heart failure	428
Hypertension	401
Stroke	430–438
Acute bronchitis and bronchiolitis	466
Pneumonia	480–486, 487.0
Chronic obstructive pulmonary disease	490–492
Asthma	493
Appendicitis	540–543
Gallstones	574
Kidney disease	580–589
Urinary tract infection	599.0
Hyperplasia of the prostate	600
Osteoarthritis	715, 721
Intervertebral disc disorders	722
Injury	800–909.2, 909.4, 909.9, 910–994.9, 995.5, 995.80–995.85
Fracture	800–829
Hip fracture	820
Internal organ injury	850–854, 860–869, 952, 995.55
Poisoning and toxic effects	960–989
Complications of care and adverse effects	996–999, 909.3, 909.5, 995.0–995.4, 995.6–995.7, 995.86, 995.89

Length of stay—See [Average length of stay](#).

Life expectancy—Life expectancy is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates, generally the mortality conditions existing in the period mentioned. Life expectancy may be determined by race, sex, or other characteristics by using age-specific death rates for the population with that characteristic. (Also see [Appendix II, Rate: Death and related rates](#).)

Starting with 2000 data, a revised methodology that uses vital statistics death rates for ages under 66 and modeled probabilities of death for ages 66–100 based on blended vital statistics and Medicare probabilities of dying was implemented. As a result, data post-2000 may differ from figures published previously. The revised methodology is similar to that developed for the 1999–2001 decennial life tables. For more information, see: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek, KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57

Table XI. Codes for procedure categories, from the *International Classification of Diseases, ninth revision, Clinical Modification*

<i>Procedure category</i>	<i>Code</i>
Operations on vessels of heart	36, 00.66
Coronary angioplasty or arthroectomy (Through 2005 data)	36.01, 36.02, 36.05
(Starting with 2006 data)	00.66
Coronary artery stent insertion	36.06, 36.07
Drug-eluting stent insertion	36.07
Coronary artery bypass graft (CABG).	36.1
Cardiac catheterization	37.21–37.23
Pacemaker	37.7–37.8
(Starting with 2003 data)	37.7–37.8, 00.50, 00.52, 00.53
Carotid (neck arteries) endarterectomy	38.12
Endoscopy of small intestine	45.11–45.14, 45.16
Endoscopy of large intestine.	45.21–45.25
Gall bladder removal	51.2
Laparoscopic gall bladder removal.	51.23, 51.24
Treatment of intra-abdominal scar tissue	54.5
Removal of prostate	60.2–60.6
Transurethral prostatectomy	60.2
Hysterectomy	68.3–68.5
Abdominal hysterectomy.	68.4
Vaginal hysterectomy	68.5
Forceps, vacuum, and breech delivery	72
Episiotomy	72.1, 72.21, 72.31, 72.71, 73.6
Other procedures inducing or assisting delivery	73
Medical induction of labor	73.4
Cesarean section	74.0–74.2, 74.4, 74.99
Reduction of fracture	79.0–79.5, 76.7, 21.7, 02.02, 03.53
Excision of intervertebral disc and spinal fusion	80.5 and 81.0
Total hip replacement	81.51
Partial hip replacement	81.52
Total knee replacement	81.54
Mastectomy	85.4
CAT scan	87.03, 87.41, 87.71, 88.01, 88.38
Arteriography and angiocardiology with contrast.	88.4–88.5
Diagnostic ultrasound	00.2, 37.28, 88.7, 95.13
Magnetic resonance imaging	88.91–88.97
Mechanical ventilation (1990–1991 data)	93.92
(Starting with 1992 data)	96.7

no 14. Hyattsville, MD: NCHS; 2009. Available from:
http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

Limitation of activity—Limitation of activity may be defined in different ways, depending on the conceptual framework. In the National Health Interview Survey, limitation of activity refers to a long-term reduction in a person’s capacity to perform the usual kind or amount of activities associated with his or her age group as a result of a chronic condition. Limitation of activity is assessed by asking persons a series of questions about limitations in their or a household members’ ability to perform activities usual for their age group because of a physical, mental, or emotional problem. Persons are asked about limitations in activities of daily living, instrumental activities of daily living, play, school, work, difficulty walking or remembering, and any other activity

limitations. For reported limitations, the causal health conditions are determined, and persons are considered limited if one or more of these conditions is chronic. Children under 18 years of age who receive special education or early intervention services are considered to have a limitation of activity. (Also see [Appendix II, Activities of daily living; Condition; Instrumental activities of daily living.](#))

Long-term care facility—A long-term care facility is a residence that provides a specific level of personal or medical care or supervision to residents. In the Medicare Current Beneficiary Survey, a residence is considered a long-term care facility if it has three or more long-term care beds and answers affirmatively to at least one of three questions: “Does this facility (a) provide personal care services to residents; (b) provide continuous supervision of residents;

(c) provide any long-term care?" Types of long-term care facilities include licensed nursing homes, skilled nursing homes, intermediate care facilities, retirement homes (that provide services), domiciliary or personal care facilities, distinct long-term care units in a hospital complex, mental health facilities and centers, assisted and foster care homes, and institutions for the mentally retarded and developmentally disabled. (Also see [Appendix II, Nursing home.](#))

Low birthweight—See [Birthweight](#).

Magnetic resonance imaging (MRI) unit—MRI is an imaging technique designed to visualize internal structures of the body by using magnetic and electromagnetic fields that induce a resonance effect of hydrogen atoms. The electromagnetic emission created by these atoms is registered and processed by a dedicated computer to produce the images of the body structures.

Mammography—A mammogram is an x-ray image of the breast used to detect irregularities in breast tissue. In the National Health Interview Survey, questions concerning use of mammography were asked on an intermittent schedule, and question content differed across years. In 1987 and 1990, women were asked to report when they had their last mammogram. In 1991, women were asked whether they had a mammogram in the past 2 years. In 1993 and 1994, women were asked whether they had a mammogram within the past year, between 1 and 2 years ago, or over 2 years ago. In 1998, women were asked whether they had a mammogram a year ago or less, more than 1 year but not more than 2 years, or more than 2 years ago.

In 1999, women were asked when they had their most recent mammogram, in days, weeks, months, or years. In 1999, 10% of women in the sample responded 2 years ago, and in this analysis these women were coded as within the past 2 years, although a response of 2 years ago may include women whose last mammogram was more than 2 but less than 3 years ago. Thus, estimates for 1999 are overestimated to some degree in comparison with estimates in previous years.

In 2000 and 2003, women were asked when they had their most recent mammogram (give month and year). Women who did not respond were given a follow-up question that used the 1999 wording, and women who did not answer the question with the 1999 wording were asked a second follow-up question that used the 1998 wording. In 2000 and 2003, 2% of women in the sample answered 2 years ago using the 1999 wording, and they were coded as within the past 2 years. Thus, estimates for 2000 and 2003 may be slightly overestimated in comparison with estimates for years prior to 1999.

In 2005, women were asked the same series of mammography questions as in the 2000 and 2003 surveys but the skip pattern was modified so that more women were asked the follow-up question using the 1998 wording. Because additional information was available for women who replied that their last mammogram was 2 years ago, these women were not uniformly coded as having had a mammogram within the past 2 years. Thus, estimates for 2005 are more precise than estimates for 1999, 2000, and 2003 and are slightly lower than they would have been without this additional information. For example, using the improved methodology instituted in 2005, 66.8% of women 40 years of age and over reported a mammogram in the past 2 years, compared with an estimate of 68.7% in 2005 using the method employed in 2000 and 2003. SAS code to categorize mammography data for 2000 and beyond is available from: http://www.cdc.gov/nchs/nhis/nhis_2005_data_release.htm. In 2008, the mammography questions were identical to those asked in 2005.

Mammography screening recommendations have changed over time and vary in the recommended age to begin screening and the interval for screening. For a summary of the current and historic recommendations see: U.S. Preventive Services Task Force. Screening for breast cancer: Recommendations and rationale. Rockville, MD: Agency for Healthcare Research and Quality; 2002. Available from: <http://www.ahrq.gov/clinic/3rduspstf/breastcancer/brcanrr.htm>; and see: U.S. Preventive Services Task Force. The guide to clinical preventive services, 2008. Rockville, MD: Agency for Healthcare Research and Quality; 2008. Available from: <http://www.ahrq.gov/Clinic/pocketgd08/pocketgd08.pdf>.

Managed care—Managed care is a term originally used to refer to prepaid health plans (generally, health maintenance organizations, or HMOs) under which care is provided through a network of providers under a fixed budget and costs are "managed." Increasingly, the term is also being used to include preferred provider organizations (PPOs) and even forms of indemnity insurance coverage (i.e., "fee-for-service" insurance) that incorporate preadmission certification and other utilization controls.

Medicare managed care has included a combination of risk-based and cost-based plans. Risk-based plans receive a fixed prepayment per beneficiary per month to cover the cost of all covered services that a beneficiary may receive. The Centers for Medicare & Medicaid Services (CMS) announces a "benchmark" amount each year for each county for coverage of Medicare Part A and B services. A managed care plan contracting with Medicare then submits a "bid" representing its revenue needs to cover such services. If the

bid is above the benchmark, this amount must be charged in a premium to the enrollees of the plan. If the bid is below, then 75% of the difference must be used to provide additional benefits to enrollees, with the Medicare trust funds getting the remaining 25%. Cost-based plans are offered by an HMO or a Competitive Medical Plan and receive reimbursement for their “reasonable costs” in providing Medicare services to enrollees, based on annual cost reports filed with CMS. For current definitions of the various Medicare managed care plans, see: Centers for Medicare & Medicaid Services. Medicare managed care manual, ch 1, sec 30, Types of MA plans. Baltimore, MD: Centers for Medicare & Medicaid Services; 2007. Available from: <http://www.cms.hhs.gov/manuals/downloads/mc86c01.pdf>. Medicare enrollees have the choice to enroll in a managed care program (if available) or to receive services on a fee-for-service basis.

The two major Medicaid managed care categories are risk-based plans (managed care organizations (MCOs)) and primary care case management (PCCM) arrangements. In risk-based plans, MCOs are paid a fixed monthly fee per enrollee. The MCOs assume some or all of the financial risk for providing the services covered under the contract. PCCM providers are usually physicians, physician group practices, or entities employing or having other arrangements with such physicians but sometimes also including nurse practitioners, nurse midwives, or physician assistants. These PCCM providers, sometimes called gatekeepers, contract directly with the state to locate, coordinate, and monitor covered primary care (and sometimes additional services). PCCM providers are paid a per-patient case management fee and usually do not assume financial risk for the provision of services. Some states allow Medicaid enrollees to voluntarily enroll in managed care plans; most states require that at least certain categories of Medicaid beneficiaries join managed care plans. Within both risk-based plans and PCCM arrangements there are plans that provide specialized services to certain categories of Medicaid beneficiaries. For more information on state Medicaid managed care plans, see <http://www.cms.hhs.gov/home/medicaid.asp>.

(Also see [Appendix II, Health maintenance organization; Medicare; Medicaid; Preferred provider organization.](#))

Marital status—Marital status is classified through self-reporting into the categories married and unmarried. The term married encompasses all married people, including those separated from their spouses. Unmarried includes those who are single (never married), divorced, or widowed. Prior to 1978, abortion data collected by the Centers for Disease Control and Prevention's Abortion Surveillance Program included separated women with unmarried women.

Birth file—In 1970, 39 states and the District of Columbia (D.C.), and in 1975, 38 states and D.C., included a direct question about mother's marital status on the birth certificate. Since 1980, national estimates of births to unmarried women have been based on two methods for determining marital status: a direct question in the birth registration process and inferential procedures. In 1980–1996, marital status was reported on the birth certificates of 41–45 states and D.C.; with the addition of California in 1997, 46 states and D.C.; and in 1998–2001, 48 states and D.C. In 1997, all but four states (Connecticut, Michigan, Nevada, and New York), and in 1998, all but two states (Michigan and New York), included a direct question about mother's marital status on their birth certificates. In 1998–2006, marital status was imputed as married on birth records with missing information in the 48 states and D.C. where this information was obtained by a direct question.

For states lacking a direct question, marital status was inferred. Before 1980, the incidence of births to unmarried women in states with no direct question on marital status was assumed to be the same as the incidence in reporting states in the same geographic division. Starting in 1980, for states without a direct question, marital status was inferred by comparing the parents' and child's surnames. For 1994–1996, birth certificates in 45 states and the D.C. included a question about the mother's marital status. Beginning in 1997, the marital status of women giving birth in California and Nevada has been determined by a direct question in the birth registration process. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question regarding mother's marital status to the state's birth certificate.

In 2006, inferential procedures were used to compile birth statistics by marital status, in full or in part, for New York and Michigan, respectively. In 2005, Michigan added a direct question to the birth registration process but uses inferential procedures to update information collected using the direct question. In both Michigan and New York, a birth is inferred as nonmarital if either of these factors, listed in priority-of-use order, is present: (a) a paternity acknowledgment was received or (b) the father's name is missing.

National Health Interview Survey (NHIS)—In NHIS, marital status is asked of, or about, all persons 14 years of age and over. Respondents were asked: “Are you now married, widowed, divorced, separated, never married, or living with a partner?”

Maternal age—See [Age](#).

Maternal death—Maternal death is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. A maternal death is one for which the certifying physician has designated a maternal condition as the underlying cause of death. Maternal conditions are those assigned to pregnancy, childbirth, and the puerperium: *International Classification of Diseases, tenth revision* (ICD–10) codes A34, O00–O95, O98–O99 (Table V). Changes were made in the classification and coding of maternal deaths between ICD–9 and ICD–10, effective with mortality data for 1999. ICD–10 changes pertain to indirect maternal causes and timing of death relative to pregnancy. If only indirect maternal causes of death (i.e., a previously existing disease or a disease that developed during pregnancy that was not due to direct obstetric causes but was aggravated by physiologic effects of pregnancy) are reported in Part I of the death certificate and pregnancy is reported in either Part I or Part II, ICD–10 classifies this as a maternal death. ICD–9 only classified the death as maternal if pregnancy was reported in Part I. Some state death certificates include a separate question regarding pregnancy status. A positive response to the question is interpreted as “pregnant” being reported in Part II of the cause-of-death section of the death certificate. If the medical certifier did not specify when death occurred relative to the pregnancy, it is assumed that the pregnancy terminated 42 days or less prior to death.

In 2003, 21 states had a separate question related to pregnancy status of female decedents around the time of their death, and two states had a prompt encouraging certifiers to report recent pregnancies on the death certificate; however, at least six different questions were used. The 2003 revision of the U.S. Standard Certificate of Death introduced a standard question format with categories designed to utilize additional codes available in ICD–10 for deaths associated with pregnancy, childbirth, and the puerperium. As states revise their certificates, most states are expected to introduce the standard item or replace preexisting questions with the standard item, so that there will be wider adoption of a pregnancy status item across the country and greater standardization of the particular item used. (Also see [Appendix II, Rate: Death and related rates.](#))

Maternal education—See [Education.](#)

Maternal mortality rate—See [Rate: Death and related rates.](#)

Medicaid—Medicaid was authorized by Title XIX of the Social Security Act in 1965 as a jointly funded cooperative venture between the federal and state governments to assist states in

the provision of adequate medical care to eligible needy persons. Within broad federal guidelines, each state establishes its own eligibility standards; determines the type, amount, duration, and scope of services; sets the rate of payment for services; and administers its own program.

Medicaid is the largest program providing medical and health-related services to America’s poorest people. However, Medicaid does not provide medical assistance to all poor persons. Under the broadest provisions of the federal statute, Medicaid does not provide health care services for very poor childless adults under 65 years of age unless they are disabled. The major eligibility groups covered by most states include:

- Individuals who meet the requirements for the Aid to Families with Dependent Children (AFDC) program that were in effect in their state on July 16, 1996, or, at state option, more liberal criteria (with some exceptions).
- Children under age 6 whose family income is at or below 133% of the federal poverty level.
- Pregnant women whose family income is at or below 133% of the federal poverty level (services to these women are limited to those related to pregnancy, complications of pregnancy, delivery, and postpartum care).
- Supplemental Security Income (SSI) recipients in most states (some states use more restrictive Medicaid eligibility requirements that predate SSI).
- Recipients of adoption or foster care assistance under Title IV of the Social Security Act.
- Special protected groups (typically individuals who lose their cash assistance because of earnings from work or from increased Social Security benefits but who may keep Medicaid for a period of time).
- Children who are at least age 6 but under age 19 in families with incomes at or below the federal poverty level.
- Individuals living in medical institutions and whose monthly income is below 300% of the SSI federal benefit rate.
- Certain Medicare beneficiaries (low income is only one test for Medicaid eligibility for those within these groups; their resources also are tested against threshold levels, as determined by each state within federal guidelines).
- Groups of individuals that meet the requirements of special state waivers approved by the Centers for Medicare & Medicaid Services.

States also have the option of providing Medicaid coverage for other groups.

Medicaid operates as a vendor payment program. States may pay health care providers directly on a fee-for-service basis, or states may pay for Medicaid services through various prepayment arrangements, such as through health maintenance organizations or other forms of managed

care. Within federally imposed upper limits and specific restrictions, each state for the most part has broad discretion in determining the payment methodology and payment rate for services. Thus, the Medicaid program varies considerably from state to state, as well as within each state over time. For more information see:

<http://www.cms.hhs.gov/home/medicaid.asp> and <http://www.cms.hhs.gov/MedicaidEligibility/>.

