

# HEALTHY PEOPLE

# 2000

*National Health Promotion and  
Disease Prevention Objectives*

## *Healthy People 2000 Review 1995-96*



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



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# Preface

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The *Healthy People 2000 Review, 1995–96*, fourth in a series of profiles tracking the year 2000 objectives, is submitted by the Secretary of Health and Human Services to the Congress of the United States in compliance with the Health Services and Centers Amendments of 1978. This report was compiled by the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC). The National Committee on Vital and Health Statistics, the Office of Disease Prevention and Health Promotion, and lead agencies for the year 2000 objectives served in a review capacity.

*Healthy People 2000 Review*, which replaces the *Prevention Profiles* that monitored the 1990 national health objectives, continues the series of annual profiles of the Nation's health as an integral part of the Department's disease prevention and health promotion initiative for the year 2000. This initiative was unveiled in September 1990 by the Secretary of the U.S. Department of Health and Human Services with the release of *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. This publication provides annual tracking data, if available, for objectives and subobjectives in all priority areas throughout the decade. This is the first year that the midcourse modifications to the objectives are presented and tracked in this report.

# Acknowledgments

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Overall responsibility for planning and coordinating the content of the volume rested with the Division of Health Promotion Statistics, National Center for Health Statistics (NCHS), under the general direction of Diane Wagener and Richard J. Klein.

The production of the *Healthy People 2000 Review* was accomplished by several working teams under the guidance of Kathleen M. Turczyn and Richard J. Klein. Team members included Fred Seitz, Susan E. Schober, Christine M. Plepys, Cheryl V. Rose, Jean Williams, Gail R. Jones, Richard J. Klein, and Kathleen M. Turczyn. Patricia A. Knapp provided additional computer programming assistance, and Coleen Ryan provided additional statistical assistance.

Publications management and editorial review were provided by Gail V. Johnson. Text and tables were composed by Annette F. Holman. Printing was managed by Joan D. Burton. Graphics were produced by Sarah M. Hinkle under the direction of Stephen L. Sloan.

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# Contents

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|   |      |
|---|------|
| Preface   | iii  |
| Acknowledgments   | iv   |
| List of Figures   | vii  |
| List of Tables  | viii |
| Introduction  | 1    |
| Background  | 1    |
| Midcourse Modifications   | 1    |
| Summary of Progress   | 3    |
| Organization and Scope of This Review                           | 3    |
| References  | 3    |
| Charting Special Populations: Racial and Ethnic Minority Groups |      |
| List of Figures   | 7    |
| List of Tables  | 7    |
| Heart Disease and Stroke  | 9    |
| Overweight  | 9    |
| Nutrition   | 10   |
| Tobacco   | 10   |
| Cirrhosis   | 11   |
| Substance Abuse   | 11   |
| Suicide   | 12   |
| Homicide  | 12   |
| Firearm-Related Deaths  | 13   |
| Weapon Carrying   | 13   |
| High School Completion  | 14   |
| Unintentional Injuries  | 14   |
| Fire-Related Deaths   | 15   |
| Oral Health   | 15   |
| Infant Mortality  | 16   |
| Pregnancy   | 17   |
| Maternal and Infant Health                                      | 17   |
| High Blood Pressure   | 18   |
| Cholesterol   | 19   |
| Cancer  | 19   |
| Chronic Disabling Conditions                                    | 20   |
| Diabetes  | 20   |
| Infectious Diseases   | 21   |
| Primary Care  | 21   |
| Degrees Awarded   | 22   |
| Data Tables for Figures A–DD                                    | 23   |
| Priority Areas  |      |
| 1. Physical Activity and Fitness                                | 31   |
| 2. Nutrition  | 40   |
| 3. Tobacco  | 50   |
| 4. Substance Abuse: Alcohol and Other Drugs                     | 59   |
| 5. Family Planning  | 66   |
| 6. Mental Health and Mental Disorders                           | 72   |
| 7. Violent and Abusive Behavior                                 | 77   |
| 8. Educational and Community-Based Programs                     | 83   |
| 9. Unintentional Injuries                                       | 88   |
| 10. Occupational Safety and Health                              | 96   |
| 11. Environmental Health  | 102  |
| 12. Food and Drug Safety  | 110  |
| 13. Oral Health   | 115  |

14. Maternal and Infant Health \_\_\_\_\_ 123

15. Heart Disease and Stroke \_\_\_\_\_ 131

16. Cancer \_\_\_\_\_ 139

17. Diabetes and Chronic Disabling Conditions \_\_\_\_\_ 147

18. HIV Infection \_\_\_\_\_ 158

19. Sexually Transmitted Diseases \_\_\_\_\_ 166

20. Immunization and Infectious Diseases \_\_\_\_\_ 172

21. Clinical Preventive Services \_\_\_\_\_ 181

22. Surveillance and Data Systems \_\_\_\_\_ 189

Appendix \_\_\_\_\_ 197

# List of Figures

---

|   |            |
|---|------------|
| 1. Healthy People 2000 objectives: Summary of progress by priority area_____  | <b>1</b>   |
| 2. Proportion of people 18 years and over who do not engage in leisure-time physical activity: United States, 1991, and year 2000 targets for objective 1.5_____                            | <b>31</b>  |
| 3. Vegetable, fruit, and grain consumption: United States, 1989–91, and year 2000 targets for objective 2.6_____  | <b>40</b>  |
| 4. Proportion of high school seniors who perceive disapproval toward smoking one or more packs of cigarettes per day: United States, 1987–95, and year 2000 targets for objective 3.2_____  | <b>50</b>  |
| 5. Alcohol-related motor vehicle crash deaths: United States, 1987–94, and year 2000 targets for objective 4.1_____   | <b>59</b>  |
| 6. Primary care providers who provide age-appropriate preconception care and counseling: United States, 1992, and year 2000 target for objective 5.10_____                                  | <b>66</b>  |
| 7. Incidence of injurious suicide attempts among adolescents 14–17 years: United States, 1990–95, and year 2000 target for objective 6.2_____   | <b>72</b>  |
| 8. Incidence of physical abuse directed at women by male partners: United States, 1987–93, objective 7.5_____   | <b>77</b>  |
| 9. Years of healthy life: United States, 1990–93, and year 2000 targets for objective 8.1_____  | <b>83</b>  |
| 10. Death rates for motor vehicle crashes and percent of motor vehicle occupatants who use seatbelts: United States, 1987–94, objectives 9.3 and 9.12_____                                  | <b>88</b>  |
| 11. Proportion of U.S. civilian and military employees exposed to average daily noise levels that exceed 85 dBA: United States, 1989–94, and year 2000 target for objective 10.7_____       | <b>96</b>  |
| 12. Proportion of homes that have been tested for radon: United States, 1989–94, and year 2000 target for objective 11.6_____   | <b>102</b> |
| 13. Proportion of people who received useful written information for new prescriptions from prescribers or dispensers: United States, 1992–94, and year 2000 target for objective 12.8_____ | <b>110</b> |
| 14. Prevalence of dental caries among children: United States, 1986–87, 1988–91, and year 2000 targets for objective 13.1_____  | <b>115</b> |
| 15. Percent of women with prenatal care in the first trimester: United States, 1987–93, objective 14.11_____  | <b>123</b> |
| 16. Prevalence of modifiable risk factors for heart disease and stroke: United States, selected years, and year 2000 targets for objectives 15.7, 15.10, and 15.12_____                     | <b>131</b> |
| 17. Age-adjusted death rates for colorectal cancer: United States, 1987–93, and year 2000 targets for objective 16.5_____   | <b>139</b> |
| 18. Prevalence of diabetes: United States, 1986–88 to 1992–94, and year 2000 targets for objective 17.11_____   | <b>147</b> |
| 19. Incidence of diagnosed AIDS cases: United States, 1989–1994, and year 2000 targets for objective 18.1_____  | <b>158</b> |
| 20. Pelvic inflammatory disease hospitalizations among females 15–44 years of age: United States, 1988–94 and year 2000 targets for objective 19.6_____                                     | <b>166</b> |
| 21. Vaccine coverage levels for children 19–35 months of age: United States, 1994–95, and year 2000 target for objective 20.11_____   | <b>172</b> |
| 22. Proportion of persons under 65 years of age without health care coverage: United States, 1992–94, objective 21.4_____   | <b>181</b> |
| 23. Timeliness of release of national surveillance and survey data for the national health objectives: United States, 1994–96, objective 22.7_____  | <b>189</b> |



# List of Tables

---

|   |     |
|---|-----|
| 1. Physical activity and fitness objective status_____              | 34  |
| 2. Nutrition objective status_____                                  | 42  |
| 3. Tobacco objective status_____                                    | 53  |
| 4. Substance Abuse: Alcohol and other drugs objective status_____   | 61  |
| 5. Family planning objective status_____                            | 68  |
| 6. Mental health and mental disorders objective status_____         | 74  |
| 7. Violent and abusive behavior objective status_____               | 79  |
| 8. Educational and community-based programs objective status_____   | 85  |
| 9. Unintentional injuries objective status_____                     | 91  |
| 10. Occupational safety and health objective status_____            | 98  |
| 11. Environmental health objective status_____                      | 105 |
| 12. Food and drug safety objective status_____                      | 112 |
| 13. Oral health objective status_____                               | 117 |
| 14. Maternal and infant health objective status_____                | 126 |
| 15. Heart disease and stroke objective status_____                  | 133 |
| 16. Cancer objective status_____                                    | 141 |
| 17. Diabetes and chronic disabling conditions objective status_____ | 150 |
| 18. HIV infection objective status_____                             | 161 |
| 19. Sexually transmitted diseases objective status_____             | 168 |
| 20. Immunization and infectious diseases objective status_____      | 174 |
| 21. Clinical preventive services objective status_____              | 183 |
| 22. Surveillance and data systems objective status_____             | 192 |