(Also see [Appendix II, Health expenditures, national; Health insurance coverage; Health maintenance organization; Managed care](#); and [Appendix I, Medicaid Statistical Information System](#).)

Medicaid payments—Under the Medicaid program, medical vendor payments are payments (expenditures) to medical vendors from the state through a fiscal agent or to a health insurance plan. Adjustments are made for Indian Health Service payments to Medicaid, cost settlements, third-party recoupments, refunds, voided checks, and other financial settlements that cannot be related to specific provided claims. Excluded are payments made for medical care under the emergency assistance provisions, payments made from state medical assistance funds that are not federally matchable, disproportionate-share hospital payments, cost sharing, or enrollment fees collected from recipients or a third-party, and administration and training costs.

Medical specialty—See [Physician specialty](#).

Medicare—Medicare is a nationwide health insurance program providing health insurance protection to people 65 years of age and over, people entitled to Social Security disability payments for 2 years or more (with limited exceptions for people with specific diagnoses), and people with end-stage renal disease, regardless of income. The program was enacted July 30, 1965, as Title XVIII, Health Insurance for the Aged of the Social Security Act, and became effective July 1, 1966. From its inception, it has included two separate but coordinated programs: hospital insurance (Part A) and supplementary medical insurance (Part B). In 1999, additional choices were allowed for delivering Medicare Part A and Part B benefits. Medicare Advantage (previously Medicare+Choice) (Part C) is an expanded set of options for the delivery of health care under Medicare, created in the Balanced Budget Act passed by Congress in 1997. The term Medicare Advantage refers to options other than those in original Medicare. Although all Medicare beneficiaries can receive their benefits through the original fee-for-service program, most beneficiaries enrolled in both Part A and Part B can choose to participate in a Medicare Advantage plan instead. Organizations that seek to contract as Medicare Advantage plans must meet specific organizational, financial, and other requirements. Most

Medicare Advantage plans are coordinated care plans, which include health maintenance organizations, preferred provider organizations, private fee-for-service plans, medical savings account (MSA) plans—which provide benefits after a single high deductible is met—and special needs plans. These programs are available in only a limited number of states. For those providers who agree to accept the plan's payment terms and conditions, this option does not place the providers at risk, nor does it vary payment rates based on utilization. Only the coordinated care plans are considered managed care plans. Except for MSA plans, all Medicare Advantage plans are required to provide at least the current Medicare benefit package, excluding hospice services. Plans may offer additional covered services and are required to do so (or return excess payments) if plan costs are lower than the Medicare payments received by the plan.

The Medicare Prescription Drug, Improvement, and Modernization Act (also called the Medicare Modernization Act, or MMA) was passed December 8, 2003. The MMA established a voluntary drug benefit for Medicare beneficiaries and created a new Medicare Part D. People eligible for Medicare could begin to enroll in Part D beginning in January 2006. For more information see: <http://www.medicare.gov/publications/pubs/pdf/10050.pdf>.

(Also see [Appendix II, Fee-for-service health insurance; Health insurance coverage; Health maintenance organization; Managed care](#); and [Appendix I, Medicare Administrative Data](#).)

Mental health organization—The Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration defines a mental health organization as an administratively distinct public or private agency or institution whose primary concern is provision of direct mental health services to the mentally ill or emotionally disturbed. Excluded are private office-based practices of psychiatrists, psychologists, and other mental health providers; psychiatric services of all types of hospitals or outpatient clinics operated by federal agencies other than the Department of Veterans Affairs (e.g., Public Health Service, Indian Health Service, Department of Defense, and Bureau of Prisons); general hospitals that have no separate psychiatric services but admit psychiatric patients to nonpsychiatric units; and psychiatric services of schools, colleges, halfway houses, community residential organizations, local and county jails, state prisons, and other human services providers. The major types of mental health organizations are described below.

Freestanding psychiatric outpatient clinic—These clinics provide only outpatient mental health services on either a regular or emergency basis. A psychiatrist generally assumes the medical responsibility for services.

Psychiatric hospital—These hospitals (public or private) primarily provide 24-hour inpatient care and treatment in a hospital setting to persons with mental illnesses. Psychiatric hospitals may be under state, county, private for profit, or private nonprofit auspices.

General hospital psychiatric service—These are organizations that provide psychiatric services with assigned staff for 24-hour inpatient or residential care and/or less than 24-hour outpatient care in a separate ward, unit, floor, or wing of the hospital.

Department of Veterans Affairs medical center—These are hospitals operated by the Department of Veterans Affairs (formerly Veterans Administration) that include general hospital psychiatric services (including large neuropsychiatric units) and psychiatric outpatient clinics.

Residential treatment center for emotionally disturbed children—These centers must meet all of the following criteria: (a) provide 24-hour residential services; (b) are not licensed as a psychiatric hospital and have the primary purpose of providing individually planned mental health treatment services in conjunction with residential care; (c) include a clinical program directed by a psychiatrist, psychologist, social worker, or psychiatric nurse with a graduate degree; (d) serve children and youth primarily under the age of 18; and (e) have the primary diagnosis as mental illness, classified as other than mental retardation, developmental disability, or substance-related disorders, according to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), second edition/*International Classification of Diseases Adapted for Use in the United States* (ICDA), eighth revision (DSM-II/ICDA-8) or DSM, third edition, revised/ICD, ninth revision, Clinical Modification (DSM-III-R/ICD-9-CM) codes, for the majority of admissions.

Multiservice mental health organization—These organizations provide services in both 24-hour and less-than-24-hour settings and are not classifiable as a psychiatric hospital, general hospital, or residential treatment center for emotionally disturbed children. (The classification of a psychiatric or general hospital or residential treatment center for emotionally disturbed children takes precedence over a multiservice classification, even if two or more services are offered.)

Partial care organization—These organizations provide a program of ambulatory mental health services or rehabilitation, habitation, or education programs.

(Also see [Appendix II, Admission; Mental health service type.](#))

Mental health service type—This term refers to the following types of mental health services:

24-hour mental health care, formerly called inpatient care, provides care in a mental health hospital setting.

Less-than-24-hour care, formerly called outpatient or partial care treatment, provides mental health services on an ambulatory basis.

Residential treatment care, provides overnight mental health care in conjunction with an intensive treatment program in a setting other than a hospital. Facilities may offer care to emotionally disturbed children or mentally ill adults.

(Also see [Appendix II, Admission; Mental health organization.](#))

Metropolitan statistical area (MSA)—The Office of Management and Budget (OMB) defines MSAs according to published standards that are applied to U.S. Census Bureau data. The standards are revised periodically, generally prior to the decennial census. In the 2000 standards, an MSA is a county or group of contiguous counties that contains at least one urbanized area of 50,000 or more population. In addition to the county or counties that contain all or part of the urbanized area, an MSA may contain other counties if there are strong economic ties with the central county or counties, as measured by commuting. Counties that are not within an MSA are considered to be nonmetropolitan. For additional information, see: <http://www.census.gov/population/www/metroareas/metroarea.html>; and http://www.whitehouse.gov/omb/bulletins/b03-04_attach.pdf. (Also see [Appendix II, Urbanization.](#))

For respondents to the National Health Interview Survey (NHIS), designation of place of residence as metropolitan or nonmetropolitan is based on the following MSA definitions: for 2006 and beyond, on the June 2003 OMB definitions (2000 OMB standards applied to 2000 census data); for 1995–2005, on the June 1993 OMB definitions (1990 OMB standards applied to 1990 census data); for 1985–1994, on the June 1983 OMB definitions (1980 OMB standards applied to 1980 census data); and for years prior to 1985 shown in *Health, United States*, on April 1973 definitions (1971 OMB standards applied to 1970 census data). For estimates based on 2006 NHIS data combined with earlier years of NHIS, metropolitan status of residence for all years involved is based on the June 2003 definitions. Introduction of each set of standards may create a discontinuity in trends. For example, when coding is based on the 2000 census data and the 2000 standards, the percentage of the population under 65 years of age obtaining private insurance through the workplace in 2005 was 64.3% for persons residing within MSAs and 59.7% for persons living outside MSAs; when coding is based on the

1990 standards and 1990 census data, the percentages are 64.5% and 59.6%, respectively.

Designation of place of residence as metropolitan or nonmetropolitan for respondents to the National Immunization Survey (NIS) is based on 2000 census data and 2000 standards and the following versions and revisions of MSA definitions: for quarter 1 of 2009, on the November 2007 definitions; for 2008, on the December 2006 definitions; for quarter 4 of 2007, on the December 2006 definitions; for quarters 1–3 of 2007, on the December 2005 definitions; for 2006, on the November 2004 definitions; for 2005, on the December 2003 definitions; for quarters 3 and 4 of 2004, on the December 2003 definitions; and for quarters 1 and 2 of 2004 and quarter 4 of 2003, on the June 2003 definitions. For more information see: <http://www.census.gov/population/www/metroareas/metroarea.html>.

Micropolitan statistical area—The Office of Management and Budget (OMB) defines micropolitan statistical areas based on published standards that are applied to U.S. Census Bureau data. A micropolitan statistical area is a nonmetropolitan county or group of contiguous nonmetropolitan counties that contains an urban cluster of 10,000–49,999 persons. A micropolitan statistical area may include surrounding counties if there are strong economic ties with the central county or counties as measured by commuting. Nonmetropolitan counties that are not classified as part of a micropolitan statistical area are considered nonmicropolitan. For additional information about micropolitan statistical areas, see <http://www.census.gov/population/www/metroareas/metroarea.html>. (Also see [Appendix II, Urbanization](#).)

Multiservice mental health organization—See [Mental health organization](#).

National Drug Code (NDC) Directory therapeutic class—The NDC system was originally established as an essential part of an out-of-hospital drug reimbursement program under Medicare. The NDC serves as a universal product identifier for human drugs. The current edition of the NDC is limited to prescription drugs and a few selected over-the-counter (OTC) products. The directory consists of prescription and selected OTC insulin and domestic and foreign drug products that are in commercial distribution in the United States. The products have been listed in accordance with the Drug Listing Act and applicable Code of Federal Regulations for submitting drug product information to the Food and Drug Administration (FDA). NDC therapeutic class codes are used to identify each of 20 major drug classes to which the drug entry may belong, adapted from Standard Drug Classifications in the NDC Directory, 1995. The two-digit categories are general and represent all

subcategories (e.g., antimicrobial agents), and the specific four-digit categories represent the breakouts of the general category (e.g., penicillin). The general two-digit codes include medications that do not fit into any of the subcategories (four-digit codes). Starting in 1995, the NDC four-digit classes were changed to include more classes than the previous classification in 1985. Therefore, some drugs switched from a general two-digit class into a more specific four-digit class. In addition, drugs may be approved for several different therapeutic classes. Some drugs receive approval for additional therapeutic uses after their initial approval, so the same drug can change classes because of new uses.

Numerous drug products have many uses or indications. In an effort to categorize the vast number of broad analgesic or pain-relief individual products in the marketplace into manageable and nonoverlapping categories, all four-digit categories within the analgesic two-digit therapeutic class were recoded by staff of the FDA's Center for Drug Evaluation and Research. Thus, the codes presented in *Health, United States* do not match the published NDC codes for analgesic therapeutic categories. The NDC contains the following four-digit analgesic therapeutic categories: 1720, general analgesics; 1721, narcotic analgesics; 1722, nonnarcotic analgesics; 1723, antimigraine/headache; 1724, antiarthritics; 1726, central pain syndrome; 1727, nonsteroidal anti-inflammatory drugs (NSAIDs); 1728, antipyretics; and 1729, menstrual products. These categories were collapsed into broader and mutually exclusive categories of narcotic analgesics, nonnarcotic analgesics, and NSAIDs. Under the NDC system, aspirin is coded as an NSAID because of its anti-inflammatory properties, but also as an analgesic, an antiarthritic, and an antipyretic. In *Health, United States*, aspirin has been recoded into the nonnarcotic analgesic category. Aspirin was not included as an NSAID because of its common use for cardiac therapy and its many other indications.

[Table XII](#) shows how generic analgesic drugs were reclassified for *Health, United States*. Analgesic drugs were reclassified based on the product's main ingredients or indication of use. For example, Robitussin AC contains several ingredients, one of which is codeine, a narcotic. However, its main use is not for pain but for cough suppression; and it is therefore categorized as a cough and cold product as opposed to a narcotic analgesic product.

Neonatal mortality rate—See [Rate: Death and related rates](#).

Nonprofit hospital—See [Hospital](#).

North American Industry Classification System (NAICS)—See [Industry of employment](#).

Table XII. National Drug Code (NDC) therapeutic class analgesic drug recodes

<i>Narcotic analgesics</i>	<i>Nonnarcotic analgesics</i>	<i>Nonsteroidal anti-inflammatory drugs (NSAIDs)</i>
Alfentanil hydrochloride	Acetaminophen	Bromfenac sodium
Alphaprodine	Acetylsalicylic acid	Celecoxib
Bupernorphine	Aminobenzoic acid	Diclofenac potassium
Butorphanol	Aspirin	Diclofenac sodium
Codeine	Auranofin	Difunisal
Dihydrocodeine	Aurothioglucose	Etodolac
Fentanyl	Butalbital	Fenoprofen
Hydrocodone bitartrate	Capsaicin	Flurbiprofen sodium
Hydromorphone	Carbaspirin calcium	Ibuprofen
Levorphanol	Choline salicylate	Indomethacin
Meperidine	Etanercept	Ketoprofen
Meperidine HCl	Fluprednisolone	Ketorolac tromethamine
Methadone	Gold sodium thiomalate	Meclofenamate
Morphine	Gold sodium thiosulfate	Meclofenamic acid
Morphine sulfate	Hyaluronic acid	Mefenamic acid
Nalbuphine	Leflunomide	Meloxicam
Opium	Magnesium salicylate	Nabumetone
Oxycodone	Menthol	Naproxen
Oxycodone HCl	Methotrexate	Oxaprozin
Pentazocine	Methylprednisolone	Piroxicam
Propoxyphene	Methylsulfonylmethane	Rofecoxib
Remifentanyl	Oxyphenbutazone	Sulindac
	Phenyl salicylate	Suprofen
	Phenylbutazone	Tolmetin
	Prednisolone	Valdecoxib
	Salicylamide	
	Salsalate	
	Sodium hyaluronate	
	Sodium salicylate	
	Sodium thiosalicylate	
	Tramadol	
	Triamcinilone	
	Zomepirac	

NOTE: Drugs originally classified as NDC therapeutic categories 1720 (general analgesics); 1721 (narcotic analgesics); 1722 (nonnarcotic analgesics); 1724 (antiarthritics); 1727 (NSAIDs); 1728 (antipyretics); and 1729 (menstrual products) were recoded into the three mutually exclusive categories shown above. NDC codes for the analgesic categories 1723 (antimigraine) and 1725 (antigout) were not recoded.

Notifiable disease—A notifiable disease is one that, when diagnosed, health providers are required, usually by law, to report to state or local public health officials. Notifiable diseases are those of public interest by reason of their contagiousness, severity, or frequency. For more information, see: <http://www.cdc.gov/ncphi/diss/nndss/phs/infdis.htm>.

Nursing home—In the Online Survey Certification and Reporting (OSCAR) database, a nursing home is a facility that is certified and meets the Centers for Medicare & Medicaid Services' long-term care requirements for Medicare and Medicaid eligibility.

In the National Master Facility Inventory (NMFI), which provided the sampling frame for the 1973–1974, 1977, and 1985 National Nursing Home Surveys, a nursing home was an establishment with three or more beds that provided nursing or personal care services to the aged, infirm, or

chronically ill. The 1977 National Nursing Home Survey included personal care homes and domiciliary care homes, whereas the National Nursing Home Surveys of 1973–1974, 1985, 1995, 1997, 1999, and 2004 excluded them. The following definitions of nursing home types applied to facilities listed in the NMFI:

Nursing care home—These homes employ one or more full-time registered or licensed practical nurses and provide nursing care to at least one-half of residents.

Personal care home with nursing—These homes have fewer than one-half of residents receiving nursing care. In addition, such homes employ one or more registered or licensed practical nurses or provide administration of medications and treatments in accordance with physicians' orders, supervision of self-administered medications, or three or more personal services.

Personal care home without nursing—These homes have no residents who receive nursing care. The homes provide administration of medications and treatments in accordance with physicians' orders, supervise self-administered medications, or provide three or more personal services.

Domiciliary care home—These homes primarily provide supervisory care and one or two personal services.

The following definitions of certification levels apply to data collected in the National Nursing Home Surveys of 1973–1974, 1977, and 1985:

Skilled nursing facility—These facilities provide the most intensive nursing care available outside a hospital. Facilities certified by Medicare provide posthospital care to eligible Medicare enrollees. Facilities certified by Medicaid as skilled nursing facilities provide skilled nursing services on a daily basis to individuals eligible for Medicaid benefits.

Intermediate care facility—These facilities are certified by Medicaid to provide health-related services on a regular basis to Medicaid eligibles who do not require hospital or skilled nursing facility care but do require institutional care above the level of room and board.

Not certified facility—These facilities are not certified by Medicare or Medicaid as providers of care.

Beginning with the 1995 National Nursing Home Survey, nursing homes have been defined as facilities that routinely provide nursing care services and have three or more beds set up for residents. Facilities may be certified by Medicare or Medicaid or not certified but licensed by the state as a nursing home. The facilities may be freestanding or a distinct unit of a larger facility.

After October 1, 1990, long-term care facilities that met the Omnibus Budget Reconciliation Act of 1987 (OBRA 87) nursing home reform requirements and were formerly certified under Medicaid as skilled nursing, nursing home, or intermediate care facilities were reclassified as nursing facilities. Medicare continues to certify skilled nursing facilities but not intermediate care facilities. State Medicaid programs can certify intermediate care facilities for the mentally retarded or developmentally disabled. In order to be certified for participation in Medicaid, nursing facilities must also be certified to participate in Medicare (except those facilities that have obtained waivers). Thus, most nursing home care is now provided in skilled care facilities.

(Also see [Appendix II, Long-term care facility](#); [Nursing home](#); [Resident, health facility](#).)

Nursing home expenditures—See [Health expenditures, national](#).

Obesity—See [Body mass index \(BMI\)](#).

Occupancy rate—In American Hospital Association statistics, hospital occupancy rate is calculated as the average daily census divided by the number of hospital beds, cribs, and pediatric bassinets set up and staffed on the last day of the reporting period, expressed as a percentage. Average daily census is calculated by dividing the total annual number of inpatients, excluding newborns, by 365 days to derive the number of inpatients receiving care on an average day during the annual reporting period. The occupancy rate for facilities other than hospitals is calculated as the number of residents at the facility reported on the day of interview, divided by the number of reported beds. In the Online Survey Certification and Reporting (OSCAR) database, occupancy is determined as of the day of certification inspection as the total number of residents on that day divided by the total number of beds on that day.

Office-based physician—See [Physician](#).

Office visit—In the National Ambulatory Medical Care Survey, a physician's ambulatory practice (office) can be in any location other than in a hospital, nursing home, other extended care facility, patient's home, industrial clinic, college clinic, or family planning clinic. Offices in health maintenance organizations and private offices in hospitals are included. An office visit is any direct personal exchange between an ambulatory patient and a physician or members of his or her staff for the purposes of seeking care and rendering health services. (Also see [Appendix II, Outpatient visit](#).)

Operation—See [Procedure](#).

Outpatient department—According to the National Hospital Ambulatory Medical Care Survey (NHAMCS), an outpatient department (OPD) is a hospital facility where nonurgent ambulatory medical care is provided. The following types of OPDs are excluded from the NHAMCS: ambulatory surgical centers, chemotherapy, employee health services, renal dialysis, methadone maintenance, and radiology. (Also see [Appendix II, Emergency department](#); [Outpatient visit](#).)

Outpatient surgery—According to the American Hospital Association, outpatient surgery is a surgical operation, whether major or minor, performed on patients who do not remain in the hospital overnight. Outpatient surgery may be performed in inpatient operating suites, outpatient surgery suites, or procedure rooms within an outpatient care facility. A surgical operation involving more than one surgical procedure is considered one surgical operation. (Also see [Appendix II, Procedure](#).)

Outpatient visit—The American Hospital Association defines outpatient visits as visits for receipt of medical, dental, or other services at a hospital by patients who are not lodged in the hospital. Each appearance by an outpatient to each unit of the hospital is counted individually as an outpatient visit, including all clinic visits, referred visits, observation services, outpatient surgeries, and emergency department visits. In the National Hospital Ambulatory Medical Care Survey, an outpatient department visit is a direct personal exchange between a patient and a physician or other health care provider working under the physician's supervision for the purpose of seeking care and receiving personal health services. (Also see [Appendix II, Emergency department or emergency room visit](#); [Outpatient department](#).)

Overweight—See [Body mass index \(BMI\)](#).

Pap smear—A Pap smear (also known as a Papanicolaou smear or Pap test) is a microscopic examination of cells scraped from the cervix that is used to detect cancerous or precancerous conditions of the cervix or other medical conditions.

In the National Health Interview Survey, questions concerning Pap smear use were asked on an intermittent schedule, and the question content differed slightly across years. In 1987, women were asked to report when they had their most recent Pap smear, in days, weeks, months, or years. Women who did not respond were asked a follow-up question, "Was it 3 years ago or less, between 3 and 5 years, or 5 years or more ago?" Pap smear data in the past 3 years were not available in 1990 and 1991. In 1993 and 1994, women were asked whether they had a Pap smear within the past year, between 1 and 3 years ago, or more than 3 years ago. In 1998, women were asked whether they had a Pap smear 1 year ago or less, more than 1 year but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or more than 5 years ago.

In 1999, women were asked when they had their most recent Pap smear, in days, weeks, months, or years. In 1999, 4% of women in the sample responded 3 years ago. In *Health, United States*, these women were coded as within the past 3 years, although a response of 3 years ago may include women whose last Pap smear was more than 3 but less than 4 years ago. Thus, estimates for 1999 may be overestimated to some degree in comparison with estimates for previous years.

In 2000 and 2003, women were asked when they had their most recent Pap smear (give month and year). Women who did not respond were given a follow-up question that used the 1999 wording, and women who did not answer the follow-up question were asked a second follow-up question that used

the 1998 wording. In 2000 and 2003, less than 1% of women in the sample answered 3 years ago using the 1999 wording, and they were coded as within the past 3 years. Therefore, estimates for 2000 and 2003 may be slightly overestimated in comparison with estimates for years prior to 1999.

In 2005, women were asked the same series of questions about Pap smear use as in the 2000 and 2003 surveys, but the skip pattern was modified so that more women were asked the follow-up question using the 1998 wording. Because additional information was available for women who replied that their last Pap smear was 3 years ago, these women were not uniformly coded as having had a Pap smear within the past 3 years. Thus, estimates for 2005 are more precise than estimates for 1999, 2000, and 2003 and are slightly lower than they would have been without this additional information. For example, using the improved methodology instituted in 2005, 77.7% of women 18 years of age and over reported a Pap smear in the past 3 years, compared with an estimate of 78.3% in 2005 using the method employed in 2000 and 2003. SAS code to categorize Pap smear data for 2000 and beyond is available from: http://www.cdc.gov/nchs/nhis/nhis_2005_data_release.htm. In 2008, Pap smear questions were identical to those asked in 2005.

All women 18 years of age and over are asked the Pap smear question(s). In some data years, a series of questions was asked that also included information about hysterectomy. Women who reported having had a hysterectomy (removal of the uterus, with or without removal of the ovaries and cervix) were still asked the Pap smear questions because a woman who has had a hysterectomy may still have Pap smear testing.

Pap smear screening recommendations have changed over time and vary in the recommended age to begin and end screening and the interval for screening. For a summary of the current and historic recommendations see: U.S. Preventive Services Task Force. Screening for cervical cancer: Recommendations and rationale. Rockville, MD: Agency for Healthcare Research and Quality; 2003. Available from: <http://www.ahrq.gov/clinic/3rduspstf/cervcan/cervcanrr.pdf>; and see: U.S. Preventive Services Task Force. The guide to clinical preventive services, 2008. Rockville, MD: Agency for Healthcare Research and Quality; 2008. Available from: <http://www.ahrq.gov/clinic/pocketgd.htm>.

Partial care organization—See [Mental health organization](#).

Partial care treatment—See [Mental health service type](#).

Patient—See [Inpatient](#); [Office visit](#); [Outpatient visit](#).

Percent change/percentage change—See [Average annual rate of change \(percent change\)](#).

Perinatal mortality rate; ratio—See [Rate: Death and related rates](#).

Personal care home with or without nursing—See [Nursing home](#).

Personal health care expenditures—See [Health expenditures, national](#).

Physical activity, leisure-time—All questions related to leisure-time physical activity were phrased in terms of current behavior and lack a specific reference period. Starting with 1998 data, leisure-time physical activity has been assessed in the National Health Interview Survey (NHIS) by asking adults a series of questions about how often they do vigorous or light/moderate physical activity of at least 10 minutes duration and for about how long these sessions generally last. Vigorous physical activity is described as causing heavy sweating or a large increase in breathing or heart rate, and light/moderate as causing light sweating or a slight to moderate increase in breathing or heart rate. Adults classified as inactive did not report any sessions of light/moderate or vigorous leisure-time physical activity of at least 10 minutes or reported they were unable to perform leisure-time physical activity. Adults who engaged in some leisure-time activity reported at least one session of light/moderate or vigorous activity of at least 10 minutes duration but did not meet the requirement for regular leisure-time activity. Adults who engaged in regular leisure-time activity reported at least three sessions per week of vigorous leisure-time physical activity lasting at least 20 minutes or at least five sessions per week of light/moderate physical activity lasting at least 30 minutes. For more information see the NHIS physical activity website: http://www.cdc.gov/nchs/nhis/physical_activity.htm.

In October, 2008, the Department of Health and Human Services issued updated physical activity guidelines for Americans. Available from: <http://www.health.gov/PAGuidelines/guidelines/default.aspx>.

Physician—Data on physician characteristics are obtained through physician self-report from the American Medical Association's (AMA) Physician Masterfile. The AMA tabulates data only for doctors of medicine (MDs), but some tables in *Health, United States* include data for both MDs and doctors of osteopathy (DOs).

Active (or professionally active) physician—These physicians are currently engaged in patient care or other professional activity for a minimum of 20 hours per week. Other professional activity includes administration, medical teaching, research, and other activities such as

employment with insurance carriers, pharmaceutical companies, corporations, voluntary organizations, and medical societies. Physicians who are retired, semiretired, working part-time, or not practicing are classified as inactive and are excluded. Also excluded are physicians with unknown address and physicians who did not provide information on type of practice or present employment (not classified).

Hospital-based physician—These physicians are employed under contract with hospitals to provide direct patient care and include physicians in residency training (including clinical fellows) and full-time members of the hospital staff.

Office-based physician—These physicians are engaged in seeing patients in solo practice, group practice, two-physician practice, other patient care employment, or in providing inpatient services such as those offered by pathologists and radiologists.

Data for physicians are presented by type of education (doctors of medicine and doctors of osteopathy); place of education (U.S. medical graduates and international medical graduates); activity status (professionally active and inactive); area of specialty; and geographic area. (Also see [Appendix II, Physician specialty](#).)

Physician specialty—A physician specialty is any specific branch of medicine in which a physician may concentrate. Data are based on physician self-reports of their primary area of specialty. Physician data are broadly categorized into two areas of practice: those who provide primary care and those who provide specialty care.

Primary care generalist—These physicians practice in the general fields of family medicine, general practice, internal medicine, obstetrics and gynecology, and pediatrics. Specifically excluded are primary care specialists associated with these generalist fields.

Primary care specialist—These specialists practice in the primary care subspecialties of family medicine, internal medicine, obstetrics and gynecology, and pediatrics. Family medicine subspecialties include geriatric medicine and sports medicine. Internal medicine subspecialties include adolescent medicine, critical care medicine, diabetes, endocrinology, diabetes and metabolism, hematology, hepatology, hematology/oncology, cardiac electrophysiology, infectious diseases, clinical and laboratory immunology, geriatric medicine, sports medicine, nephrology, nutrition, medical oncology, pulmonary critical care medicine, and rheumatology. Obstetrics and gynecology subspecialties include gynecological oncology, gynecology, maternal and fetal

medicine, obstetrics, critical care medicine, and reproductive endocrinology. Pediatric subspecialties include adolescent medicine, pediatric critical care medicine, pediatrics/internal medicine, neonatal–perinatal medicine, pediatric allergy, pediatric cardiology, pediatric endocrinology, pediatric infectious disease, pediatric pulmonology, medical toxicology (pediatrics), pediatric emergency medicine, pediatric gastroenterology, pediatric hematology/oncology, clinical and laboratory immunology (pediatrics), pediatric nephrology, pediatric rheumatology, and sports medicine (pediatrics).

Specialty care physician—These physicians are sometimes called specialists and include primary care specialists listed above in addition to all other physicians not included in the generalist definition. Specialty fields include allergy and immunology, aerospace medicine, anesthesiology, cardiovascular diseases, child and adolescent psychiatry, colon and rectal surgery, dermatology, diagnostic radiology, forensic pathology, gastroenterology, general surgery, medical genetics, neurology, nuclear medicine, neurological surgery, occupational medicine, ophthalmology, orthopedic surgery, otolaryngology, psychiatry, public health and general preventive medicine, physical medicine and rehabilitation, plastic surgery, anatomic and clinical pathology, pulmonary diseases, radiation oncology, thoracic surgery, urology, addiction medicine, critical care medicine, legal medicine, and clinical pharmacology.

(Also see [Appendix II, Physician.](#))

Population—The U.S. Census Bureau collects and publishes data on populations in the United States according to several different definitions. Various statistical systems then use the appropriate population for calculating rates. (Also see [Appendix I, Population Census and Population Estimates.](#))

Resident population includes persons whose usual place of residence (i.e., the place where one usually lives and sleeps) is in one of the 50 states or the District of Columbia. It includes members of the Armed Forces stationed in the United States and their families. It excludes members of the Armed Forces stationed outside the United States and civilian U.S. citizens whose usual place of residence is outside the United States. The resident population is the denominator for calculating birth and death rates and incidence of disease.

Civilian population is the resident population excluding members of the Armed Forces, although families of members of the Armed Forces are included. The civilian population is the denominator in rates calculated for the National Hospital Discharge Survey and the National Nursing Home Survey, and for emergency department

visit rates using the National Hospital Ambulatory Medical Care Survey—Emergency Department Component.

Civilian noninstitutionalized population is the civilian population excluding persons residing in institutions (such as nursing homes, prisons, jails, mental hospitals, and juvenile correctional facilities). U.S. Census Bureau estimates of the civilian noninstitutionalized population are used to calculate sample weights for the National Health Interview Survey, the National Health and Nutrition Examination Survey, and the National Survey of Family Growth, and as denominators in rates calculated for the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey—Outpatient Department Component.

Postneonatal mortality rate—See [Rate: Death and related rates.](#)

Poverty—Poverty statistics are based on definitions originally developed by the Social Security Administration. These include a set of money income thresholds that vary by family size and composition. Families or individuals with income below the appropriate threshold are classified as below poverty. These thresholds are updated annually by the U.S. Census Bureau to reflect changes in the Consumer Price Index for all urban consumers (CPI-U). For example, the average poverty threshold for a family of four was \$22,207 in 2008, \$17,603 in 2000, and \$13,359 in 1990. For more information, see: DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance coverage in the United States: 2007. U.S. Census Bureau Current Population Report, P60–235. Washington, DC: U.S. Government Printing Office; 2008. Available from: <http://www.census.gov/prod/2008pubs/p60-235.pdf>. Also see the U.S. Census Bureau poverty website: <http://www.census.gov/hhes/www/poverty/poverty.html>.

National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES)—Percent of poverty level, for years prior to 1997, was based on family income and family size using U.S. Census Bureau poverty thresholds. Starting with 1997 data, percent of poverty level has been based on family income, family size, number of children in the family, and for families with two or fewer adults, the age of the adults in the family. Percent of poverty level in NHANES is also based on family income and family size and composition. (Also see [Appendix II, Consumer Price Index; Family income](#); and [Appendix I, Current Population Survey; National Health Interview Survey; National Health and Nutrition Examination Survey.](#))

Preferred provider organization (PPO)—A PPO is a type of medical plan in which coverage is provided to participants through a network of selected health care providers, such as hospitals and physicians. Enrollees may seek care outside the network but pay a greater percentage of the cost of coverage than within the network. (Also see [Appendix II, Health maintenance organization](#); [Managed care](#).)

Prenatal care—Prenatal care is medical care provided to a pregnant woman to prevent complications and decrease the incidence of maternal and prenatal mortality. Information on when pregnancy care began is recorded on the birth certificate. Between 1970 and 1980, the reporting area for prenatal care expanded. In 1970, 39 states and the District of Columbia (D.C.) reported prenatal care on the birth certificate. Data were not available from Alabama, Alaska, Arkansas, Connecticut, Delaware, Georgia, Idaho, Massachusetts, New Mexico, Pennsylvania, and Virginia. In 1975, data were available from three additional states—Connecticut, Delaware, and Georgia—increasing the number of states reporting prenatal care to 42 and D.C. During 1980–2002, prenatal care information was available for the entire United States.

Starting in 2003, some states began implementation of the 2003 revision of the U.S. Standard Certificate of Live Birth. The prenatal care item on the 2003 revision of the certificate asks for the date of first prenatal visit, whereas the prenatal care item on the 1989 revision asks for the month prenatal care began. In addition, the 2003 revision recommends that information on prenatal care be gathered from prenatal care or medical records, whereas the 1989 revision did not recommend a source for these data. Data on prenatal care from the 2003 revision of the birth certificate are not comparable with data from the 1989 revision. Therefore, 2005 and 2006 data on prenatal care are shown separately for the 34 reporting areas (32 states, D.C., and New York City) that used the 1989 revision for data on prenatal care in 2005 and 2006 and for the 12 reporting areas that used the 2003 revision in 2005 and 2006, in order to provide 2 years of comparable data. The states that used the 2003 revision of the U.S. Standard Certificate of Live Birth for data on prenatal care in 2005 and 2006 are Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, and Washington state. Data are not shown in *Health, United States* for one state that implemented the 2003 revision midyear in 2005 and five states that implemented the 2003 revision in 2006: Delaware, North Dakota, Ohio, South Dakota, Vermont (midyear), and Wyoming. Although California implemented the 2003 revision in 2006, the state did not revise the prenatal care question, and therefore the prenatal care data for California are included with data for the states using the 1989 revision in 2005 and 2006.