# Introduction

## Background

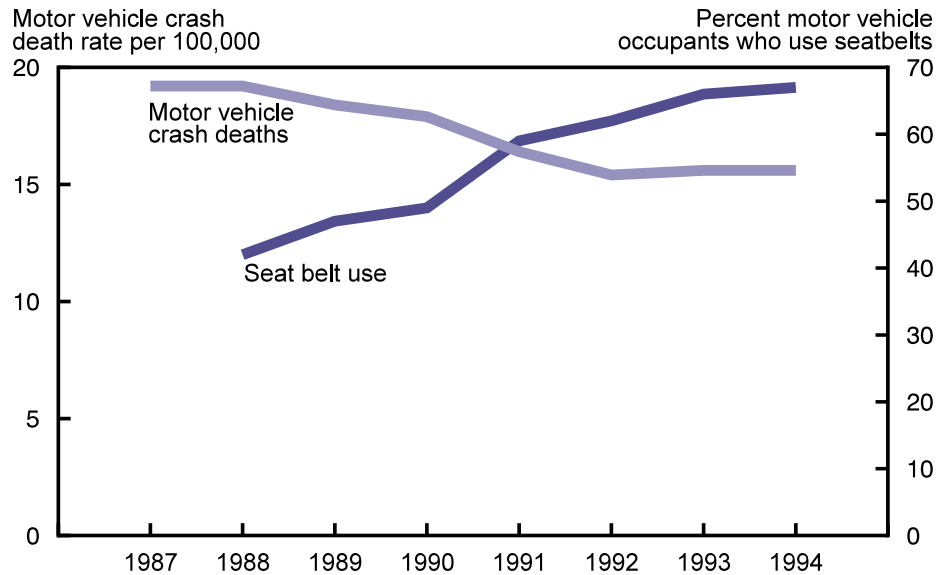
*Healthy People 2000: National Health Promotion and Disease Prevention Objectives* (1) presents a national prevention strategy for significantly improving the health of the American people. *Healthy People 2000* defines three broad goals and 319 objectives. The goals focus on increasing the span of healthy life for Americans, reducing health disparities among Americans, and achieving access to preventive services for all Americans. The objectives are organized into 22 priority areas. For each of these priority areas, one or more U.S. Public Health Service agencies are designated to coordinate activities directed toward attaining the objectives (see [appendix table I](#)).

The Public Health Service (PHS) periodically reviews progress toward the year 2000 objectives for specific priority areas and for special population groups in briefings with the Assistant Secretary for Health. Summaries of these briefings are published in *Public Health Service Progress Review Reports on Healthy People 2000* (2). The *Healthy People 2000 Review* series, which began with *Healthy People 2000 Review, 1992* (3), presents an overview of the current status of progress toward all of the national year 2000 objectives. The *1992–94 Reviews* (3–5) reported on the objectives as published in the 1990 *Healthy People 2000*. (1) Beginning with this *1995–96 Review*, the current status of progress toward the objectives includes all additions and modifications that resulted from the 1995 PHS midcourse review of the *Healthy People 2000* objectives.

## Midcourse Modifications

The midcourse review was a 2-year process, announced in the fall of 1993 and culminating in the publication of the *Healthy People 2000 Midcourse Review and 1995 Revisions* (6), in the fall of 1995. PHS workgroups met to consider new data, new information, and new science that had become available since the release of *Healthy People 2000* in 1990. In the resulting draft of the proposed midcourse revisions (7), announced in the *Federal Register* on

**Figure 1. *Healthy People 2000* objectives: Summary of progress by priority area**



| Priority area | Met/ progressed | Moved away from target | Mixed/ no charge | Cannot assess | Total objectives |
|---------------|-----------------|------------------------|------------------|---------------|------------------|
| 1.....        | 5               | 4                      | 2                | 2             | 13               |
| 2.....        | 14              | 4                      | 2                | 7             | 27               |
| 3.....        | 15              | 3                      | 6                | 2             | 26               |
| 4.....        | 8               | 2                      | 4                | 6             | 20               |
| 5.....        | 2               | 2                      | 2                | 6             | 12               |
| 6.....        | 6               | 4                      | 1                | 4             | 15               |
| 7.....        | 7               | 5                      | 1                | 6             | 19               |
| 8.....        | 5               | 2                      | 0                | 7             | 14               |
| 9.....        | 18              | 1                      | 1                | 6             | 26               |
| 10.....       | 10              | 7                      | 1                | 2             | 20               |
| 11.....       | 13              | 2                      | 1                | 1             | 17               |
| 12.....       | 5               | 0                      | 1                | 2             | 8                |
| 13.....       | 10              | 2                      | 1                | 4             | 17               |
| 14.....       | 9               | 4                      | 1                | 3             | 17               |
| 15.....       | 15              | 2                      | 0                | 0             | 17               |
| 16.....       | 14              | 0                      | 0                | 3             | 17               |
| 17.....       | 3               | 11                     | 4                | 5             | 23               |
| 18.....       | 7               | 2                      | 1                | 7             | 17               |
| 19.....       | 7               | 1                      | 2                | 7             | 17               |
| 20.....       | 5               | 6                      | 3                | 5             | 19               |
| 21.....       | 2               | 2                      | 1                | 3             | 8                |
| 22.....       | 5               | 1                      | 0                | 1             | 7                |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics.

October 3, 1994, for public review and comment, there were no changes to the three goals of *Healthy People 2000* nor to the organization of the 22 priority areas. The changes that were proposed included:

- New objectives that reflect scientific developments, new policy initiatives, or new information that has become available
- New duplicates of existing

objectives, shared across priority areas in recognition of the interrelationships among health issues

- Revisions to language in existing objectives to make them more understandable, to encompass current issues, and to reflect changes in data reporting systems
- New special population targets to focus on groups that are at highest risk of premature death, disease, or disability

■ Revisions to year 2000 targets to make them more challenging

More than 550 public comments were received on the proposed midcourse revisions. These public comments were used by the PHS agencies to complete the revised Summary List of Objectives that includes the new objectives, modifications to existing objectives, new special population subobjectives, and the target revisions (6). All midcourse modifications were coordinated and edited by the PHS Office of Disease Prevention and Health Promotion.

As a result of the review process, 19 new objectives were added to the original 300 unduplicated main objectives, bringing the total number of objectives to 319. Additional data that

showed increased health risk or disparity between the total population and people in age, sex, racial, or ethnic minority groups resulted in the addition of 111 new special population subobjectives during the midcourse review. Including the midcourse changes, *Healthy People 2000* now contains a total of 638 objectives and subobjectives; because some priority areas share identical objectives, the number of objectives and subobjectives including duplicates is 805.

There were 58 target revisions (29 objectives and 29 subobjectives), in almost all cases to make the target more challenging. Text changes were made to 75 existing objectives, in some cases considerably modifying the objective. All midcourse review modifications will be detailed in a future *Statistical Note*

(8) (See [appendix table VII.](#))

The midcourse modifications established baselines for all *Healthy People 2000* objectives for which data were available. Most of these baselines are the same as those established in the original *Healthy People 2000* report (1); others reflect revisions to the original baselines or are newly created. This *Review* tracks progress for all the objectives contained in the *Midcourse Review and 1995 Revisions* report (6) using the midcourse review baselines and the most recent data available. As of July 1996 when this *Review* went to press, about 50 baselines were revised from those published in the midcourse review report; these changes are denoted by a footnote “a” in each priority area summary table.

| Objective number | New <i>Healthy People 2000</i> objectives (not duplicates of previous objectives)   |
|------------------|---|
| 3.23             | Increase the average (State and Federal combined) tobacco excise tax to at least 50 percent of the average retail price of cigarettes and smokeless tobacco.  |
| 3.24             | Increase to 100 percent the proportion of health plans that offer treatment of nicotine addiction (e.g., tobacco use cessation counseling by healthcare providers, tobacco use cessation classes, prescriptions for nicotine replacement therapies, and/or other cessation services).   |
| 3.25             | Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level. (Duplicate objective 10.20).  |
| 3.26             | Enact in 50 States and the District of Columbia laws banning cigarette vending machines except in places inaccessible to minors.  |
| 4.20             | Increase to 30 the number of States with Hospitality Resource Panels (including representatives from State regulatory, public health, and highway safety agencies; law enforcement; insurance associations; and alcohol retail and licensed beverage associations) to ensure a process of management and server training and define standards of responsible hospitality. |
| 5.12             | Increase to at least 95 percent the proportion of all females aged 15–44 at risk of unintended pregnancy who use contraception.   |
| 6.15             | Reduce the prevalence of depressive (affective) disorders among adults living in the community to less than 4.3 percent.  |
| 7.19             | Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of unintentional discharge by minors. (Duplicate objective 9.25.)   |
| 9.24             | Extend to 50 States laws requiring helmets for bicycle riders.  |
| 9.26             | Increase to 35 the number of States having a graduated driver licensing system for novice drivers and riders under the age of 18.   |
| 10.16            | Reduce deaths from work-related homicides to no more than 0.5 per 100,000 full-time workers.  |
| 10.17            | Reduce the overall age-adjusted mortality rate for four major preventable occupational lung diseases (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis) to 7.7 per 100,000.  |
| 12.7             | Increase to at least 75 percent the proportion of the total number of adverse event reports voluntarily sent directly to FDA that are regarded as serious.  |
| 12.8             | Increase to at least 75 percent the proportion of people who receive useful information verbally and in writing for new prescriptions from prescribers or dispensers.   |
| 14.17            | Reduce the incidence of spina bifida and other neural tube defects to 3 per 10,000 live births.   |
| 17.21            | Prevent the prevalence of peptic ulcer disease to no more than 18 per 1,000 people aged 18 and older by preventing its recurrence.  |
| 17.23            | Increase to 70 percent the proportion of people with diabetes who have an annual dilated eye exam.  |
| 18.16            | Increase to at least 50 percent the proportion of large businesses and to 10 percent the proportion of small businesses that have implemented a comprehensive HIV/AIDS workplace program.   |
| 18.17            | Increase to at least 40 percent the number of federally funded primary care clinics that have formal established linkages with substance-abuse treatment programs and increase to at least 40 percent the number of federally funded substance-abuse treatment programs that have formal established linkages with primary care clinics.                                  |

## Summary of Progress

Movement either toward or away from the target is determined by the direction of the change between the baseline and the most recent data point. Some of these changes are relatively small and may be within what could be expected on the basis of sampling or random variation. For objectives with more than one measure (“compound” objectives), if data show trends in different directions, progress is labeled as “mixed.” For compound objectives with partial data, progress is determined by the direction of the measure(s) with data (for example, objective 12.1). Finally, a few objectives are very broad in scope and tracking data are not available; in these cases the subobjectives are being used to track progress (for example, objective 17.14).