Prevalence—Prevalence is the number of cases of a disease, number of infected persons, or number of persons with some other attribute present during a particular interval of time. It is often expressed as a rate (e.g., the prevalence of diabetes per 1,000 persons during a year). (Also see [Appendix II, Incidence](#).)

Primary care specialty—See [Physician specialty](#).

Private expenditures—See [Health expenditures, national](#).

Procedure—The National Hospital Discharge Survey (NHDS) used to classify a procedure as a surgical or nonsurgical operation, diagnostic procedure, or therapeutic procedure (such as respiratory therapy); however, the distinction between types of procedures has become less meaningful because of the development of minimally invasive and noninvasive surgery. Thus, the practice of classifying the type of procedure has been discontinued. Procedures are coded according to the *International Classification of Diseases, ninth revision, Clinical Modification* (see [Table XI](#)). Up to four different procedures are coded in the NHDS. Procedures per hospital stay can be classified as any-listed—that is, if more than one procedure with the same code is performed it is counted only once—or all-listed, where multiple occurrences of the same procedure are counted each time they appear on the medical record, up to the maximum of four available codes. Because all-listed procedures overcount the number of procedures of a given type that are performed, all-listed procedure counts are greater than the number of hospital stays that occurred. Any-listed procedure counts approximate the number of hospital stays where a procedure was performed at any time during the stay. (Also see [Appendix II, Outpatient surgery](#).)

Proprietary hospital—See [Hospital](#).

Psychiatric hospital—See [Hospital](#); [Mental health organization](#).

Public expenditures—See [Health expenditures, national](#).

Purchasing power parities (PPPs)— PPPs are calculated rates of currency conversion that equalize the purchasing power of different currencies by eliminating the differences in price levels between countries. PPPs show the ratio of prices in national currencies for the same good or service in different countries. PPPs can be used to make intercountry comparisons of the gross domestic product (GDP) and its component expenditures. (Also see [Appendix II, Gross domestic product](#).)

Race—In 1977, the Office of Management and Budget (OMB) issued Race and Ethnic Standards for Federal Statistics and Administrative Reporting (Statistical Policy Directive 15) to promote comparability of data among federal data systems. The 1977 Standards called for the federal government's data systems to classify individuals into the following four racial groups: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. Depending on the data source, the classification by race was based on self-classification or on observation by an interviewer or other person filling out the questionnaire.

In 1997, revisions were announced for classification of individuals by race within the federal government's data systems (Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Fed Regist 1997 October 30;62:58781–90). The 1997 Standards specify five racial groups: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white. These five categories are the minimum set for data on race in federal statistics. The 1997 Standards also offer an opportunity for respondents to select more than one of the five groups, leading to many possible multiple-race categories. As with the single-race groups, data for the multiple-race groups are to be reported when estimates meet agency requirements for reliability and confidentiality. The 1997 Standards allow for observer or proxy identification of race but clearly state a preference for self-classification. The federal government considers race and Hispanic origin to be two separate and distinct concepts. Thus, Hispanics may be of any race. Federal data systems were required to comply with the 1997 Standards by 2003.

National Health Interview Survey (NHIS)—Starting with *Health, United States, 2002*, race-specific estimates based on NHIS were tabulated using the 1997 Standards for data year 1999 and beyond and are not strictly comparable with estimates for earlier years. The 1997 Standards specify five single-race categories plus multiple-race categories. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories white only, black or African American only, American Indian or Alaska Native only, Asian only, and Native Hawaiian or Other Pacific Islander only include persons who reported only one racial group; the category 2 or more races includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and “some other race.” Prior to data year 1999, data were tabulated according to the 1977 Standards, with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if

they reported more than one race, identified one race as best representing their race. Differences between estimates tabulated using the two standards for data year 1999 are discussed in the footnotes for each NHIS table in the *Health, United States 2002, 2003, and 2004* editions. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hus/previous.htm#editions>.

Tables XIII and XIV illustrate NHIS data tabulated by race and Hispanic origin according to the 1997 and 1977 Standards for two health statistics (cigarette smoking and private health insurance coverage). In these examples, three separate tabulations using the 1997 Standards are shown: (a) Race: mutually exclusive race groups, including several multiple-race combinations; (b) Race, any mention: race groups that are not mutually exclusive because each race category includes all persons who mention that race; and (c) Hispanic origin and race: detailed race and Hispanic origin with a multiple-race total category. Where applicable, comparison tabulations by race and Hispanic origin are shown based on the 1977 Standards. Because there are more race groups with the 1997 Standards, the sample size of each race group under the 1997 Standards is slightly smaller than the sample size under the 1977 Standards. Only those few multiple-race groups with sufficient numbers of observations to meet standards of statistical reliability are shown. Tables XIII and XIV also illustrate changes in labels and group categories resulting from the 1997 Standards. The race designation black was changed to black or African American, and the ethnicity designation Hispanic was changed to Hispanic or Latino.

Data systems included in *Health, United States*, other than NHIS, the National Survey of Drug Use & Health (NSDUH), and the National Health and Nutrition Examination Survey (NHANES), generally do not permit tabulation of estimates for the detailed race and ethnicity categories shown in Tables XIII and XIV, either because race data based on the 1997 Standards categories are not yet available or because there are insufficient numbers of observations in certain subpopulation groups to meet statistical reliability or confidentiality requirements.

In an effort to improve the quality of data on ethnicity and race in NHIS, hot-deck imputation of selected race and ethnicity variables was done for the first time in the 2000 NHIS and continued to be used for subsequent data years. Starting with 2003 data, records for persons for whom “other race” was the only race response were treated as having missing data on race and were added to the pool of records for which selected race and ethnicity variables were imputed. Prior to the 2000 NHIS,

Table XIII. Current cigarette smoking among persons 18 years of age and over, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
White only	46,228	25.2	0.26	White	46,664	25.3	0.26
Black or African American only	7,208	26.6	0.64	Black	7,334	26.5	0.63
American Indian or Alaska Native only	416	32.9	2.53	American Indian or Alaska Native	480	33.9	2.38
Asian only	1,370	15.0	1.19	Asian or Pacific Islander	1,411	15.5	1.22
2 or more races total	786	34.5	2.00				
Black or African American; white	83	*21.7	6.05				
American Indian or Alaska Native; white	461	40.0	2.58				
Race, any mention							
White, any mention	46,882	25.3	0.26				
Black or African American, any mention	7,382	26.6	0.63				
American Indian or Alaska Native, any mention	965	36.3	1.71				
Asian, any mention	1,458	15.7	1.20				
Native Hawaiian or Other Pacific Islander, any mention	53	*17.5	5.10				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only	42,421	25.8	0.27	White	42,976	25.9	0.27
Black or African American only	7,053	26.7	0.65	Black	7,203	26.7	0.64
American Indian or Alaska Native only	358	33.5	2.69	American Indian or Alaska Native	407	35.4	2.53
Asian only	1,320	14.8	1.21	Asian or Pacific Islander	1,397	15.3	1.24
2 or more races total	687	35.6	2.15				
Hispanic or Latino	5,175	17.8	0.65	Hispanic	5,175	17.8	0.65

* Relative standard error is 20%–30%.

NOTES: The Office of Management and Budget's (OMB) 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity specifies five race groups (white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allows respondents to report one or more race groups. Estimates for single-race and multiple-race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30%). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents [person's] race?" For persons who selected multiple groups, race groups under the OMB's 1977 Race and Ethnic Standards for Federal Statistics and Administrative Reporting were based on the additional question, "Which of those groups would you say best represents [person's] race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

a crude imputation method that assigned a race to persons with missing values for the variable MAINRACE (the respondent's classification of the race he or she most identified with) was used. Under these procedures, if an observed race was recorded by the interviewer, it was used to code a race value. If there was no observed race value, all persons who had a missing value for MAINRACE and were identified as Hispanic on the Hispanic origin question were coded as white. In all other cases, non-Hispanic persons were coded as "other race." Additional information on the NHIS methodology for imputing race and ethnicity is available from the survey documentation: http://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm; and from

the NHIS race and Hispanic origin home page: <http://www.cdc.gov/nchs/nhis/rhoi/rhoi.htm>.

National Health and Nutrition Examination Survey (NHANES)—Starting with Health, United States, 2003, race-specific estimates based on NHANES were tabulated using the 1997 Standards for data years 1999 and beyond. Prior to data year 1999, the 1977 Standards were used. Because of the differences between the two standards, the race-specific estimates shown in trend tables based on NHANES for 1999–2004 are not strictly comparable with estimates for earlier years. Race in NHANES I and II was determined primarily by interviewer observation; starting with NHANES III, race was self-reported by survey participants.

Table XIV. Private health care coverage among persons under 65 years of age, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
White only	168,256	76.1	0.28	White	170,472	75.9	0.28
Black or African American only	30,048	53.5	0.63	Black	30,690	53.6	0.63
American Indian or Alaska Native only	2,003	44.2	1.97	American Indian or Alaska Native	2,316	43.5	1.85
Asian only	6,896	68.0	1.39	Asian and Pacific Islander	7,146	68.2	1.34
Native Hawaiian or Other Pacific Islander only	173	75.0	7.43				
2 or more races total	4,203	60.9	1.17				
Black or African American; white	686	59.5	3.21				
American Indian or Alaska Native; white	2,022	60.0	1.71				
Asian; white	590	71.9	3.39				
Native Hawaiian or Other Pacific Islander; white	56	59.2	10.65				
Race, any mention							
White, any mention	171,817	75.8	0.28				
Black or African American, any mention	31,147	53.6	0.62				
American Indian or Alaska Native, any mention	4,365	52.4	1.40				
Asian, any mention	7,639	68.4	1.27				
Native Hawaiian or Other Pacific Islander, any mention	283	68.7	6.23				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only	146,109	78.9	0.27	White	149,057	78.6	0.27
Black or African American only	29,250	53.9	0.64	Black	29,877	54.0	0.63
American Indian or Alaska Native only	1,620	45.2	2.15	American Indian or Alaska Native	1,859	44.6	2.05
Asian only	6,623	68.2	1.43	Asian and Pacific Islander	6,999	68.4	1.40
Native Hawaiian or Other Pacific Islander only	145	76.4	7.79				
2 or more races total	3,365	62.6	1.18				
Hispanic or Latino	31,040	48.8	0.74	Hispanic	31,040	48.8	0.74

NOTES: The Office of Management and Budget's (OMB) 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity specifies five race groups (white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allows respondents to report one or more race groups. Estimates for single-race and multiple-race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30%). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents [person's] race?" For persons who selected multiple groups, race groups under the OMB's 1977 Race and Ethnic Standards for Federal Statistics and Administrative Reporting were based on the additional question, "Which of those groups would you say best represents [person's] race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Estimates are age-adjusted to the year 2000 standard population using three age groups: under 18 years, 18–44 years, and 45–64 years. See [Appendix II, Age adjustment](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

The NHANES sample was designed to provide estimates specifically for persons of Mexican origin and not for all Hispanic-origin persons in the United States. Persons of Hispanic origin other than Mexican were entered into the sample with different selection probabilities that are not nationally representative of the total U.S. Hispanic population. Estimates are shown for non-Hispanic white, non-Hispanic black, and Mexican-origin persons. Although data were collected according to the 1997 Standards, there are insufficient numbers of observations to meet

statistical reliability or confidentiality requirements for reporting estimates for additional race categories.

National Survey on Drug Use & Health (NSDUH)—Race-specific estimates based on NSDUH are tabulated using the 1997 Standards. Estimates in the NSDUH trend table begin with data year 2002. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories white only, black or African American only, American Indian or Alaska Native only, Asian only, and

Native Hawaiian or Other Pacific Islander only include persons who reported only one racial group; the category 2 or more races includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and "some other race."

National Vital Statistics System (NVSS)—Most of the states in the Vital Statistics Cooperative Program are still revising their birth and death records to conform to the 1997 Standards on race and ethnicity. During the transition to full implementation of the 1997 Standards, vital statistics data will continue to be presented for four major race groups—white, black or African American, American Indian or Alaska Native, and Asian or Pacific Islander—in accordance with the 1977 Standards.

Birth file—Information about the race and Hispanic ethnicity of the mother and father are provided by the mother at the time of birth and are recorded on the birth certificate and fetal death record. Since 1980, birth rates, birth characteristics, and death rates for live-born infants and fetal deaths are presented in *Health, United States* according to race of mother. Before 1980, data were tabulated by race of the newborn and fetus, taking into account the race of both parents. If the parents were of different races and one parent was white, the child was classified according to the race of the other parent. When neither parent was white, the child was classified according to father's race, with one exception: if either parent was Hawaiian, the child was classified Hawaiian. Before 1964, if race was unknown, the birth was classified as white. Starting in 1964, unknown race was classified according to information on the birth record. Starting with the 2000 census, the race and ethnicity data used for denominators (population) to calculate birth and fertility rates have been collected in accordance with 1997 revised OMB standards for race and ethnicity. However, the numerators (births) will not be compatible with the denominators until all the states revise their birth certificates to reflect the new standards. To compute rates, it is currently necessary to bridge population data for multiple-race persons to single-race categories. (Also see [Appendix I, Population Census and Population Estimates, Bridged-Race Population Estimates for Census 2000.](#))

Starting with 2003 data, multiple-race data were reported by both Pennsylvania and Washington state, which used the 2003 revision of the U.S. Standard Certificate of Live Birth, as well as by California, Hawaii, Ohio (for births occurring in December only), and Utah, which used the 1989 revision of the U.S. Standard Certificate of Live

Birth. In 2004, multiple race was reported on the revised birth certificates of Florida, Idaho, Kentucky, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington state, as well as on the unrevised certificates of California, Hawaii, Michigan (for births at selected facilities only), Minnesota, Ohio, and Utah (a total of 15 states). For the 2005 data year, multiple race was also reported by those 15 states that reported multiple race data in 2004 and additionally by Kansas, Nebraska, Texas, and Vermont (for births occurring from July 1, 2005, only) using the 2003 revision. In 2006, multiple race was additionally reported by Delaware, North Dakota, South Dakota, Tennessee, and Wyoming, which used the 2003 revision of the U.S. Standard Certificate of Live Birth. The 23 states reporting multiple race in 2006 represent 55% of all U.S. resident births. More than one race was reported for 1.6% of mothers in the states that reported multiple race. Data from the vital records of the remaining 27 states, the District of Columbia (D.C.), and New York City followed the 1977 OMB Standards. In addition, these areas also report the minimum set of four race categories as stipulated in the 1977 Standards, compared with the minimum of five race categories for the 1997 Standards. To provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, the responses of those who reported more than one race must be bridged to a single race. See: Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Mathews TJ. Births: Final data for 2006. National vital statistics report; vol 57 no 7. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf.

Although the bridging procedure imputes multiple race of mothers to one of the four minimum races stipulated in the 1977 Standards, mothers of a specified Asian or Pacific Islander (API) subgroup (Chinese, Japanese, Hawaiian, or Filipino) in combination with another race (American Indian or Alaska Native, black, and/or white) or another API subgroup cannot be imputed to a single API subgroup. API mothers are slightly overrepresented in the 23 states with complete reporting of multiple race for 2006 (6.3% of births in those states) compared with the remaining 27 states, New York City, and D.C. (4.8%). Data are not shown for the API subgroups or reported alone or in combination with other races or other API subgroups because the bridging technique cannot be applied in this detail. These data are available in the 2003 Natality public-use data file at <http://www.cdc.gov/nchs/births.htm>.

Mortality file—Information about the race and Hispanic ethnicity of a decedent is reported by the funeral director as provided by an informant, often the surviving next of kin, or in the absence of an informant, on the basis of observation. Death rates by race and Hispanic origin are based on information from death certificates (numerators of the rates) and on population estimates from the Census Bureau (denominators). Race and ethnicity information from the census is by self-report. To the extent that race and Hispanic origin are inconsistent between these two data sources, death rates will be biased. Studies have shown that persons self-reported as American Indian, Asian, or Hispanic on census and survey records may sometimes be reported as white or non-Hispanic on the death certificate, resulting in an underestimation of deaths and death rates for the American Indian, Asian, and Hispanic groups. Bias also results from undercounts of some population groups in the census, particularly young black males, young white males, and elderly persons, resulting in an overestimation of death rates. The net effects of misclassification and undercoverage result in overstated death rates for the white population and the black population estimated to be 1% and 5%, respectively. Understated death rates for other population groups are estimated as follows: American Indians, 21%; Asian or Pacific Islanders, 11%; and Hispanics, 2%. For more information, see: Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, MacDorman MF, Hoyert DL, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. *Vital Health Stat* 2(128). Hyattsville, MD: NCHS; 1999; and see: Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. *Vital Health Stat* 2(148). Hyattsville, MD: NCHS; 2008.

Denominators for infant and maternal mortality rates are based on the number of live births, rather than on population estimates. Race information for the denominator is supplied from the birth certificate. Before 1980, race of child for the denominator took into account the races of both parents. Starting in 1980, race information for the denominator has been based solely on the race of the mother. Race information for the numerator is supplied from the death certificate. For the infant mortality rate, race information for the numerator is race of the deceased child; for the maternal mortality rate, it is race of the mother.

Issues affecting the interpretation of vital event rates for the American Indian or Alaska Native population include (a) the presence of two enumeration techniques for estimating the American Indian or Alaska Native

population, (b) changes in the classification or self-identification of American Indian or Alaska Native heritage over time, and (c) misclassification of American Indian or Alaska Native persons on death certificates. Vital event rates for the American Indian or Alaska Native population shown in *Health, United States* are based on the total U.S. resident population of American Indians and Alaska Natives, as enumerated by the U.S. Census Bureau. In contrast, the Indian Health Service calculates vital event rates for this population based on U.S. Census Bureau county data for American Indians and Alaska Natives who reside on or near reservations. Interpretation of trends for the American Indian and Alaska Native population should take into account that population estimates for these groups increased by 45% between 1980 and 1990, partly because of better enumeration techniques in the 1990 decennial census and the increased tendency for people to identify themselves as American Indian in 1990. Because of misclassification of American Indian or Alaska Native persons on death certificates (estimated at greater than 10%), or no information on misclassification, American Indian or Alaska Native state-specific mortality estimates are not published in *Health, United States* for Alabama, Arkansas, California, Connecticut, D.C., Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin. See: Support Services International. Methodology for adjusting IHS mortality data for miscoding race-ethnicity of American Indian or Alaska Native on state death certificates. Report submitted to the Indian Health Service (IHS). Silver Spring, MD: Support Services International; 1996.

Interpretation of trends for the Asian population in the United States should take into account that this population more than doubled between 1980 and 1990, primarily because of immigration. Between 1990 and 2000, the increase in the Asian population was 48% for persons reporting that they were Asian alone and 72% for persons who reported they were either Asian alone or Asian in combination with another race.

For more information on coding race by using vital statistics, see: NCHS. *Vital statistics of the United States*, vol I, Natality, and vol II, Mortality, part A, Technical appendix. Hyattsville, MD: NCHS; published annually. Available from: <http://www.cdc.gov/nchs/nvss.htm>.

Starting with 2003 data, some states began using the 2003 revision of the U.S. Standard Certificate of Death, which allows the reporting of more than one race (multiple races). This change was implemented to reflect the increasing diversity of the U.S. population and to be consistent with the decennial census. Most states, however, are still using the 1989 revision of the U.S. Standard Certificate of Death, which allows only a single race to be reported.

To provide uniformity and comparability of data until all states are reporting multiple-race data, it has been necessary to “bridge” the responses of those for whom more than one race is reported (multiple race) to one single race. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data, and in 2005, 21 states reported multiple-race data. The states using the 2003 death certificate and reporting multiple-race data from 2003 onward were California, Idaho, Montana, and New York; in addition, Hawaii, Maine, and Wisconsin reported multiple-race data using the 1989 revision of the death certificate. Starting with 2004, multiple-race data were reported for those seven states, plus Michigan, Minnesota, New Hampshire, New Jersey, Oklahoma, South Dakota, Washington, and Wyoming. Starting with 2005, the seven additional reporting areas providing multiple-race data were Connecticut, D.C., Florida, Kansas, Nebraska, South Carolina, and Utah. Starting with 2006, the four additional states providing multiple-race data were New Mexico, Oregon, Rhode Island, and Texas. For more information on coding race by using vital statistics, see: Heron M, Hoyert DL, Murphy SL, Xu J, Kochanek, KD, Tejada-Vera B. Deaths: Final data for 2006. National vital statistics reports; vol 57 no 14. Hyattsville, MD: NCHS; 2009. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf; NCHS; and see: NCHS procedures for multiple-race and Hispanic origin data: Collection, coding, editing, and transmitting. Hyattsville, MD: NCHS; 2004. Available from: http://www.cdc.gov/nchs/data/dvs/Multiple_race_documentation_5-10-04.pdf; and see: NCHS. Vital statistics of the United States, vol I, Natality, and vol II, Mortality, part A, Technical appendix. Hyattsville, MD: NCHS; published annually. Available from: <http://www.cdc.gov/nchs/nvss.htm>.

Youth Risk Behavior Survey (YRBS)—Prior to 1999, the 1977 OMB Standards were used. Respondents could select only one of the following categories: white (not Hispanic), black (not Hispanic), Hispanic or Latino, Asian or Pacific Islander, American Indian or Alaska Native, or other. Beginning in 1999, the 1997 OMB Standards were used for race-specific estimates, and respondents were

given the option of selecting more than one category to describe their race/ethnicity. Between 1999 and 2003, students were asked a single question about race and Hispanic origin, with the option of choosing more than one of the following responses: white, black or African American, Hispanic or Latino, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. In 2005, students were asked a question about Hispanic origin (“Are you Hispanic or Latino?”) and a second separate question about race that included the option of selecting more than one of the following categories: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, or white. Because of the differences between questions, data about race and Hispanic ethnicity for the years prior to 1999 are not strictly comparable with estimates for the later years. However, analyses of data collected between 1991 and 2003 have indicated that the data are comparable across years and can be used to study trends. See: Brener ND, Kann L, McManus T. A comparison of two survey questions on race and ethnicity among high school students. *Public Opin Q* 2003;67(2):227–36. (Also see [Appendix II, Hispanic origin](#); and [Appendix I, Population Census and Population Estimates](#).)

Rate—A rate is a measure of some event, disease, or condition in relation to a unit of population, along with some specification of time. (Also see [Appendix II, Age adjustment](#); [Population](#).)

■ *Birth and related rates*

Birth rate is calculated by dividing the number of live births in a population in a year by the resident population. For census years, rates are based on unrounded census counts of the resident population as of April 1. For the noncensus years 1981–1989, rates were based on national estimates of the resident population as of July 1, rounded to thousands. Rounded population estimates for 5-year age groups were calculated by summing unrounded population estimates before rounding to thousands. Starting in 1991, rates were based on unrounded national population estimates. Birth rates for 1991–1999 were revised based on the April 1, 2000, census. The rates for 1990 and 2000 were based on populations from the censuses in those years as of April 1. Birth rates for 2001–2006 are based on populations estimated from the 2000 census as of July 1 each year. The population estimates have been provided by the U.S. Census Bureau and are based on the 2000 census counts by age, race, and sex, which have been modified to be consistent with OMB racial categories as of 1977 and historical categories for birth data. Beginning in 1997,

the birth rate for the maternal age group 45–49 years includes data for mothers 50–54 years of age in the numerator and is based on the population of women 45–49 years of age in the denominator. Birth rates are expressed as the number of live births per 1,000 population. The rate may be restricted to births to women of specific age, race, marital status, or geographic location (specific rate), or it may be related to the entire population (crude rate).

Fertility rate is the total number of live births, regardless of the age of the mother, per 1,000 women of reproductive age (15–44 years). Beginning in 1997, the birth rate for the maternal age group 45–49 years includes data for mothers 50–54 years of age in the numerator and is based on the population of women 45–49 years of age in the denominator.

■ *Death and related rates*

Death rate is calculated by dividing the number of deaths in a population in a year by the midyear resident population. For census years, rates are based on unrounded census counts of the resident population as of April 1. For the noncensus years 1981–1989, rates were based on national estimates of the resident population as of July 1, rounded to thousands. Rounded population estimates for 10-year age groups were calculated by summing unrounded population estimates before rounding to thousands. Starting in 1991, rates were based on unrounded national population estimates. Rates for the Hispanic and non-Hispanic white populations in each year are based on unrounded state population estimates for states in the Hispanic reporting area. Death rates are expressed as the number of deaths per 100,000 population. The rate may be restricted to deaths in specific age, race, sex, or geographic groups or from specific causes of death (specific rate), or it may be related to the entire population (crude rate).

Birth cohort infant mortality rates are based on linked birth and infant death files. In contrast to period rates in which the births and infant deaths occur in the same period or calendar year, infant deaths constituting the numerator of a birth cohort rate may have occurred in the same year as, or in the year following, the year of birth. The birth cohort infant mortality rate is expressed as the number of infant deaths per 1,000 live births. (Also see [Appendix II, Birth cohort.](#))

Fetal death rate is the number of fetal deaths with stated or presumed gestation of 20 weeks or more, divided by the sum of live births plus fetal deaths, per 1,000 live births plus fetal deaths.

Infant mortality rate, based on period files, is calculated by dividing the number of infant deaths during a calendar year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births. *Neonatal mortality rate* is the number of deaths of children under 28 days of age per 1,000 live births. *Postneonatal mortality rate* is the number of deaths of children that occur between 28 days and 365 days after birth, per 1,000 live births. (Also see [Appendix II, Infant death.](#))

Late fetal death rate is the number of fetal deaths with stated or presumed gestation of 28 weeks or more, divided by the sum of live births plus late fetal deaths per 1,000 live births plus late fetal deaths. (Also see [Appendix II, Gestation.](#))

Maternal mortality rate is the number of maternal deaths per 100,000 live births. The maternal mortality rate is a measure of the likelihood that a pregnant woman will die from maternal causes. The number of live births used in the denominator is a proxy for the population of pregnant women who are at risk of a maternal death. (Also see [Appendix II, Maternal death.](#))

Perinatal mortality rates and ratios relate to the period surrounding the birth event. Rates and ratios are based on events reported in a calendar year. *Perinatal mortality rate* is the sum of late fetal deaths plus infant deaths within 7 days of birth, divided by the sum of live births plus late fetal deaths per 1,000 live births plus late fetal deaths. *Perinatal mortality ratio* is the sum of late fetal deaths plus infant deaths within 7 days of birth, divided by the number of live births per 1,000 live births.

Visit rate is a basic measure of service utilization for event-based data. Examples of events include physician office visits with drugs provided or hospital discharges. In the visit rate calculation, the numerator is the number of estimated events, and the denominator is the corresponding U.S. population estimate for those who possibly could have had events during a given period of time. The interpretation is that for every person in the population there were, on average, x events. It does not mean that x of the population had events, because some persons in the population had no events while others had multiple events. The only exception is when an event can occur just once for a person (e.g., if an appendectomy is performed during a hospital stay). The visit rate is best used to compare utilization across various subgroups of interest, such as age or race groups or geographic regions.

Region—See [Geographic region](#).

Registered hospital—See [Hospital](#).

Registration area—The United States has separate registration areas for birth, death, marriage, and divorce statistics. In general, registration areas correspond to states and include two separate registration areas for the District of Columbia (D.C.) and New York City. The term reporting area may be used interchangeably with the term registration area. All states have adopted laws that require registration of births and deaths and the reporting of fetal deaths. It is believed that more than 99% of births and deaths occurring in this country are registered.

The death registration area was established in 1900 with 10 states and D.C., and the birth registration area was established in 1915, also with 10 states and D.C. Beginning in 1933, all states were included in the birth and death registration areas. The specific states added year by year are shown in: Hetzel AM. History and organization of the vital statistics system. Hyattsville, MD: NCHS; 1997. Available from: <http://www.cdc.gov/nchs/data/misc/usvss.pdf>. Currently, Puerto Rico, the U.S. Virgin Islands, and Guam each constitute a separate registration area, although their data are not included in statistical tabulations of U.S. resident data. (Also see [Appendix II, Reporting area](#).)

Relative standard error (RSE)—RSE is a measure of an estimate's reliability. The RSE of an estimate is obtained by dividing the standard error of the estimate (SE(*r*)) by the estimate itself (*r*). This quantity is expressed as a percentage of the estimate and is calculated as follows:

$$\text{RSE} = 100 \times (\text{SE}(r) / (r)).$$

Estimates with large RSEs are considered unreliable. In *Health, United States*, most statistics with large RSEs are preceded by an asterisk or are not presented.

Relative survival rate—The relative survival rate is the ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. The 5-year relative survival rate is used to estimate the proportion of cancer patients potentially curable. Because over one-half of all cancers occur in persons 65 years of age and over, many of these individuals die of other causes with no evidence of recurrence of their cancer. Thus, because it is obtained by adjusting observed survival for the normal life expectancy of the general population of the same age, the relative survival rate is an estimate of the chance of surviving the effects of cancer.

Reporting area—In the National Vital Statistics System, the reporting area for such basic items on the birth and death certificates as age, race, and sex is based on data from residents of all 50 states in the United States, the District of Columbia, and New York City. The term reporting area may be used interchangeably with the term registration area. (Also see [Appendix II, Registration area](#); and [Appendix I, National Vital Statistics System](#).)

Resident, health facility—In the Online Survey Certification and Reporting (OSCAR) database, all residents in certified facilities are counted on the day of certification inspection. In the National Nursing Home Survey, a resident is a person on the roster of the nursing home as of the night before the survey. Included are all residents for whom beds are maintained, even though they may be on overnight leave or in a hospital. (Also see [Appendix II, Nursing home](#).)

Resident population—See [Population](#).

Residential treatment care—See [Mental health service type](#).

Residential treatment center for emotionally disturbed children—See [Mental health organization](#).

Rural—See [Urbanization](#).

Self-assessment of health—See [Health status, respondent-assessed](#).

Serious psychological distress—The K6 instrument is a measure of psychological distress associated with unspecified but potentially diagnosable mental illness that may result in a higher risk for disability and higher utilization of health services. In the National Health Interview Survey (NHIS), the K6 was asked of adults 18 years of age and older. The K6 is designed to identify persons with serious psychological distress, using as few questions as possible. The six items included in the K6 are presented as follows:

During the past 30 days, how often did you feel:

- So sad that nothing could cheer you up?
- Nervous?
- Restless or fidgety?
- Hopeless?
- That everything was an effort?
- Worthless?

Possible answers are "All of the time" (4 points), "Most of the time" (3 points), "Some of the time" (2 points), "A little of the time" (1 point), and "None of the time" (0 points).

To score the K6, the points are added together, yielding a possible total of 0–24 points. A threshold of 13 points or more

is used to define serious psychological distress. Persons answering “Some of the time” to all six questions would not reach the threshold for serious psychological distress because to achieve a score of 13 they would need to answer “Most of the time” to at least one item. The version of the K6 used in the NHIS provides 1-month prevalence rates because the reference period is the past 30 days. For more information, see: Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry* 2003;60(2):184–9. (Also see [Appendix II, Basic actions difficulty](#).)

Short-stay hospital—See [Hospital](#).

Skilled nursing facility—See [Nursing home](#).

Smoker—See [Cigarette smoking](#).

Specialty hospital—See [Hospital](#).

State mental health agency—Refers to the agency or department within state government, headed by the state or territorial health official, that deals with mental health issues. Generally, the state mental health agency is responsible for setting statewide mental health priorities, carrying out national and state mandates, responding to mental health hazards, and ensuring access to mental health care for underserved state residents.

Substance use—Substance use refers to the use of selected substances, including alcohol, tobacco products, drugs, inhalants, and other substances that can be consumed, inhaled, injected, or otherwise absorbed into the body with possible dependence and other detrimental effects. (Also see [Appendix II, Illicit drug use](#).)

Monitoring the Future (MTF)—MTF collects information on the use of selected substances by using self-completed questionnaires in a school-based survey of secondary school students. MTF has tracked 12th graders’ illicit drug use and attitudes toward drugs since 1975. In 1991, 8th and 10th graders were added to the study. The survey includes questions on abuse of substances including (but not limited to) marijuana, inhalants, illegal drugs, alcohol, cigarettes, and other tobacco products. A standard set of three questions is used to assess use of the substances in the past month. Past month refers to an individual’s use of a substance at least once during the month preceding their response to the survey. (Also see [Appendix I, Monitoring the Future](#).)

National Survey on Drug Use & Health (NSDUH)—NSDUH conducts in-person computer-assisted interviews of a sample of individuals 12 years of age and older at their place of residence. For illicit drug use, alcohol use,

and tobacco use, information is collected about use in the lifetime, past year, and past month. However, only estimates of use in the past month are presented in *Health, United States*. For illicit drug use, respondents in NSDUH are asked about use of marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, and prescription-type psychotherapeutic drugs (pain relievers, tranquilizers, stimulants, and sedatives) used nonmedically. A series of questions is asked about each substance: “Have you ever, even once, used [substance]?” “How long has it been since you last used [substance]?” Numerous probes and checks are included in the computer-assisted interview system.

Nonprescription medications and legitimate use of prescription drugs under a doctor’s supervision are not included in the survey. Summary measures, such as current illicit drug use, are produced. (Also see [Appendix II, Alcohol consumption](#); [Cigarette smoking](#); [Illicit drug use](#); and [Appendix I, National Survey on Drug Use & Health](#).)

Suicidal ideation—Suicidal ideation means having thoughts of suicide or of taking action to end one’s own life. Suicidal ideation includes all thoughts of suicide, both when the thoughts include a plan to commit suicide and when they do not include a plan. Suicidal ideation is measured in the Youth Risk Behavior Survey by the following three questions: “During the past 12 months, did you ever seriously consider attempting suicide?”, “During the past 12 months, how many times did you actually attempt suicide?”, and “If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?” For more information, see: <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

Surgery—See [Outpatient surgery](#); [Procedure](#).

Surgical specialty—See [Physician specialty](#).

Tobacco use—See [Cigarette smoking](#).

Uninsured—In the Current Population Survey (CPS), persons are considered uninsured if they do not have coverage through private health insurance, Medicare, Medicaid, Children’s Health Insurance Program, military or veterans coverage, another government program, a plan of someone outside the household, or other insurance. Persons with only Indian Health Service coverage are considered uninsured. In addition, if the respondent has missing Medicaid information but has income from certain low-income public programs, then Medicaid coverage is imputed. The questions on health insurance are administered in March and refer to the previous calendar year.