The following summary of progress is based on the revised number of 319 unduplicated objectives (6). At the midpoint of the decade, 8 percent of the objectives have reached or surpassed the year 2000 targets. Progress toward the targets has been made for another 40 percent of the objectives, and 18 percent show movement away from the targets. Data for 5 percent of the objectives show mixed results and 3 percent show no change from the baseline. Seventy-five objectives (20 percent) have baseline data but have no new data with which to evaluate progress. Baselines have yet to be obtained for 19 objectives (6 percent). [Figure A](#) shows the progress of the objectives by priority area.

## Organization and Scope of This Review

This *Review* includes all revisions to objectives and subobjectives that resulted from the midcourse review process and is organized into four major sections. The introductory section includes a brief history of *Healthy People 2000*, a discussion of the *Healthy People 2000* midcourse review process, and a summary of the progress of all year 2000 objectives through July 1996.

The second section is a chart section. Beginning with this issue, the *Review* will focus on the special population groups targeted by *Healthy People 2000* because of increased risk of disease, injury, or disability. This year, a selection of racial and ethnic

minority subobjectives are highlighted with a series of charts showing the latest data on progress or lack of progress toward the subobjective targets. The choice of charts is meant to illustrate and does not confer more relative importance to any of the subobjectives shown as opposed to subobjectives not shown.

The third section consists of 22 chapters, one for each *Healthy People 2000* priority area. Each chapter contains a summary data table, a text discussion of specific data issues, a chart representing one of the priority area objectives, and the full text of the objectives in that priority area. Baseline data that have been revised since the midcourse review are indicated with a footnote “a” in the data table.

The text for each chapter includes a brief discussion of the public health significance of the priority area, midcourse modifications to the objectives within the priority area, data highlights, a summary of the progress for the objectives, and data issues that may not be apparent from the summary table or the text of the objective—such as proxy measures, differing tracking systems, and operational definitions.

Most charts show the movement of one of the priority area objectives toward or away from the objective target. Some show the latest data for population groups that were targeted because of especially high risk of disease, injury, or disability. As in the chart section, the choice of charts does not confer more relative importance to any of the objectives shown.

An appendix and seven appendix tables comprise the fourth section. The appendix presents and discusses major data issues involved in the monitoring of the objectives and subobjectives.

■ [Table I](#) lists the priority area PHS lead agencies

■ [Table II](#) lists the acronyms used in the list of data sources in the chapter data summary tables

■ [Table III](#) displays the cause-of-death categories used for the *Healthy People 2000* mortality objectives compared with the cause-of-death categories used for the mortality tabulations published by the National Center for Health Statistics

■ [Table IV](#) shows trends in the Health Status Indicators developed for objective 22.1

■ [Table V](#) presents the latest available Health Status Indicators data for racial and Hispanic-origin population groups

■ [Table VI](#) shows progress since the 1987 baseline for the age-related objectives; these four *Healthy People 2000* objectives continue monitoring the data for the five major life stage goals of the 1990 health promotion and disease prevention initiative (9)

■ [Table VII](#) lists the publications in the *Healthy People 2000 Statistical Notes* series to date.

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*Charting Special  
Populations: Racial and  
Ethnic Minority Groups*

## List of Figures

---

|  |    |
|--|----|
| A. Age-adjusted death rates for coronary heart disease: United States, 1987–93, and year 2000 targets for objectives 1.1, 2.1, 3.1, and 15.1_____  | 9  |
| B. Proportion of females 20 years of age and over who are overweight: United States, 1976–80 and 1988–91, and year 2000 targets for objectives 1.2, 2.3, 15.10, and 17.12_____   | 9  |
| C. Proportion of overweight people 18 years of age and over who report trying to lose weight by eating fewer calories and exercising: United States, 1991–93, and year 2000 targets for objective 2.7_____                                 | 10 |
| D. Cigarette smoking prevalence among people 18 years of age and over: United States, selected years, and year 2000 targets for objectives 3.4, 15.12, and 16.6_____   | 10 |
| E. Age-adjusted death rates for cirrhosis: United States, 1987–93, and year 2000 targets for objective 4.2_____  | 11 |
| F. Age-adjusted rates for drug-related deaths: United States, 1987–93, and year 2000 target for objective 4.3_____   | 11 |
| G. Age-adjusted rates for suicide: United States, 1987–93, and year 2000 targets for objectives 6.1 and 7.2_____   | 12 |
| H. Homicide rates: United States, 1987–93, and year 2000 targets for objective 7.1_____  | 12 |
| J. Age-adjusted rates for firearm-related deaths: United States, 1990 and 1993, and year 2000 targets for objective 7.3_____   | 13 |
| K. Incidence of weapon carrying by adolescents: United States, 1991, 1993, and 1995, and year 2000 targets for objective 7.10_____   | 13 |
| L. Percent of people completing high school: United States, 1992 and 1994, and year 2000 target for objective 8.2_____   | 14 |
| M. Age-adjusted death rates for unintentional injuries: United States, 1987–93, and year 2000 targets for objective 9.1_____   | 14 |
| N. Age-adjusted rates for fire-related deaths: United States, 1987–93, and year 2000 targets for objective 9.6_____  | 15 |
| O. Death rates due to cancer of the oral cavity and pharynx for people 45–74 years of age: United States, 1987–93, and year 2000 targets for objectives 3.17, 13.7, and 16.17_____   | 15 |
| P. Percent of people 35 years of age and over who use the oral health care system each year: United States, 1991 and 1993, and year 2000 targets for objective 13.14_____  | 16 |
| Q. Infant mortality rates: United States, 1987–93, and year 2000 targets for objective 14.1_____   | 16 |
| R. Severe complications of pregnancy: United States, 1987–94, and year 2000 targets for objective 14.7_____  | 17 |
| S. Proportion of mothers who breastfed in the early postpartum period: United States, 1988–94, and year 2000 target for objectives 2.11 and 14.9_____  | 17 |
| T. Proportion of people with high blood pressure who have their blood pressure under control: United States, 1988–91, and year 2000 target for objective 15.4_____   | 18 |
| U. Proportion of people with high blood pressure who are taking action to help control their blood pressure: United States, 1991 and 1993, and year 2000 targets for objective 15.5_____   | 18 |
| W. Proportion of adults who have had their blood cholesterol checked: United States, 1993, and year 2000 target for objective 15.14_____   | 19 |
| Y. Age-adjusted death rates for breast cancer: United States, 1990–94, and year 2000 targets for objective 16.3_____   | 19 |
| Z. Proportion of people who experience limitation in major activity due to chronic conditions: United States, 1988–94, and year 2000 targets for objective 17.2_____   | 20 |
| AA. Age-adjusted rates for diabetes-related deaths: United States, 1988–93, and year 2000 targets for objective 17.9_____  | 20 |
| BB. Incidence of tuberculosis: United States, 1988–94, and year 2000 targets for objective 20.4_____   | 21 |
| CC. Proportion of people 18 years of age and over who have a specific source of ongoing primary care: United States, 1991 and 1994, and year 2000 target for objective 21.3_____   | 21 |
| DD. Proportion of all degrees in the health professions and associated health profession fields awarded to members of racial and ethnic minority groups: United States, 1985–86 and 1993–94, and year 2000 targets for objective 21.8_____ | 22 |

## List of Tables

---

|  |   |
|--|---|
| A. Summary of progress for all <i>Healthy People 2000</i> race and Hispanic-origin subobjectives and objectives_____ | 8 |
|--|---|

## Charting Special Populations: Racial and Ethnic Minority Groups

This special chart section focuses on the minority groups targeted by *Healthy People 2000* to address health disparities. The groups targeted are blacks, American Indians and Alaska Natives, Asians and Pacific Islanders, all Hispanics, Mexican-Americans, Puerto Ricans, and Cubans living in the 50 States and the District of Columbia. Included in the 27 figures are selected data from a total of 201 race and Hispanic-origin special population subobjectives and 4 compound objectives that address minority populations. The figures shown are illustrative; the choice of objectives and subobjectives does not confer more relative importance to those shown.

Approximately the same proportion of minority subobjectives and objectives (51 percent) are showing progress toward the year 2000 targets as all *Healthy People 2000* objectives (48 percent). However, significantly more minority subobjectives and objectives are moving away from the targets (30 percent versus 18 percent for all year 2000 objectives). An additional 5 (2 percent) show mixed progress or no change from baseline, and 35 (17 percent) have no data with which to evaluate progress.