In the National Health Interview Survey (NHIS), the uninsured are persons who do not have coverage under private health insurance, Medicare, Medicaid, public assistance, a state-sponsored health plan, other government-sponsored programs, or a military health plan. Persons with only Indian Health Service coverage are considered uninsured. Estimates of the percentage of persons who are uninsured based on NHIS (Table 140) may differ slightly from those based on the March CPS (Table 150) because of differences in survey questions, recall period, and other aspects of survey methodology. Estimates for the uninsured are shown only for the population under 65 years of age.

Survey respondents may be covered by health insurance at the time of interview but may have experienced one or more lapses in coverage during the year prior to interview. Starting with *Health United States, 2006*, NHIS estimates for people with health insurance coverage for all 12 months prior to interview, for those who were uninsured for any period up to 12 months, and for those who were uninsured for more than 12 months were added as stub variables to selected tables. (Also see Appendix II, [Health insurance coverage](#); and Appendix I, [Current Population Survey](#).)

Urbanization—Urbanization is the degree of urban (city-like) character of a particular geographic area. Urbanization can be measured in a variety of ways. In *Health United States*, the two measures used to categorize counties by urbanization level are the Office of Management and Budget's (OMB) metropolitan statistical area (MSA) classification and the 2006 NCHS Urban–Rural Classification Scheme for Counties. For more information on the OMB classification of counties, see Appendix II, [Metropolitan statistical area](#); [Micropolitan statistical area](#).

The 2006 NCHS Urban–Rural Classification Scheme for Counties is a six-level classification scheme developed by NCHS to categorize the 3,141 U.S. counties and county equivalents based on their urban and rural characteristics. The classification scheme includes four metropolitan (or urban) categories and two nonmetropolitan (or rural) categories. The county classifications are based on the following information: (a) the 2003 OMB definitions of metropolitan and micropolitan counties (with revisions through 2005); (b) the 2004 postcensal county population estimates; and (c) county-level data on several settlement density, socioeconomic, and demographic variables from Census 2000. The six categories of the 2006 NCHS Urban–Rural Classification Scheme for Counties are large central metro (central counties of metro areas of 1 million or more population), large fringe metro (outlying counties of metro areas of 1 million or more population), medium metro (metro areas of 250,000–999,999 population), small metro (metro areas with less than 250,000 population), nonmetropolitan

micropolitan, and nonmetropolitan noncore. For more information on this classification scheme, see: http://www.cdc.gov/nchs/r&d/rdc_urbanrural.htm.

Usual source of care—Usual source of care was measured in the National Health Interview Survey (NHIS) in 1993 and 1994 by asking the respondent “Is there a particular person or place that [person] usually goes to when [person] is sick or needs advice about [person's] health?” In the 1995 and 1996 NHIS, the respondent was asked “Is there one doctor, person, or place that [person] usually goes to when [person] is sick or needs advice about health?” Starting in 1997, the respondent was asked “Is there a place that [person] usually goes when he/she is sick or you need advice about [his/her] health?” Persons who report the emergency department as their usual source of care are defined as having no usual source of care in *Health, United States*.

Vaccination—Vaccinations, or immunizations, work by stimulating the immune system—the natural disease-fighting system of the body. A healthy immune system is able to recognize invading bacteria and viruses and produce substances (antibodies) to destroy or disable these invaders. Vaccinations prepare the immune system to ward off a disease. In addition to the initial immunization process, the effectiveness of some immunizations can be improved by periodic repeat injections or “boosters.” Vaccines are among the most successful and cost-effective public health tools available for reducing morbidity and mortality from vaccine-preventable diseases. For a comprehensive list of vaccine-preventable diseases, see: <http://www.cdc.gov/vaccines/vpd-vac/vpd-list.htm> and <http://www.cdc.gov/vaccines/spec-grps/default.htm>.

The currently recommended childhood vaccination schedule includes vaccines that prevent infectious diseases including hepatitis A, diphtheria, tetanus toxoids, acellular pertussis (whooping cough), measles, mumps, rubella (German measles), polio, varicella (chicken pox), and some forms of meningitis, influenza, and pneumonia. In February 2006, a rotavirus vaccine (RotaTeq) was licensed for use among U.S. infants. For more information on the 2008 recommended childhood vaccinations and schedules, see: CDC. Recommended immunization schedules for persons aged 0–18 years—United States, 2008. MMWR 2008;57(01): Q1–Q4. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5701a8.htm?s_cid=mm5701a8_e.

A vaccine that protects against the four types of human papillomavirus (HPV) that cause most cervical cancers and genital warts began to be marketed in 2006 and is now available for females. The vaccine is recommended for 11- and 12-year-old girls. It is also recommended for girls and women 13–26 years of age who have not yet been vaccinated or completed the vaccine series.

Boosters (revaccination) of vaccinations received during childhood or adulthood are necessary for some vaccines. In addition to keeping current with the vaccines listed above, some additional vaccinations are recommended for older adults, persons with specific health conditions, or health care workers who are likely to be exposed to infectious persons. Influenza vaccination is recommended annually for adults 50 years of age and over, herpes zoster vaccination is recommended one time for adults 60 years of age and over, and pneumococcal vaccination is recommended one time for adults 65 years of age and over.

For a full discussion of recommended vaccination schedules by age and/or population, see CDC's vaccination and immunization website:

<http://www.cdc.gov/vaccines/spec-grps/default.htm>.

Wages and salaries—See [Employer costs for employee compensation](#).

Years of potential life lost (YPLL)—YPLL is a measure of premature mortality. Starting with *Health, United States, 1996* and 1997 editions, YPLL has been presented for persons under 75 years of age because the average life expectancy in the United States is over 75 years. YPLL-75 is calculated using the following eight age groups: under 1 year, 1-14 years, 15-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, and 65-74 years. The number of deaths for each age group is multiplied by years of life lost, calculated as the difference between age 75 years and the midpoint of the age group. For the eight age groups, the midpoints are 0.5, 7.5, 19.5, 29.5, 39.5, 49.5, 59.5, and 69.5 years. For example, the death of a person 15-24 years of age counts as 55.5 years of life lost. Years of potential life lost is derived by summing years of life lost over all age groups. In *Health, United States, 1995* and earlier editions, YPLL was presented for persons under 65 years of age. For more information, see: CDC. Premature mortality in the United States: Public health issues in the use of years of potential life lost. *MMWR* 1986;35(2 supp):1s-11s. Available from:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001773.htm>.

Appendix III

Additional Data Years Available

For trend tables spanning long periods, only selected data years are shown in *Health, United States*, to highlight major trends. Additional years of data for some of the

tables are available in electronic spreadsheets on the *Health, United States, 2009* website at <http://www.cdc.gov/nchs/hus.htm>. Standard errors are included in spreadsheet files for trend tables that are based on the National Health Interview Survey (NHIS), the National Health and Nutrition Examination Survey (NHANES), and the National Survey of Family Growth (NSFG).

Table number	Table topic	Additional data years available
1	Resident population	2001–2004
2	Inmates in state or federal prisons and local jails	2001–2003
3	Poverty	1986–1989, 1991–1994, 1996–1999, 2001–2003, 2005
4	Fertility rates and birth rates	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2004
5	Live births	1972–1974, 1976–1979, 1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2004
6	Twin births	1972–1974, 1976–1979, 1981–1984, 1986–1989, 1991–1994, 1996, 1998–1999, 2001–2003
7	Prenatal care	1975, 1981–1989, 1991–1999, 2001–2002
8	Teenage childbearing	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2002
9	Nonmarital childbearing	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2002
10	Maternal smoking	1991–1994, 1996–1999, 2001
11	Low birthweight	1981–1984, 1986–1989, 1991–1994, 1996–1998, 2001–2003
12	Low birthweight	1991–1994, 1996–1999, 2001
14	Abortions	1981–1984, 1986–1989, 1991–1994, 1996–1998, 2001–2002
17	Infant mortality rates	1996–1999, 2001–2002; (3 year data: 1996–1998, 1997–1999, 1998–2000, 2000–2002, 2001–2003, 2002–2004)
18	Infant mortality rates	1984, 1986–1989, 1991, 1996–1999, 2001–2002
19	Infant mortality rates	1981–1989, 1991–1994, 1996–1999
22	International mortality rates and rankings	2001, 2002–2004; ranking 2005
23	International life expectancy	1999, 2001, 2003–2004
24	Life expectancy	1975, 1981–1989, 1991–1994, 1996–1997
26	Age-adjusted death rates for selected causes	1981–1989, 1991–1999, 2001–2003
27	Years of potential life lost	1991–1999 2001, crude 1999–2003
30	Urbanization level	2002–2004, 2003–2005
31	Death rates for all causes	1981–1989, 1991–1999, 2001–2004
32	Diseases of heart	1981–1989, 1991–1999, 2001–2004
33	Cerebrovascular diseases	1981–1989, 1991–1999, 2001–2004
34	Malignant neoplasms	1981–1989, 1991–1999, 2001–2004
35	Malignant neoplasms of trachea, bronchus, and lung	1981–1989, 1991–1999, 2001–2004
36	Malignant neoplasm of breast	1981–1989, 1991–1999, 2001–2004
37	Chronic lower respiratory diseases	1981–1989, 1991–1994, 1996–1999, 2001
38	Human immunodeficiency virus (HIV) disease	1988–1989, 1991–1994, 2001–2003
39	Maternal mortality	1981–1989, 1991–1999, 2001–2003
40	Motor vehicle-related injuries	1981–1989, 1991–1999, 2001–2004
41	Homicide	1981–1989, 1991–1999, 2001–2004
42	Suicide	1981–1989, 1991–1999, 2001–2004
43	Firearm-related injuries	1981–1989, 1991–1994, 1996–1999, 2001–2003

Table number	Table topic	Additional data years available
44	Occupational diseases	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2003
46	Nonfatal occupational injuries and illnesses	2004
47	Notifiable diseases	1985, 1988–1989, 1991–1999, 2001–2004
49	Cancer incidence rates	1991–1994, 1996–1999
50	Five-year relative cancer survival rates	1978–1980, 1984–1986, 1990–1992
51	Diabetes	2001–2004,
53	Severe headache or migraine, low back pain, and neck pain	1998–2005
54	Joint pain	2003–2005
55	Basic actions difficulty and complex activity limitation	1999–2002
56	Vision and hearing limitations	1998–1999, 2001–2005
57	Respondent-assessed health status	1998–1999, 2001–2002
58	Serious psychological distress	1998–1999, 2000–2001, 2002–2003, 2003–2004, 2005–2006
60	Cigarette smoking	1983, 1987–1988, 1991–1994, 1997–1999, 2001–2003
61	Cigarette smoking	1983, 1987–1988, 1991–1994, 1997–1999, 2001–2003
62	Cigarette smoking	1993–1995, 1994–1997, 2002–2004, 2003–2005, 2004–2006
63	Use of selected substances	2003–2005
64	Use of selected substances	1981–1984, 1986–1989, 1992–1994, 1996–1999, 2001–2004
65	Lifetime alcohol drinking status	1998–1999, 2001–2005
66	Heavier drinking and drinking five or more drinks in a day	1998–1999, 2001–2004
68	Hypertension (elevated blood pressure)	2001–2004
69	Serum total cholesterol levels	2001–2004
71	Leisure-time physical activity	1999–2005
72	Overweight, obesity, and healthy weight	2001–2004
73	Overweight among children and adolescents	2001–2004
74	Untreated dental caries	1999–2000, 1999–2002
75	No usual source of health care	1995–1996, 1997–1998, 1999–2000, 2001–2002, 2004–2005, 2005–2006
76	No usual source of health care	2004–2005, 2005–2006
77	Reduced access to medical care	1998–2005
78	Reduced access to medical care	2000–2001, 2004–2005; 2005–2006
79	No health care visits	1999–2000, 2003–2004, 2004–2005, 2005–2006
80	Health care visits	1998–2005
82	Vaccinations	1996–1999, 2001–2002
84	Influenza vaccination	1991, 1993–1994, 1997–1999, 2001–2002
85	Pneumococcal vaccination	1991, 1993–1994, 1997–1999, 2001–2002
86	Mammography	1991, 1998
87	Pap smears	1998
88	Emergency department visits for children	1998–2005
89	Emergency department visits for adults	1998–1999, 2001–2005
90	Injury-related visits to hospital emergency departments	2005–2006
91	Ambulatory care visits	1997–1999, 2001–2005
92	Ambulatory care visits	1997–1999, 2001–2006
93	Dental visits	1998–2005
95	Prescription drug use	1999–2000, 1999–2002, 2001–2004
96	Dietary supplement use	2001–2004
97	Additions to mental health organizations	1992, 1994, 1998, 2000
98	Discharges	1998–2005
99	Discharges	1991–1994, 1996–1999, 2001–2003

Table number	Table topic	Additional data years available
100	Discharges	1991–1999, 2001–2005
101	Discharge rate	1991–1999, 2001–2005
102	Average length of stay	1991–1999, 2001–2005
103	Discharges	1991–1999, 2001–2005
105	Nursing home residents	1997
106	Persons employed in health service sites	2001
107	Active physicians and doctors of medicine	2003–2006
108	Physicians	1970, 1980, 1987, 1989–1990, 1992–1994, 1996–1999, 2001–2003
109	Primary care doctors of medicine	1994, 1996–1999, 2001, 2003–2005
111	Employees and wages	2000–2001, 2003–2004, 2006
116	Mental health organizations	1992
119	Nursing homes	1996–1999, 2001–2006
120	Medicare-certified providers and suppliers	1997–1998, 2002, 2004, 2006
121	Magnetic Resonance Imaging (MRI) units and Computed Tomography (CT) scanners	2001–2002
122	Total health expenditures as a percent of gross domestic product	1961–1969, 1971–1979, 1981–1989, 1991–1994, 1996–1999
129	Expenditures for mental health services	1987–1989, 1991–1994, 1996–1999, 2001
130	Expenditures for substance abuse treatment	1987–1989, 1991–1994, 1996–1999, 2001
131	Expenditures for health care	1998–1999, 2001–2005
132	Sources of payment for health care	1996, 1998–1999, 2001–2005
133	Out-of-pocket health care expenses	1998–1999, 2001–2002
135	Employers' costs and health insurance	1992–1993, 1995, 1997–1999, 2001–2004
137	Private health insurance	1994, 1996, 1998–1999, 2001–2002
138	Private health insurance	1994, 1996, 1998–1999, 2001–2002
139	Medicaid coverage	1994, 1996, 1998–1999, 2001–2003
140	No health insurance coverage	1994, 1996, 1998–1999, 2001–2003
141	Health care coverage	1993–1994, 1996–1999, 2001–2005
143	Medicare	1996–1998, 2001, 2003
144	Medicare	All: 1999–2002; 1993–2003
145	Medicaid	1975, 1985–1989, 1991–1994, 1996–1999, 2001–2002
146	Medicaid	1975, 1985–1989, 1991–1994, 1996–1999, 2001–2002
147	Department of Veterans Affairs	1985, 1988–1989, 1991–1994, 1996–1999, 2001–2004
148	Medicare	1995–2006
149	Medicaid	1998, 2000–2001, 2003–2005
150	Persons without health insurance coverage	2004–2006

Index

(Numbers refer to tables and figures)

A	<i>Table/Figure</i>	A—Con.	<i>Table/Figure</i>
Abortion	14	American Indian or Alaska Native population—Con.	
Access to care (see also Delayed medical care; Dental visits; Drugs prescribed during medical visits; Emergency department visits; Health insurance; Hospital utilization; Injury; Unmet need)		Physical activity	71
Health care visits	80	Population, resident	1, Figure 2
No recent health care visit, children	79	Prenatal care	7
No usual source of care	75, 76	Serious psychological distress	58
Reduced access to services	77, 78	Smoking status of mother	10, 11
Abdominal pain, see Emergency department visits.		Students, health occupations	113
Accidents, see Motor vehicle-related injuries; Unintentional injuries.		Teenage childbearing	4, 8
Activities of daily living (ADLs), see Limitation of activity.		Twin, triplet, and higher-order multiple births	5, 6
Adolescents, see Child and adolescent health.		Unmarried mothers	9
AIDS, see HIV/AIDS.		Unmet need	77
Alcohol consumption	63, 64, 65, 66	Vaccinations	82, 84, 85
Alzheimer's disease	28, 29	Vision trouble	56
Ambulatory surgery centers, Medicare certified	120	Years of potential life lost (YPLL)	27
American Indian or Alaska Native population		Asian or Pacific Islander population	
Access to care	75, 76, 77, 79, 80	Access to care	75, 76, 77, 79, 80
AIDS cases	48	AIDS cases	48
Alcohol consumption	63, 65, 66	Alcohol consumption	63, 65, 66
Back pain, low	53	Back pain, low	53
Basic actions difficulty	55	Basic actions difficulty	55
Birth rates	4, 6, 9	Births, number	5
Births, number	5	Birthweight, low	11, 12, 13
Birthweight, low	11, 12, 13	Cancer incidence rates	49
Cancer incidence rates	49	Cigarette smoking	10, 62, 63
Cigarette smoking	10, 62, 63	Complex activity limitation	55
Complex activity limitation	55	Death rates, all causes	25, 26, 31
Death rates, all causes	25, 26, 31	Death rates, selected causes	26, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43
Death rates, selected causes	26, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43	Death rates, state	25
Death rates, state	25	Deaths, leading causes	28
Deaths, leading causes	28	Dental visits	93
Dental visits	93	Education of mother	10, 12
Education of mother	10, 12	Emergency department visits	88, 89
End-stage renal disease	52	End-stage renal disease	52
Emergency department visits	88, 89	Headache, severe or migraine	53
Headache, severe or migraine	53	Health insurance	137, 138, 139, 140, 141
Health insurance	137, 138, 139, 140	Health status, respondent-assessed	57
Health status, respondent-assessed	57	Hearing trouble	56
Hearing trouble	56	Hospital utilization, inpatient	98
Hospital utilization, inpatient	98	Illicit drug use	63
Illicit drug use	63	Infant mortality	17, 20, 21
Infant mortality	17, 20, 21	Joint pain	54
Joint pain	54	Mammography	86, Figure 26
Mammography	86	Marijuana use	63
Marijuana use	63	Maternal mortality	39
Maternal mortality	39	Medicaid	139, 145
Medicaid	139, 145	Neck pain	53
Neck pain	53	Occupational injury deaths	45
Occupational injury deaths	45	Pap smear	87
Pap smear	87	Physical activity	71
		Population, resident	1, Figure 2
		Poverty	3, Figure 5
		Prenatal care	7

A—Con.