**Table A. Summary of progress for all *Healthy People 2000* race and Hispanic-origin subobjectives and objectives**

| Race or Hispanic origin                 | Subobjectives and objectives | Met or progressed | Moved away from target | Mixed or no change | Cannot assess |
|---|------------------------------|-------------------|------------------------|--------------------|---------------|
|   | Number                       | Percent           |                        |                    |               |
| Total . . . . .                         | 210                          | 51.4              | 29.5                   | 2.4                | 16.7          |
| Black . . . . .                         | 87                           | 56.3              | 29.9                   | —                  | 13.8          |
| American Indian/Alaska Native . . . . . | 40                           | 55.0              | 30.0                   | 7.5                | 7.5           |
| Asian/Pacific Islander . . . . .        | 9                            | 55.6              | 22.2                   | 11.1               | 11.1          |
| All Hispanic . . . . .                  | 42                           | 42.9              | 31.0                   | —                  | 26.2          |
| Mexican-American . . . . .              | 14                           | 64.3              | 21.4                   | —                  | 14.3          |
| Puerto Rican . . . . .                  | 14                           | 35.7              | 35.7                   | 7.1                | 21.4          |
| Cuban . . . . .                         | 4                            | —                 | 25.0                   | —                  | 75.0          |

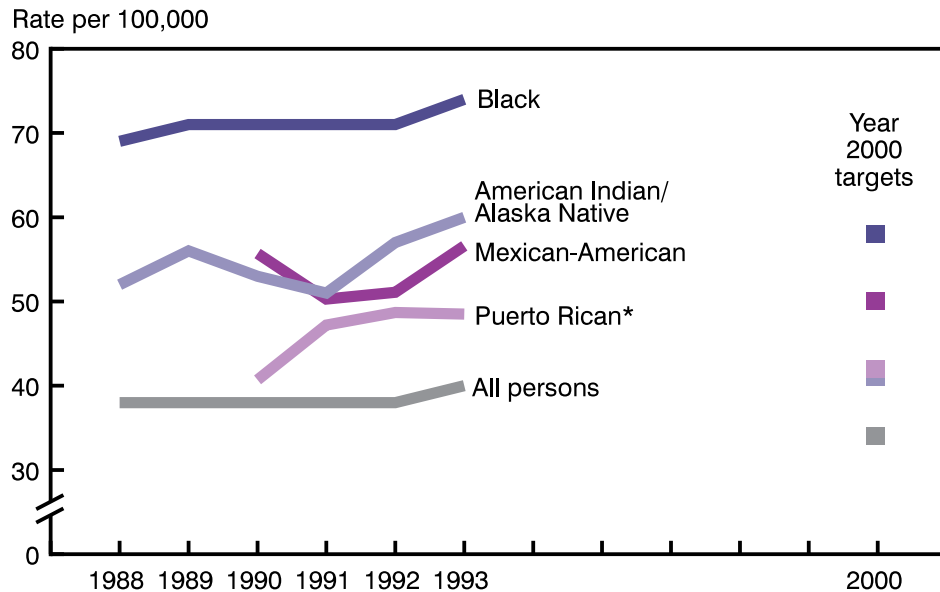
— Quantity zero.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics.

## Heart Disease and Stroke

The age-adjusted death rate declined for coronary heart disease for the total population by 16 percent from 1987 to 1993. For black persons, the decrease was only 8 percent with a slight increase in the age-adjusted death rate between 1992 and 1993 (from 151 to 154 deaths per 100,000).

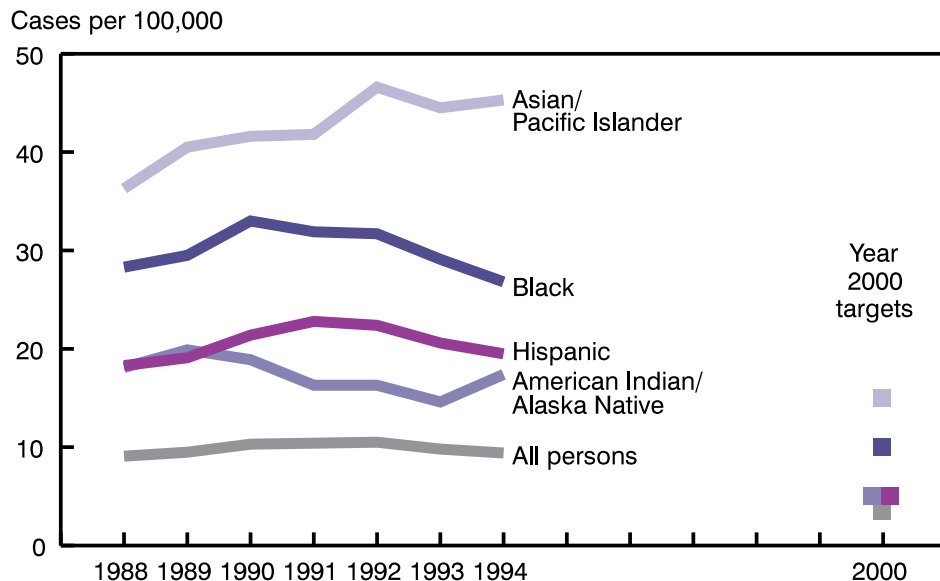
**Figure A. Age-adjusted death rates for coronary heart disease: United States, 1987–93, and year 2000 targets for objectives 1.1, 2.1, 3.1, and 15.1**



## Overweight

Overweight prevalence among females has increased for the total population, black people, and Mexican-American people between 1976–80 and 1988–91. In 1988–91 the prevalence of overweight for black women was 49 percent and for Hispanic women, 47 percent.

**Figure B. Proportion of females 20 years of age and over who are overweight: United States, 1976–80 and 1988–91, and year 2000 targets for objectives 1.2, 2.3, 15.10, and 17.12**

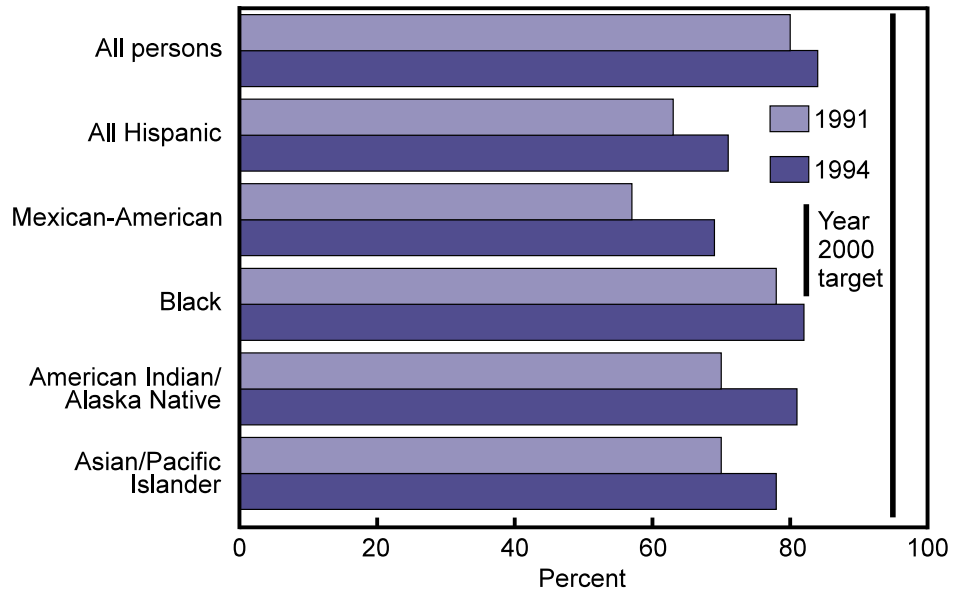




## Nutrition

The proportion of overweight persons who have adopted sound dietary practices combined with regular physical activity has not improved among all males, all females, or among Hispanic males. Data for Hispanic females, however, show a slight increase. Between 1991 and 1993, the percent of overweight Hispanic females using sound practices increased from 13 to 16 percent but needs to increase another 6 percent to achieve the year 2000 target.

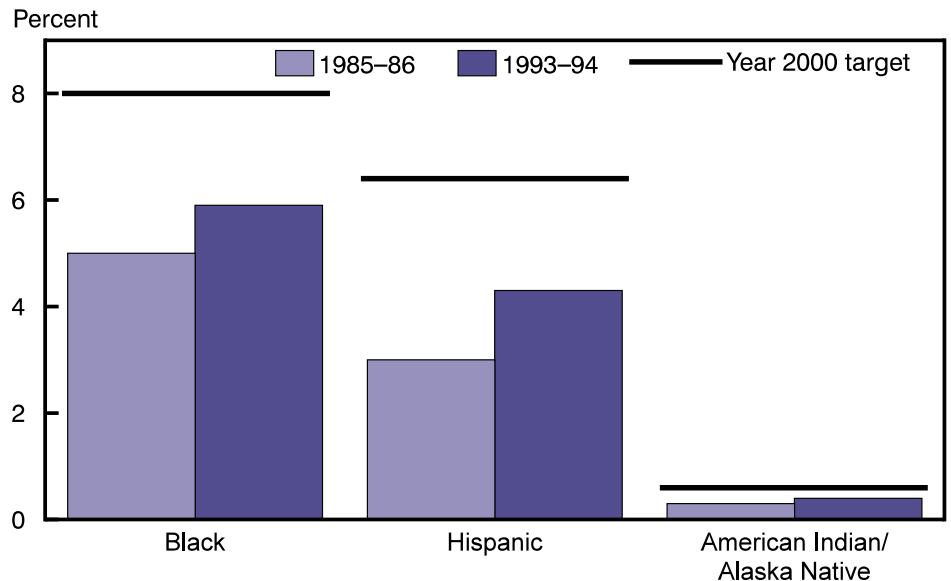
**Figure C. Proportion of overweight people 18 years of age and over who report trying to lose weight by eating fewer calories and exercising: United States, 1991–93, and year 2000 targets for objective 2.7**



## Tobacco

Between 1987 and 1994 smoking prevalence for people 18 years and over declined from 33 to 27 percent among black people and from 24 to 20 percent among Hispanic people. The prevalence in both populations is moving in the targeted direction. Among American Indians and Alaska Natives, the prevalence increased slightly from 38 percent in 1990 to 40 percent in 1994—a difference that is within sampling error.

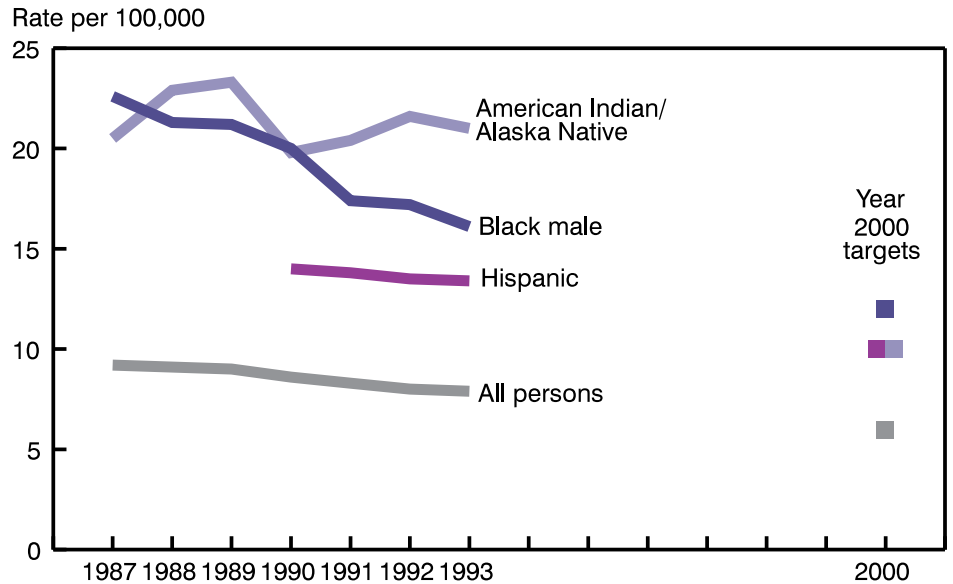
**Figure D. Cigarette smoking prevalence among people 18 years of age and over: United States, selected years, and year 2000 targets for objectives 3.4, 15.12, and 16.6**



## Cirrhosis

Mortality due to cirrhosis improved in most population groups. Among black males, age-adjusted mortality declined nearly 30 percent between 1987 and 1993. Among Hispanic people, the improvement was from 14 per 100,000 population in 1990 to 13.4 per 100,000 population in 1993. However, among American Indians and Alaska Natives, cirrhosis death rates fluctuated during 1987–93 and show essentially no change from baseline.

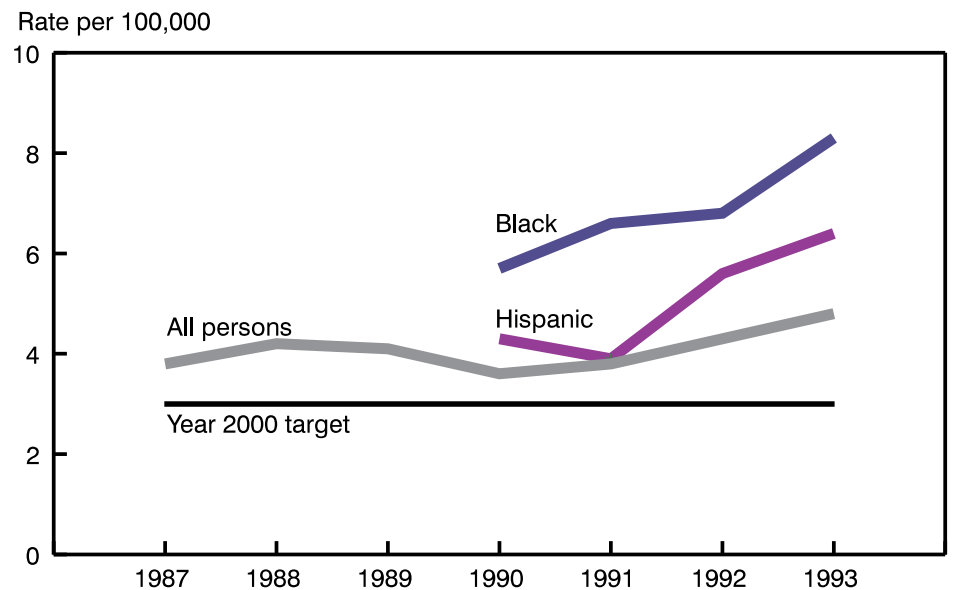
**Figure E. Age-adjusted death rates for cirrhosis: United States, 1987–93, and year 2000 targets for objective 4.2**



## Substance Abuse

Mortality due to drug-related causes is moving away from the target for all populations. Among Hispanic and black people, the rates have increased by almost 50 percent since 1990.

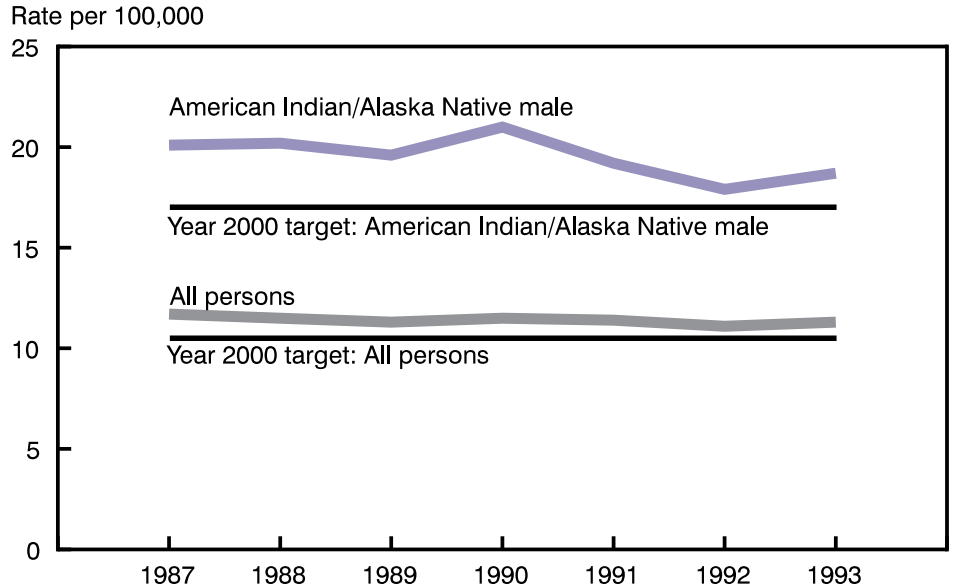
**Figure F. Age-adjusted rates for drug-related deaths: United States, 1987–93, and year 2000 target for objective 4.3**



## Suicide

Suicide has decreased among American Indians and Alaska Natives. Despite an increase in suicide rates between 1992 and 1993, the age-adjusted death rate declined to 18.7 per 100,000 population in 1993, 7 percent lower than in 1987.

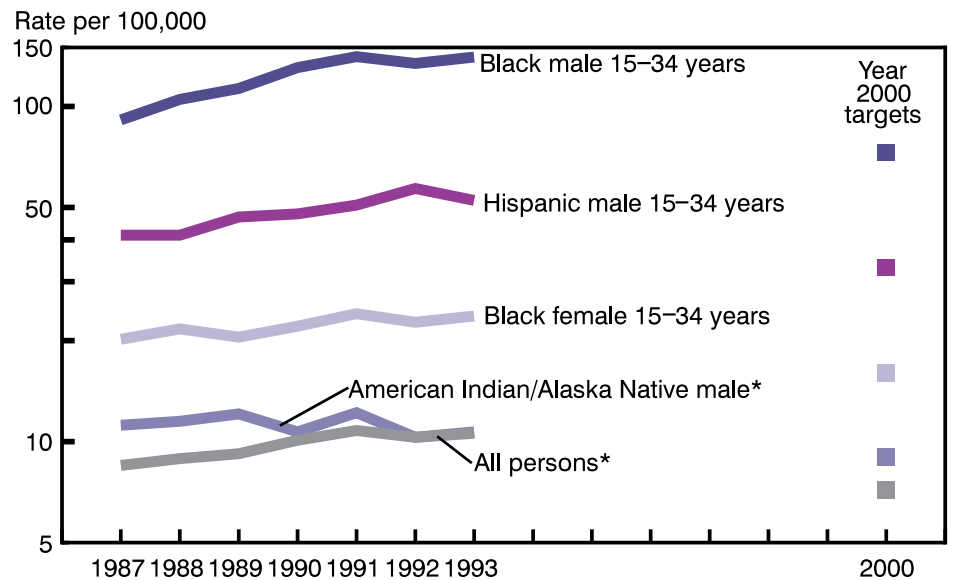
**Figure G. Age-adjusted rates for suicide: United States, 1987–93, and year 2000 targets for objectives 6.1 and 7.2**



## Homicide

Among special population subgroups targeted by *Healthy People 2000* for homicide, the rate for American Indians and Alaska Natives declined 4 percent between 1987 and 1993. Among black males 15–34 years of age, black females, and Hispanic males, the rates increased by 54, 17, and 27 percent, respectively.