Table/Figure

Asian or Pacific Islander population—Con.
 Serious psychological distress 58
 Smoking status of mother 10, 11
 Students, health occupations 113
 Teenage childbearing 4, 8
 Twin, triplet, and higher-order multiple births 5, 6
 Uninsured Figure 20
 Unmarried mothers 9
 Unmet need 77
 Vaccinations 82, 84, 85
 Vision trouble 56
 Years of potential life lost (YPLL) 27
 Assisted reproductive technologies Figure 33
 Atherosclerosis 28

B

Back pain, low 53
 Basic actions difficulty 55, 137, 138, 139, 140
 Bed, health facility 116, 119, 136
 Birth control, see Contraception.
 Births
 Age of mother 4, 9, 10
 Birth rates 4, 6, 9
 Births, number 5, 9
 Birthweight, low 11, 12, 13
 Education of mother 10, 12
 Fertility rates 4
 Hospital discharges 100, 101
 Prenatal care 7
 Smoking status of mother 10, 11
 State 13
 Teenage childbearing 8
 Twin, triplet, and higher-order multiple births 5, 6
 Unmarried mothers 9
 Black or African American population
 Abortion 14
 Access to care 75, 76, 77, 79, 80
 AIDS cases 48
 Alcohol consumption 63, 64, 65, 66
 Back pain, low 53
 Basic actions difficulty 55
 Birth rates 4, 6, 9
 Births, number 5
 Birthweight, low 11, 12, 13
 Breastfeeding 16
 Cancer incidence rates 49
 Cancer survival, 5-year relative 50
 Cholesterol, serum 69
 Cigarette smoking 10, 60, 61, 62, 63, 64
 Cocaine use 64
 Complex activity limitation 55
 Contraception 15
 Death rates, all causes 25, 26, 30, 31
 Death rates, selected causes 26, 32, 33, 34, 35, 36,
 37, 38, 39, 40, 41, 42, 43, Figure 35

B—Con.

Table/Figure

Black or African American population—Con.
 Death rates, state 25
 Death rates, urbanization 30
 Deaths, leading causes 28
 Dental caries (cavities), untreated 74
 Dental visits 93, 144
 Diabetes 51
 Dietary supplements 96
 Doctor visits 92
 Drugs, prescription, use in past month 95
 Education of mother 10, 12
 Emergency department visits 88, 89, 91
 End-stage renal disease 52
 Expenses, health care 131
 Fetal mortality 19
 Headache, severe or migraine 53
 Health insurance 137, 138, 140, 141
 Health status, respondent-assessed 57
 Hearing trouble 56
 Hospital utilization, inpatient 98, 144
 Hospital utilization, outpatient department 91, 144
 Hypertension 68
 Illicit drug use 63, 64
 Infant mortality 17, 19, 20, 21
 Inhalants 64
 Inmates, prisons and jails 2
 Joint pain 54
 Life expectancy 24, Figure 16
 Mammography 86, Figure 26
 Marijuana use 63, 64
 Maternal mortality 39
 Medicaid 132, 139, 141, 145
 Medicare 132, 141, 144
 Neck pain 53
 Nursing home utilization 105
 Occupational injury deaths 45
 Out-of-pocket health care expenditures 131, 132
 Overweight and obesity 72, 73
 Pap smear 87
 Physical activity 71
 Population, resident 1, Figure 2
 Poverty 3, Figure 5
 Prenatal care 7
 Serious psychological distress 58
 Smoking status of mother 10, 11
 Students, health occupations 113
 Suicidal ideation, suicide attempts 59
 Teenage childbearing 4, 8
 Twin, triplet, and higher-order multiple births 5, 6
 Uninsured Figure 20
 Unmarried mothers 9
 Unmet need 77
 Vaccinations 82, 84, 85
 Vision trouble 56
 Years of potential life lost (YPLL) 27
 Blood pressure, elevated, see Hypertension.
 Breastfeeding 16

C

Table/Figure

C—Con.

Table/Figure

Calories, see Energy and macronutrient intake.

Cancer (Malignant neoplasms)

- Breast 26, 27, 36, 49, 50, 100, 101
- Deaths and death rates 26, 28, 29, 34, 35, 36, Figure 18
- Hospital discharges 100, 101
- Incidence rates 49
- Site-specific data 26, 27, 35, 36, 49, 50, 100, 101
- Survival, 5-year relative 50
- Trachea, bronchus, lung 26, 35, 49, 50, 100, 101
- Years of potential life lost (YPLL) 27

Cardiac procedures, see Heart disease, procedures.

Central and South American population, see Hispanic subgroups.

Cerebrovascular disease (stroke)

- Deaths and death rates 26, 28, 29, 33, Figure 18
- Hospital discharges 100, 101
- Years of potential life lost (YPLL) 27

Cesarean section 103

Chancroid, see Diseases, notifiable.

Child and adolescent health

- Abortion 14
- Access to care 75, 77, 79, 80
- AIDS cases 48
- Alcohol consumption 63, 64
- Birthweight 11, 12, 13
- Breastfeeding 16
- Cigarette smoking 63, 64, Figure 6
- Cocaine use 64
- Contraception 15
- Death rates, all causes 29, 31
- Death rates, selected causes 29, 32, 33, 34, 37, 38, 40, 41, 42, 43, 45
- Deaths, leading causes 29
- Dental caries (cavities), untreated 67, 74
- Dental visits 93
- Doctor visits 92
- Drugs, during physician and hospital outpatient department visits 94
- Drugs, prescription, use in past month 95
- Emergency department visits 88, 90, 91
- Expenses, health care 131, 133
- Health insurance 137, 138, 139, 140
- Health status, respondent-assessed 57
- Hospital utilization, inpatient 98, 99, 100, 101
- Hospital utilization, outpatient department 91
- Illicit drug use 63, 64
- Infant mortality 17, 18, 19, 20, 21, 22, Figure 17
- Inhalants 64
- Injury 90
- Limitation of activity Figure 13
- Marijuana use 63, 64
- Medicaid 132, 139, 145
- Out-of-pocket health care expenditures 131, 132, 133

Child and adolescent health—Con.

- Overweight 67, 73, Figure 7
- Population, resident 1, Figures 1, 2
- Poverty 3, Figures 4, 5
- Residential treatment centers for emotionally disturbed children 97, 116
- Suicidal ideation, suicide attempts 59
- Teenage childbearing 4, 8
- Uninsured Figure 20
- Vaccinations 82, 83

Chlamydia, see Diseases, notifiable.

Cholesterol, serum 67, 69

Chronic liver disease and cirrhosis 26, 27, 28, 29

Chronic lower respiratory diseases

- Deaths and death rates 26, 28, 29, 37, Figure 18
- Years of potential life lost (YPLL) 27

Cigarette smoking (see also Births, smoking status of mother) 60, 61, 62, 63, 64, Figure 6

Cirrhosis, see Chronic liver disease and cirrhosis.

Cocaine use 64

Complex activity limitation 55, 137, 138, 139, 140

Computed tomography (CT) scanners (see also Magnetic resonance imaging (MRI) units) 121, Figure 25

Congenital anomalies 28, 29

Consumer Price Index (CPI) 124

Contraception 15

Cost, see Employers' costs.

Cuban population, see Hispanic subgroups.

D

Deaths, death rates (see also Cancer (malignant neoplasms); Cerebrovascular disease (stroke); Chronic lower respiratory diseases; Diabetes; Firearm-related injuries; Heart disease; HIV/AIDS; Homicide; Infant mortality; Life expectancy; Maternal mortality; Motor vehicle-related injuries; Occupational diseases deaths; Occupational injuries; Suicide; Years of potential life lost (YPLL))

- All causes 31
- Leading causes 28, 29, Figure 18
- Selected causes 26, Figure 35
- State 25
- Urbanization 30

Delayed medical care due to cost 77, 78

Dental caries (cavities), untreated 67, 74

Dental services expenditures 126, Figure 21

Dental visits 93, 144

Dentists 106, 110, 112, 113, 114

- Employees in offices of 106
- Schools and students 112, 113, 114
- State 110

Depression Figure 12

Diabetes 26, 27, 28, 29, 51, 67, 100, 101, Figure 10

- Deaths and death rates 26, 28, 29

Drugs prescribed during medical visits 94

D—Con.

	<i>Table/Figure</i>
Hospital discharges	100, 101
Prevalence	51
Years of potential life lost (YPLL)	27
Diagnostic procedures, during hospitalizations	103
Dietary supplements	96
Diphtheria, see Diseases, notifiable; Vaccinations.	
Disability	
Basic actions difficulty	55, 137, 138, 139, 140
Blind and disabled Medicaid expenditures	145
Complex activity limitation	55, 137, 138, 139, 140
Limitation of activity	Figures 13, 14, 15
Medicaid recipients	146
Medicare beneficiaries	144
Veterans with service-connected disabilities	147, Figure 3
Diseases, notifiable	47
Doctors of Medicine, see Physicians.	
Drug use, illicit, see Alcohol consumption; Cigarette smoking; Cocaine use; Illicit drug use; Inhalants; Marijuana use.	
Drugs prescribed during medical visits	94
Drugs, prescription, use in past month	95, Figure 34
DTP (Diphtheria, Tetanus, Pertussis), see Vaccinations.	

E

Education	
Access to care	77
Alcohol consumption	64
Back pain, low	53
Births	10, 12
Breastfeeding	16
Cigarette smoking	61, 62, 64
Cocaine use	64
Headache, severe or migraine	53
Hearing trouble	56
Inhalants	64
Joint pain	54
Mammography	86
Marijuana use	64
Neck pain	53
Pap smear	87
Physical activity	71
Suicidal ideation, suicide attempts	59
Unmet need	77
Vision trouble	56
Elderly population, see Older population 65 years of age and over.	
Emergency department visits	88, 89, 90, 91
Employed health service personnel	106, 111
Employers' costs for health insurance	135
End-stage renal disease	52
End-stage renal disease facilities, Medicare certified	120
Energy and macronutrient intake	70

E—Con.

	<i>Table/Figure</i>
Ethnicity, see Hispanic or Latino population.	
Exercise, see Physical activity.	
Expenditures, national health (see also Consumer Price Index (CPI); Hospital care expenditures; Medicaid; Medicare; Mental health expenditures; Nursing homes expenditures; Physician services expenditures; Prescription drug expenditures; Substance abuse treatment expenditures; Veterans' medical care)	
Amount per capita	122, 123, 127
Factors affecting growth	125
Government	123, 127
International	122
Percent of Gross Domestic Product	122, 123
Personal health care	127, 128, Figures 21, 22
Source of funds	123, 127, Figures 21, 22
Type of expenditure	126, 127, 128, 129, 130, Figure 21
Type of payer	134
Expenses, health care	131, 132, 133

F

Fertility rates, see Births.	
Fetal mortality	19
Firearm-related injuries, death rates	43
Food intake, see Energy and macronutrient intake.	

G

Geographic region	
Access to care	75, 76, 77, 79, 80
Back pain, low	53
Breastfeeding	16
Death rates	30
Dental visits	93
Emergency department visits	88, 89
Headache, severe or migraine	53
Health insurance	137, 138, 139, 140
Health status, respondent-assessed	57
Hearing trouble	56
Hospital utilization	98, 99
Joint pain	54
Neck pain	53
Physical activity	71
Serious psychological distress	58
Unmet need	77
Vaccinations	83, 84, 85
Vision trouble	56
Gonorrhea, see Diseases, notifiable.	
Gross Domestic Product (GDP)	122, 123

H

H—Con.

	<i>Table/Figure</i>
Haemophilus influenzae, invasive, see Diseases, notifiable.	
Hawaiian population, see Native Hawaiian or Other Pacific Islander population.	
Headache, severe or migraine	53
Health care utilization	79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 105
Health expenditures, national, see Expenditures, national health.	
Health insurance (see also Access to care; Emergency department visits; Medicaid; Medicare)	
Basic actions difficulty	137, 138, 139, 140
Complex activity limitation	137, 138, 139, 140
Employer costs	135
Employment-related	138
Medicaid	139, Figure 19
Private	137, 138
Race and Hispanic origin	137, 138, 139, 140, 141
65 years of age and over	141
Under 65 years of age	137, 138, 139, 140
Uninsured	140, Figures 19, 20
Health care expenses, see Expenses, health care.	
Health professionals visits, see Visits to health professionals.	
Health status, respondent-assessed	57
Hearing trouble	56
Heart disease	
Deaths and death rates	26, 28, 29, 32, Figure 18
Drugs prescribed during medical visits	94
Hospital discharges	100, 101, 103
Ischemic heart disease	26, 27
Prevalence	Figure 10
Procedures (angiocardiography; cardiac catheterization; coronary artery bypass graft; insertion of stent; pacemaker)	103, Figure 28
Years of potential life lost (YPLL)	27
Hib (Haemophilus influenzae type b), see Vaccinations.	
Hispanic or Latino population	
Abortion	14
Access to care	75, 76, 77, 79, 80
AIDS cases	48
Alcohol consumption	63, 65, 66
Back pain, low	53
Basic actions difficulty	55
Birth rates	4, 6, 9
Births, number	5
Birthweight, low	11, 12, 13
Breastfeeding	16
Cancer incidence rates	49
Cholesterol, serum	69
Cigarette smoking	10, 62, 63
Complex activity limitation	55
Contraception	15
Death rates, all causes	25, 26, 31
Death rates, geographic division and state	25
Death rates, selected causes	26, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, Figure 34
Deaths, leading causes	28

Table/Figure

Hispanic or Latino population—Con.	
Dental caries (cavities), untreated	74
Dental visits	93, 144
Diabetes	51
Dietary supplements	96
Drugs, prescription, use in past month	95
Education of mother	12
Emergency department visits	88, 89
End-stage renal disease	52
Expenses, health care	131
Headache, severe or migraine	53
Health insurance	137, 138, 140, 141
Health status, respondent-assessed	57
Hearing trouble	56
Hospital utilization, inpatient	98
Hypertension	68
Illicit drug use	63
Infant mortality	17, 20, 21
Inmates, prisons and jails	2
Joint pain	54
Limitation of activity	144, Figures 13, 14, 15
Mammography	86, Figure 26
Marijuana use	63
Maternal mortality	39
Medicaid	132, 139, 141, 145
Medicare	132, 141, 144
Neck pain	53
Occupational injury deaths	45
Out-of-pocket health care expenditures	131, 132
Overweight and obesity	72, 73
Pap smear	87
Physical activity	71
Population, resident	1, Figure 2
Poverty	3, Figure 5
Prenatal care	7
Serious psychological distress	58
Smoking status of mother	10, 11
Students, health occupations	113
Suicidal ideation, suicide attempts	59
Teenage childbearing	4, 8
Twin, triplet, and higher-order multiple births	5, 6
Uninsured	Figure 20
Unmarried mothers	9
Unmet need	77
Vaccinations	82, 84, 85
Vision trouble	56
Years of potential life lost (YPLL)	27
Hispanic subgroups (Central and South American; Cuban; Mexican; Puerto Rican) (see also Mexican; Puerto Rican)	
Access to care	77
Alcohol consumption	65, 66
Birth rates	6, 9
Births, number	5
Birthweight, low and very low	11, 12
Cholesterol, serum	69

H—Con.