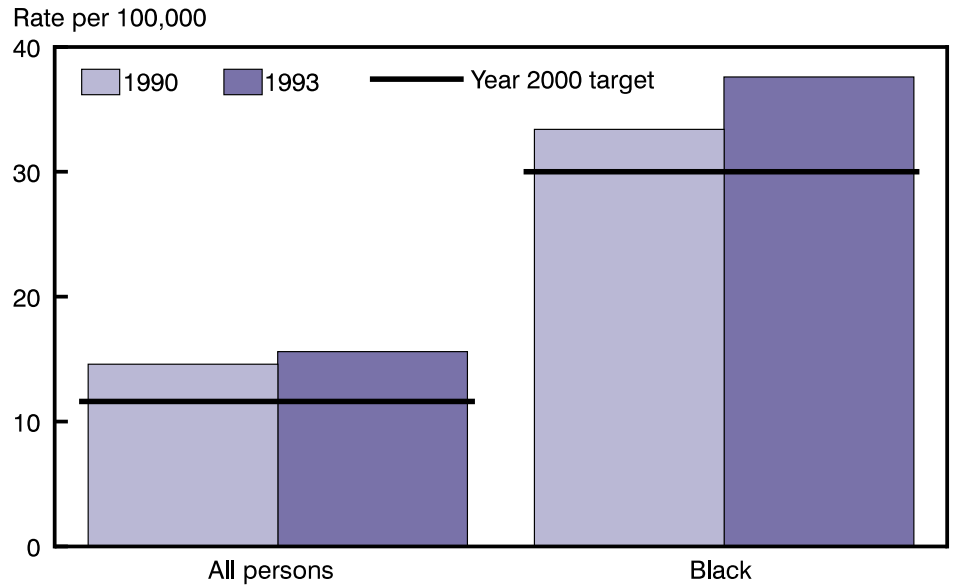
**Figure H. Homicide rates: United States, 1987–93, and year 2000 targets for objective 7.1**



## Firearm-Related Deaths

Firearm-related death rates are increasing and moving away from the year 2000 target. The increase among black persons (13 percent) was almost double that of the total population (7 percent) between 1990 and 1993.

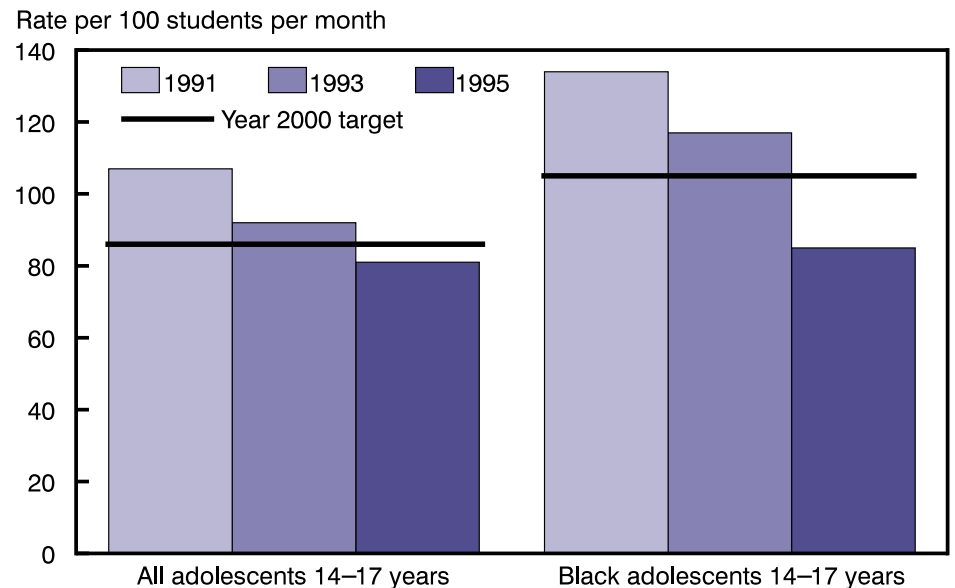
**Figure J. Age-adjusted rates for firearm-related deaths: United States, 1990 and 1993, and year 2000 targets for objective 7.3**



## Weapon Carrying

The incidence of weapon carrying by adolescents has declined between 1991 and 1993. Among all adolescents, the incidence declined from 107 to 92 per 100 students per month; among black adolescents, the decline was from 134 to 117.

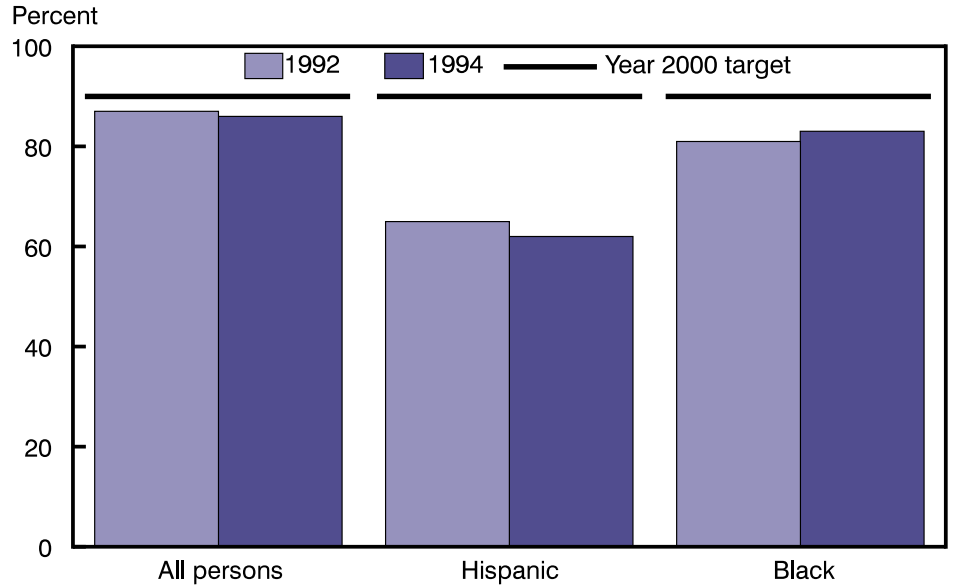
**Figure K. Incidence of weapon carrying by adolescents: United States, 1991, 1993, and 1995, and year 2000 targets for objective 7.10**



## High School Completion

Between 1992 and 1994, the percent completing high school improved slightly among black people (from 81 to 83 percent). However, among Hispanic people, for whom the targeted change was larger, the percent completing high school declined from 65 to 62 percent.

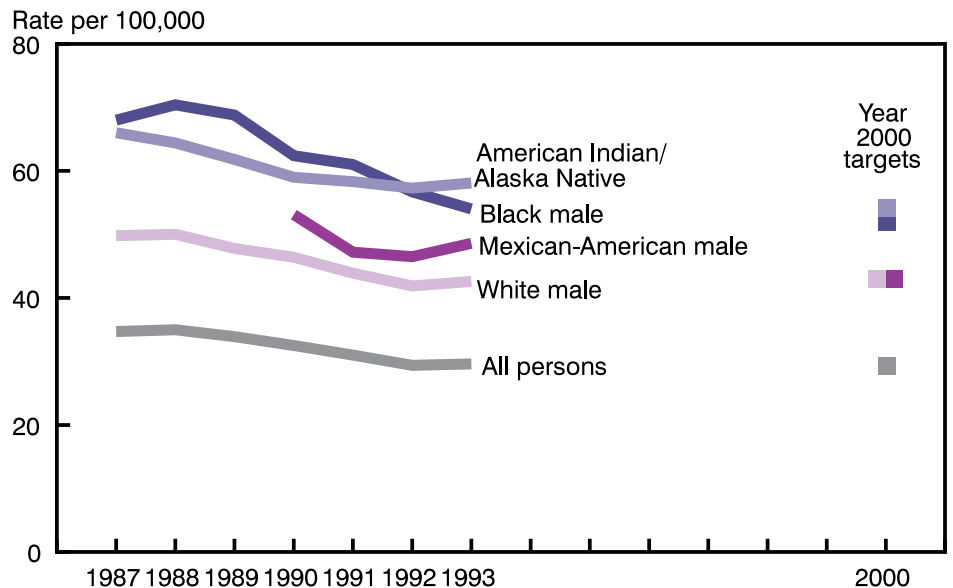
**Figure L. Percent of people completing high school: United States, 1992 and 1994, and year 2000 target for objective 8.2**



## Unintentional Injuries

The age-adjusted rates of death caused by unintentional injuries have generally improved. White males have surpassed the targeted improvement. Rates for black males have declined from 68 to 54 per 100,000, close to the target of 51.9 per 100,000. Mexican-American males and the American Indian and Alaska Native populations have experienced declines in death rates from baseline to 1992; these declines were not evident in 1993.

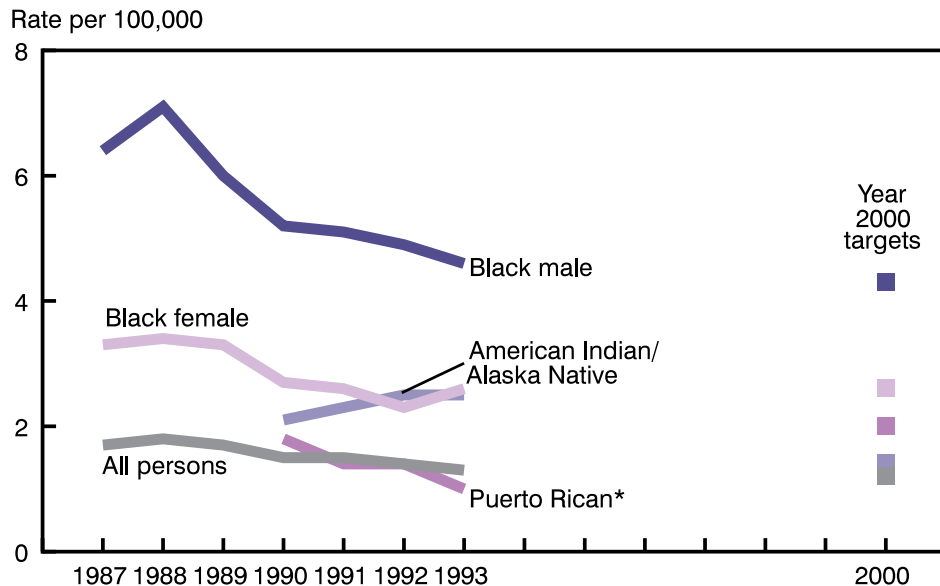
**Figure M. Age-adjusted death rates for unintentional injuries: United States, 1987–93, and year 2000 targets for objective 9.1**



## Fire-Related Deaths

In 1993, mortality declined among black females to reach the year 2000 target of 2.6; mortality among black males declined 28 percent between 1987 and 1993 to 4.6 per 100,000, close to the year 2000 target of 4.3. Death rates for Puerto Ricans declined between 1990 and 1993. However, mortality has increased 19 percent among American Indians and Alaska Natives.

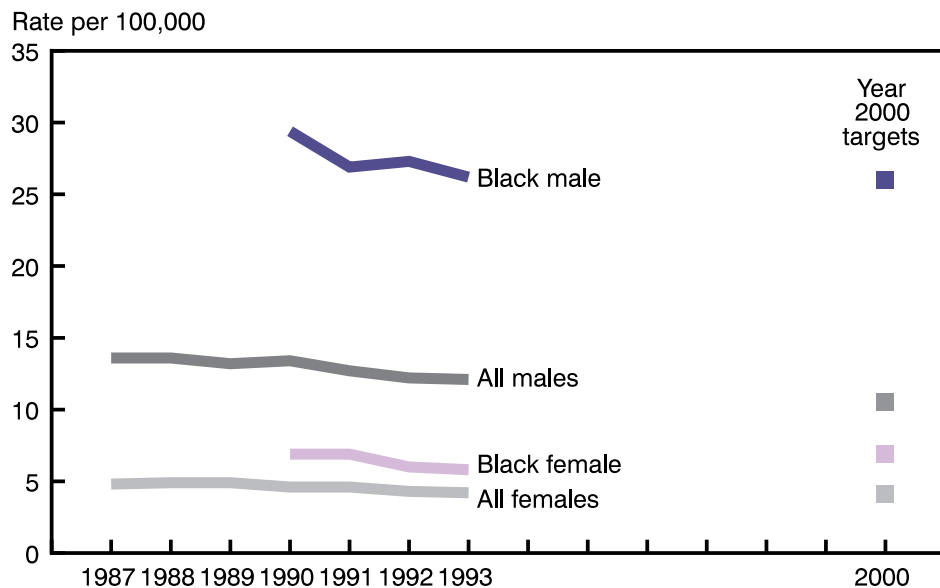
**Figure N. Age-adjusted rates for fire-related deaths: United States, 1987–93, and year 2000 targets for objective 9.6**



## Oral Health

Mortality due to cancer of the oral cavity and pharynx has improved in all populations. The rate for black females 45–74 years of age surpassed the year 2000 target in 1992 and 1993. The rate for black males 45–74 years of age nearly reached the target in 1993.

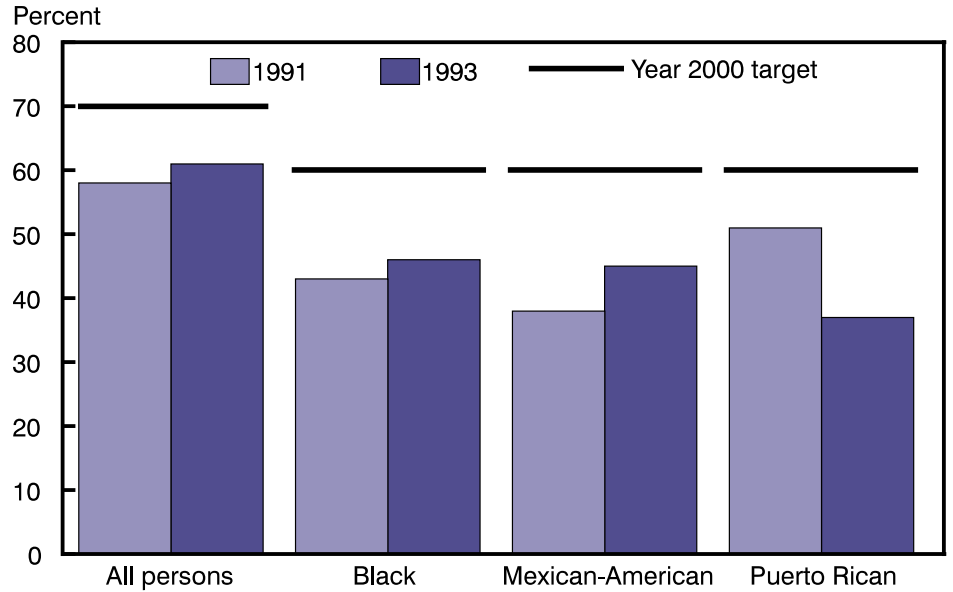
**Figure O. Death rates due to cancer of the oral cavity and pharynx for people 45–74 years of age: United States, 1987–93, and year 2000 targets for objectives 3.17, 13.7, and 16.17**



## Oral Health

A modest improvement in the use of the oral health care system occurred between 1991 and 1993 among black people and Mexican-American people 35 years of age and over. However, among Puerto Ricans usage decreased.

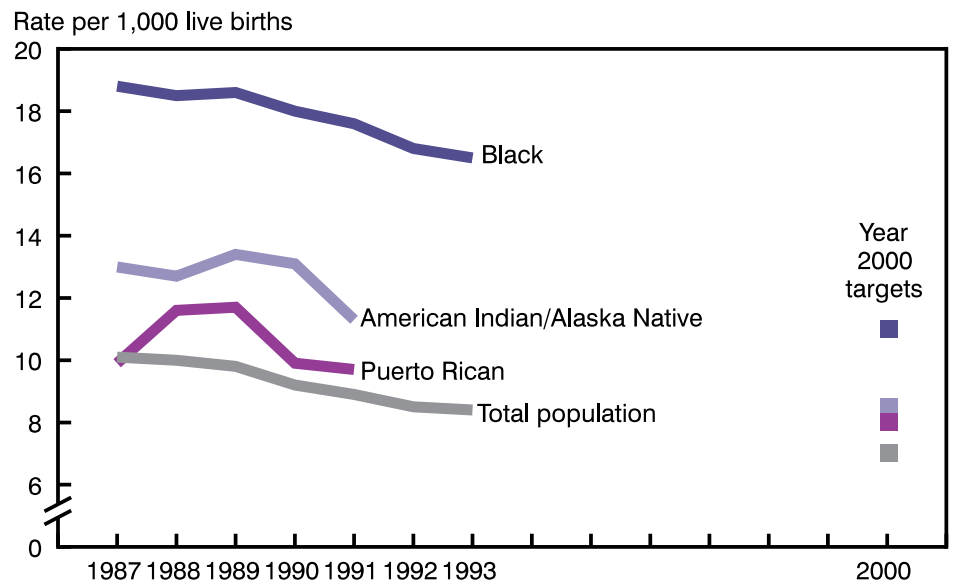
**Figure P. Percent of people 35 years of age and over who use the oral health care system each year: United States, 1991 and 1993, and year 2000 targets for objective 13.14**



## Infant Mortality

Infant mortality in the black population has improved, declining from 18.8 per 1,000 live births in 1987 to 16.5 in 1993. Between 1987 and 1991 the rate among Puerto Ricans was largely unchanged and the rate for the American Indian and Alaska Native population declined from 13.0 to 11.3; however, the rates have been fluctuating in these populations.

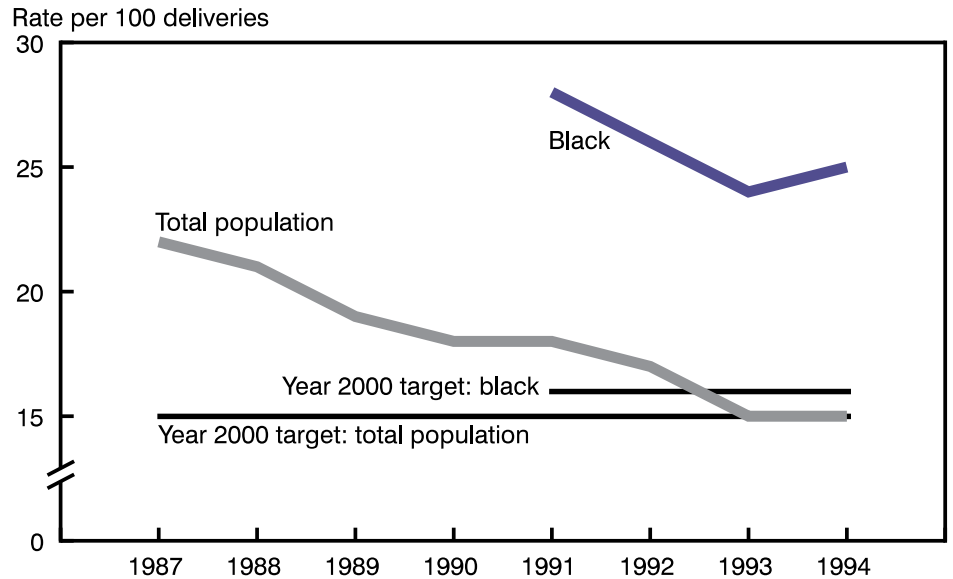
**Figure Q. Infant mortality rates: United States, 1987–93, and year 2000 targets for objective 14.1**



## Pregnancy

The rate of severe complications of pregnancy among the total female population reached the year 2000 target in 1993. From 1991 to 1994 the rate for the black population declined 11 percent, with a slight increase between 1993 and 1994.