	<i>Table/Figure</i>
Hispanic subgroups (Central and South American; Cuban; Mexican; Puerto Rican) (see also Mexican; Puerto Rican)—Con.	
Dental caries (cavities), untreated	74
Diabetes	51
Dietary supplements	96
Drugs, prescription, use in past month	95
Education of mother	10, 12
Health insurance	137, 138, 139, 140
Health status, respondent-assessed	57
Hypertension	68
Infant mortality	17
Overweight and obesity	72, 73
Physical activity	71
Prenatal care	7
Serious psychological distress	58
Smoking status of mother	10, 11
Teenage childbearing	8
Twin, triplet, and higher-order multiple births	5, 6
Uninsured	Figure 20
Unmarried mothers	9
Unmet need	77
Vaccinations	84
HIV/AIDS	
AIDS cases	48
Deaths and death rates	26, 28, 29, 38, Figure 35
Hospital discharges	100, 101
Years of potential life lost (YPLL)	27
Home health agencies, Medicare certified	120
Home health care expenditures	126, Figure 21
Homicide, death rates	26, 27, 28, 29, 41
Hospices, Medicare certified	120
Hospital care expenditures (see also Consumer Price Index (CPI); Medicaid; Medicare)	127, 129, 130, 136, Figure 36
Hospital discharges	98, 99, 100, 101, 103, Figure 27
Hospital employees	106
Hospital utilization (see also Access to care; Emergency department visits; Medicaid; Medicare; Veterans' medical care)	
Admissions	104
Average length of stay	99, 102, 104, 148
Days of care	99
Diagnoses, selected	100, 101, 102
Discharges	99, 100, 101, 102, 103
Intensive care stay among Medicare decedents	Figure 31
Outpatient department	91, 104, 144, Figures 29, 30
Procedures or surgeries	103, Figures 27, 28, 29, 30
Race and Hispanic origin	98, 144
Hospitals (see also Hospital employees; Mental health; Nursing homes)	
Beds	115, 117
Occupancy rate	115, 118
State	117
Hypertension	67, 68, Figure 10

I

	<i>Table/Figure</i>
Illicit drug use	63, 64
Imaging scans	Figure 25
Immunizations, see Vaccinations.	
Influenza, see Vaccinations.	
Incidence (Cancer)	49
Income, family, see Poverty.	
Infant mortality (see also Fetal mortality)	
Age at death	17, 19, 21
Birth cohort data	17, 18
Birthweight	18
Cause of death	29
International	22
Race and Hispanic origin	17, 19, 20, 21
State	20, 21
Influenza and pneumonia	26, 27, 28, 29
Influenza vaccination, see Vaccinations.	
Inhalants	64
Injuries, see Emergency department visits; Firearm-related injuries; Hospital utilization, diagnoses, selected; Motor vehicle-related injuries; Occupational injuries; Suicide; Unintentional injuries.	
Inmates, prisons and jails	2
Inpatient care, see Hospital utilization; Mental health, admissions, mental health organizations; Nursing home, utilization.	
Instrumental activities of daily living (IADLs), see Limitation of activity.	
Insurance, see Health insurance.	
International health (see also Expenditures, international; Infant mortality; Life expectancy)	22, 23, 122
Intervertebral disc disorders	100, 101, 102
Ischemic heart disease, see Heart disease.	

J

Jails, see Inmates, prisons and jails.	
Joint pain	54

L

Laboratories, Clinical Laboratory Improvement Amendment (CLIA)	Figure 24
Leading causes of death, see Deaths, leading causes.	
Leisure-time activity, see Physical activity.	
Life expectancy	23, 24, Figure 16
Limitation of activity	144, Figures 13, 14, 15
Liver disease, see Chronic liver disease and cirrhosis.	
Low birthweight, see Births; Infant mortality.	
Low income, see Poverty.	
Lyme disease, see Diseases, notifiable.	

M

M—Con.

	<i>Table/Figure</i>
Magnetic resonance imaging (MRI) units (see also Computed tomography (CT) scanners)	121, Figure 25
Malignant neoplasms, see Cancer.	
Mammography	86, Figure 26
Marijuana use	63, 64
Maternal health, see Women's health.	
Maternal mortality	39
Measles (Rubella), see Diseases, notifiable; Vaccinations.	
Medicaid (see also Health insurance)	
Basic actions difficulty	139
Basis of eligibility	145
Complex activity limitation	139
Coverage	139, 141, Figure 19
Expenditures	127, 134, Figures 21, 22
Race and Hispanic origin	139, 145
Recipients and payments	145, 146, 149
State	149
Type of service	146
Medical doctors, see Physicians.	
Medical technology	Figures 23–36
Medicare (see also Health insurance)	
Age and sex of beneficiaries	141, 143
Certified providers and suppliers	120
Coverage	141
Enrollment	142, 143, 144, 148
Expenditures	127, 142, Figures 21, 22
Geographic region and state	148
Hospital utilization	148
Payments	132, 143, 148
Race and Hispanic origin	141, 144
Type of service	141, 142
Meningococcal disease	29, 47
Men's health	
Access to care	76, 77, 80
AIDS cases	48
Alcohol consumption	63, 64, 65, 66
Back pain, low	53
Basic actions difficulty	55
Cancer incidence rates	49
Cancer survival, 5-year relative	50
Cholesterol, serum	69
Cigarette smoking	60, 61, 62, 63, 64, Figure 6
Complex activity limitation	55
Death rates, all causes	26, 31
Death rates, selected causes	26, 32, 33, 34, 35, 37, 38, 40, 41, 42, 43, Figure 35
Death rates, urbanization	30
Deaths, leading causes	28
Dental caries (cavities), untreated	74
Dental visits	93
Depression	Figure 12
Diabetes	51
Dietary supplements	96
Drugs prescribed during medical visits	94
Drugs, prescription, use in past month	95
Emergency department visits	89, 90, 91

	<i>Table/Figure</i>
Men's health—Con.	
End-stage renal disease	52
Energy and macronutrient intake	70
Headache, severe or migraine	53
Health status, respondent-assessed	57
Hearing trouble	56
Hospital utilization, inpatient	98, 99, 100, 101, 102, 103, Figures 27, 28, 29
Hospital utilization, outpatient department	91, Figure 29
Hypertension	68
Illicit drug use	63
Inhalants	64
Inmates	2
Joint pain	54
Life expectancy	23, 24, Figure 16
Marijuana use	63, 64
Neck pain	53
Nursing home utilization	105
Occupational injury deaths	45
Overweight and obesity	72
Physical activity	71
Population, resident	1
Serious psychological distress	58
Vaccinations	84, 85
Vision trouble	56
Years of potential life lost (YPLL)	27
Mental health (see also Suicide)	
Admissions, mental health organizations	97, 116
Beds and organizations	116
Depression	Figure 12
Drugs prescribed during medical visits	94
Expenditures	129, 146
Hospital discharges	100, 101, 102
Providers	108
Serious psychological distress	58
Metropolitan/nonmetropolitan data	
Access to care	75, 76, 77, 79, 80
Back pain, low	53
Basic actions difficulty	55
Complex activity limitation	55
Death rates	30
Dental visits	93
Emergency department visits	88, 89
Headache, severe or migraine	53
Health insurance	137, 138, 139, 140
Health status, respondent-assessed	57
Hearing trouble	56
Hospital utilization	98
Joint pain	54
Neck pain	53
Physical activity	71
Serious psychological distress	58
Unmet need	77
Vaccinations	82, 83, 84, 85
Vision trouble	56

M—Con.

	<i>Table/Figure</i>
Mexican population (see also Hispanic subgroups)	
Access to care	76, 77
Alcohol consumption	65, 66
Back pain, low	53
Birth rates	6
Births, number	5
Cholesterol, serum	69
Cigarette smoking	62
Dental caries (cavities), untreated	74
Diabetes	51
Dietary supplements	96
Drugs, prescription in past month	95
Headache, severe or migraine	53
Health insurance	137, 138, 139, 140
Health status, respondent-assessed	57
Hearing trouble	56
Hypertension	68
Joint pain	54
Medical students	113
Neck pain	53
No usual source of care	76
Overweight and obesity	72, 73
Physical activity	71
Poverty	3
Serious psychological distress	58
Vaccinations	84, 85
Vision trouble	56
MMR (Measles, Mumps, Rubella), see Vaccinations.	
Motor vehicle-related injuries	26, 27, 40, 90
Mumps, see Diseases, notifiable; Vaccinations.	

N

National health expenditures, see Expenditures, national health.	
Native Hawaiian or Other Pacific Islander population	
AIDS cases	48
Alcohol consumption	63
Cigarette smoking	63
Illicit drugs	63
Occupational injuries	45
Vaccinations	82
Neonatal mortality, see Infant mortality, age at death.	
Nephritis, nephrotic syndrome, and nephrosis	28, 29
Neck pain	53
Nurses	111, 112, 113, 114
Nursing homes	
Beds, occupancy	119
Employees	106
Expenditures	126, 127, 129, 130, 144, Figure 21
Utilization	105, 119, 144, 147
Nutrition, see Energy and macronutrient intake.	

O

	<i>Table/Figure</i>
Obesity	67, 72, Figure 7
Occupational diseases deaths	44
Occupational injuries	45, 46, Figure 11
Occupational therapists	111
Office visit	91, 92
Older population 65 years of age and over	
Access to care	77, 80
AIDS cases	48
Alcohol consumption	65, 66
Back pain, low	53
Basic actions difficulty	55
Bed, health facility	119
Cholesterol, serum	69
Cigarette smoking	60, 62
Complex activity limitation	55
Death rates, all causes	31
Death rates, selected causes	32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43
Deaths, leading causes	29
Dental caries (cavities), untreated	74
Dental visits	93, 144
Depression	Figure 12
Dietary supplements	96
Doctor visits	92
Drugs prescribed during medical visits	94
Drugs, prescription, use in past month	95
Emergency department visits	89, 90
Energy and macronutrient intake	70
Expenses, health care	131, 133
Headache, severe or migraine	53
Hearing trouble	56
Health insurance	141
Health status, respondent-assessed	57
Hospital utilization, inpatient	98, 99, 100, 101, 102, 103, 144, 148, Figure 27
Hospital utilization, outpatient department	91, 144
Hypertension	68
Imaging scans	Figure 25
Injury	90
Joint pain	54
Life expectancy	23, 24, Figure 16
Limitation of activity	Figure 15
Mammography	86
Medicaid	132, 141, 145
Medicare	132, 141, 142, 143, 144, 148
Neck pain	53
Nursing home expenditures	144
Nursing home utilization	105, 119, 144
Occupational injury deaths	45
Out-of-pocket health care expenses	131, 132, 133
Overweight and obesity	72
Pap smear	87
Physical activity	71
Pneumonia discharges	100, 101
Population, resident	1, Figures 1, 2
Poverty	Figures 4, 5
Procedures	Figures 27, 28

O—Con.

P—Con.

	<i>Table/Figure</i>
Older population 65 years of age and over—Con.	
Serious psychological distress	58
Sleep difficulties or medication use	Figure 8
Unmet need	77
Vaccinations	81, 84, 85, Figure 9
Vision trouble	56
Optometrists	112, 113, 114
Organ transplantation	Figure 32
Osteoarthritis	100, 101, 102
Osteopaths, see Physicians.	
Out-of-pocket health care expenses	131, 132, 133, 134, Figures 21, 22
Outpatient department, see Hospital utilization, outpatient department.	
Overweight	67, 72, 73, Figure 7

	<i>Table/Figure</i>
Poverty—Con.	
Emergency department visits	88, 89
Headache, severe or migraine	53
Health care visits	80
Health insurance	137, 138, 139, 140, 141
Health status, respondent-assessed	57
Hearing trouble	56
Heart disease	Figure 10
Hospital utilization, inpatient	98
Hypertension	68, Figure 10
Joint pain	54
Mammography	86
Medicaid	139, 141
Neck pain	53
Overweight and obesity	72, 73
Pap smear	87
Physical activity	71
Population	3, Figures 4, 5
Serious psychological distress	58
Unmet need	77
Vaccinations	82, 84, 85
Vision trouble	56
Prenatal care	7
Prescription drug expenditures (see also Medicaid; Medicare)	126, 127, 129, 130, 131, Figure 21
Prescription drug use, see Drugs, prescription, use in past month.	
Primary care physicians, see Physicians.	
Prisons, see Inmates, prisons and jails.	
Private health insurance, see Health insurance.	
Procedures	103, Figures 27, 28
Public Health, schools of; students	112
Puerto Rican population (see also Hispanic subgroups)	
Health insurance	137, 138, 139
Medical students	113
Poverty	3

P

Pacemakers	103
Pap smear	87
Perinatal mortality, see Infant mortality, age at death.	
Personal health care expenditures, see Expenditures, national health.	
Pertussis (whooping cough), see Diseases, notifiable; Vaccinations.	
Pharmacists	111, 112, 113, 114
Physical activity	71
Physician services expenditures (see also Consumer Price Index (CPI); Medicaid; Medicare)	127, 129, 130, Figure 21
Physician utilization	91, 92
Physicians	
Doctors of osteopathy	112, 113, 114
Employees, in offices of	106
International medical school graduates	108
Primary care	92, 109
Primary specialty	92, 108, 109
Schools and students	112, 113, 114
State	107
Pneumococcal vaccinations, see Vaccinations.	
Pneumonia (see also Influenza and pneumonia)	100, 101, 102
Podiatrists	112, 113, 114
Poliomyelitis (Polio), see Diseases, notifiable; Vaccinations.	
Population, resident	1
Postneonatal mortality, see Infant mortality, age at death.	
Poverty	
Access to care	75, 76, 77, 79, 80
Alcohol consumption	65, 66
Back pain, low	53
Basic actions difficulty	55
Cholesterol, serum	69
Complex activity limitation	55
Dental caries (cavities), untreated	74
Dental visits	93
Diabetes	Figure 10
Dietary supplements	96

R

Race, see specific race groups.	
Rocky Mountain spotted fever, see Diseases, notifiable.	
Rubella (German measles), see Diseases, notifiable; Vaccinations.	
Rural data, see Metropolitan/nonmetropolitan data.	

S

Salmonellosis, see Diseases, notifiable.	
Self-assessment of health, see Health status, respondent-assessed.	
Septicemia	28, 29
Serious psychological distress, (see also Mental health)	58
Shigellosis, see Diseases, notifiable.	
Sleep difficulties or medication use	Figure 8
Smoking, see Cigarette smoking.	
Socioeconomic status, see Education; Poverty.	

S—Con.

	<i>Table/Figure</i>
Source of funds or payments (see also Expenditures, national health; Health insurance; Medicaid; Medicare)	127, 132, 134
Special feature, see Medical technology.	
State data	
Access to care	78
Birthweight, low	13
Death rates	25
Dentists	110
Health insurance, uninsured	150
Hospital beds	117
Hospital occupancy rates	118
Infant mortality	20, 21
Intensive care stay among Medicare decedents	Figure 31
Medicaid	149
Medicare	148
Nursing homes, beds, occupancy, residents	119
Physicians	107
Vaccinations	83
Stent, cardiac, see Heart disease, procedures.	
Sterilization, see Contraception.	
Stroke, see Cerebrovascular disease.	
Substance abuse treatment expenditures	130
Sudden infant death syndrome, see Infant mortality, cause of death.	
Suicidal ideation, suicide attempts	59
Suicide	26, 27, 28, 29, 42
Surgery, see Hospital utilization.	
Syphilis, see Diseases, notifiable.	

T

Tetanus, see Diseases, notifiable; Vaccinations.	
Tobacco use, see Cigarette smoking.	
Tuberculosis, see Diseases, notifiable.	
Twin, triplet, and higher-order multiple births	5, 6

U

Uninsured, health, see Health insurance, uninsured.	
Unintentional injuries	26, 27, 28, 29, 90, Figure 18
Unmet need	77, 78
Urban and rural data, see Metropolitan/nonmetropolitan data.	
Usual source of care, see Access to care.	

V

Vaccinations	81, 82, 83, 84, 85, Figure 9
Varicella, see Vaccinations.	
Veterans	
Medical care	116, 147
Service-connected disability	Figure 3
Vision trouble	56
Visits to health professionals	80

W

	<i>Table/Figure</i>
Wages and salaries	111, 135
Wages, health care occupations	111
Women's health	
Access to care	76, 77, 80
Abortion	14
AIDS cases	48
Alcohol consumption	63, 64, 65, 66
Back pain, low	53
Basic actions difficulty	55
Birth rates, fertility rates	4, 9
Births, number	5, 9
Breast cancer	36, 49, 50, 100, 101
Cancer incidence rates	49
Cancer survival, 5-year relative	50
Cesarean section	103
Cholesterol, serum	69
Cigarette smoking	10, 11, 60, 61, 62, 63, 64, Figure 6
Complex activity limitation	55
Contraception	15
Death rates, all causes	26, 31
Death rates, selected causes	26, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, Figure 35
Death rates, urbanization	30
Deaths, leading causes	28
Dental caries (cavities), untreated	74
Dental visits	93
Depression	Figure 12
Diabetes	51
Dietary supplements	96
Doctor visits	92
Drugs prescribed during medical visits	94
Drugs, prescription, use in past month	95
Emergency department visits	89, 90, 91
End-stage renal disease	52
Energy and macronutrient intake	70
Headache, severe or migraine	53
Health status, respondent-assessed	57
Hearing trouble	56
Hospital utilization, inpatient	98, 99, 100, 101, 102, 103, Figures 27, 28, 29
Hospital utilization, outpatient department	91, Figure 29
Hypertension	68
Illicit drug use	63
Inhalants	64
Inmates	2
Joint pain	54
Life expectancy	23, 24, Figure 16
Mammography	86, Figure 26
Marijuana use	63, 64
Maternal mortality	39
Neck pain	53
Nursing home utilization	105
Occupational injury deaths	45
Overweight and obesity	72
Pap smear	87

W—Con.

Table/Figure

Women's health—Con.

Physical activity	71
Population, resident	1
Poverty	3
Prenatal care	7
Serious psychological distress	58
Teenage childbearing	4, 8
Unmarried mothers	9
Vaccinations	84, 85
Vision trouble	56
Years of potential life lost (YPLL)	27

Y

Years of potential life lost (YPLL)	27
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