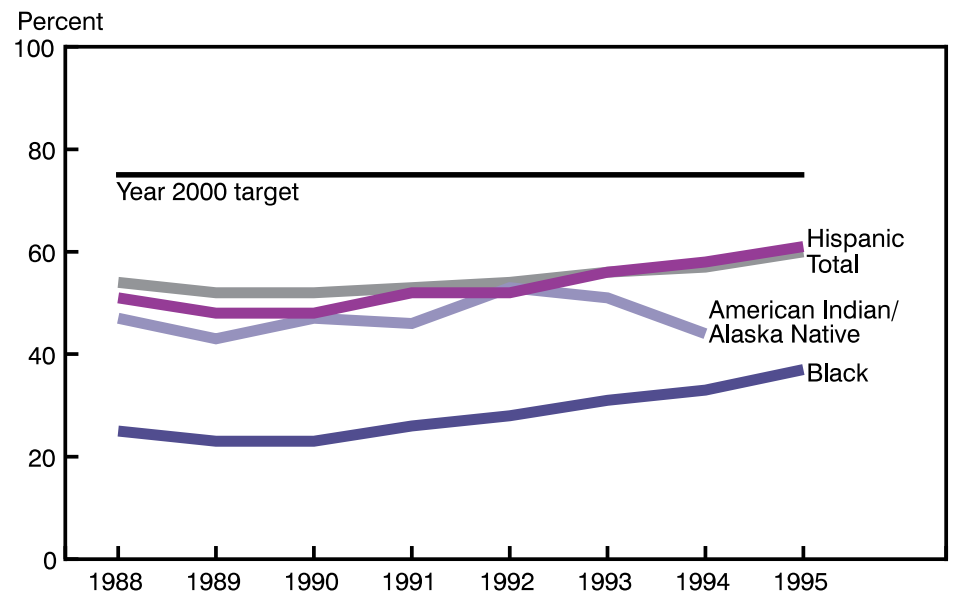
**Figure R. Severe complications of pregnancy: United States, 1987–94, and year 2000 targets for objective 14.7**



## Maternal and Infant Health

The proportion of black and Hispanic mothers who breastfed in the early postpartum period increased between 1988 and 1994. Among American Indian and Alaska Native mothers the proportion fluctuated; it has been declining since 1992.

**Figure S. Proportion of mothers who breastfed in the early postpartum period: United States, 1988–94, and year 2000 target for objectives 2.11 and 14.9**

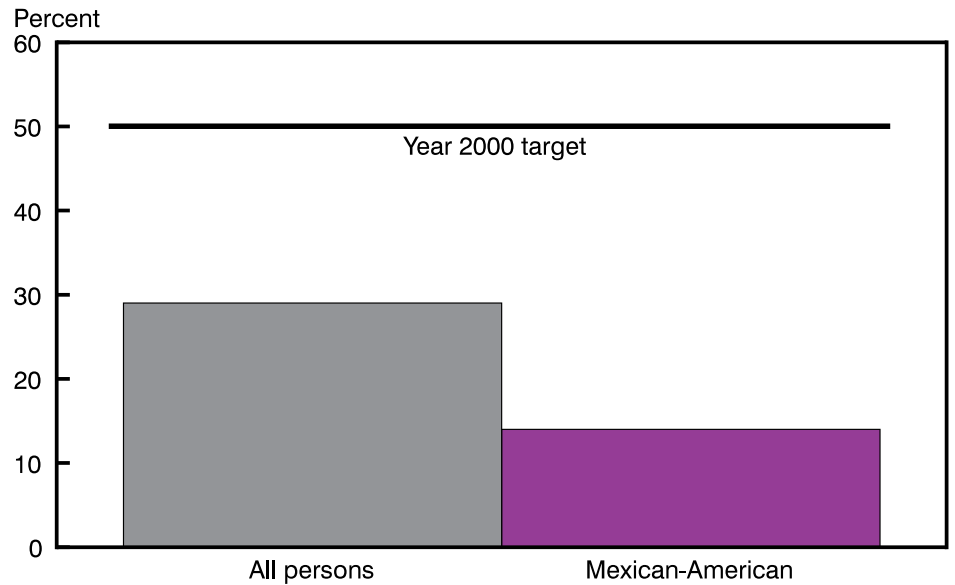




## High Blood Pressure

In 1988–91, 29 percent of adults with high blood pressure had their blood pressure under control. Only 14 percent of Mexican-Americans had their blood pressure under control.

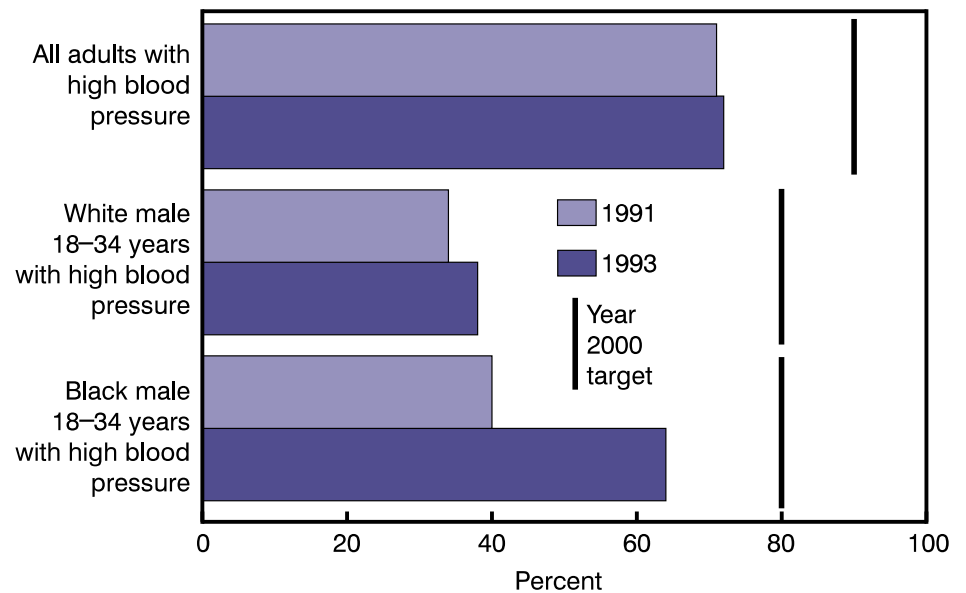
**Figure T. Proportion of people with high blood pressure who have their blood pressure under control: United States, 1988–91, and year 2000 target for objective 15.4**



## High Blood Pressure

Taking action to help control high blood pressure, such as taking medication or dieting to lose weight, is an objective for adults with high blood pressure. Among white males 18–34 years of age, the increase in the proportion taking action is slight; however, the improvement among black males is about 25 percent.

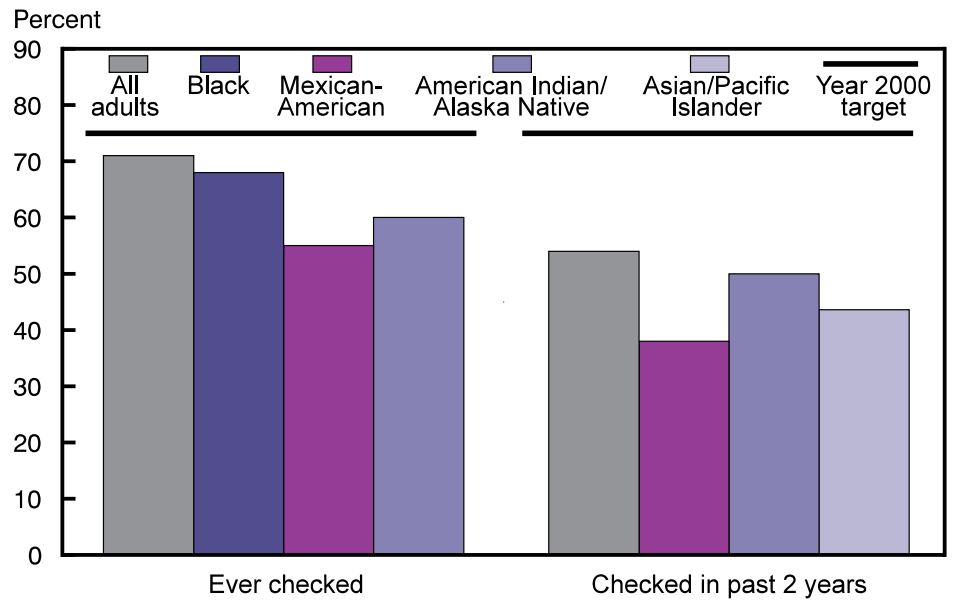
**Figure U. Proportion of people with high blood pressure who are taking action to help control their blood pressure: United States, 1991 and 1993, and year 2000 targets for objective 15.5**



## Cholesterol

The proportion of adults who have had their blood cholesterol checked needs to be improved for all populations. Among the race and ethnic subgroups targeted by *Healthy People 2000*, Mexican-Americans have the lowest cholesterol screening rates.

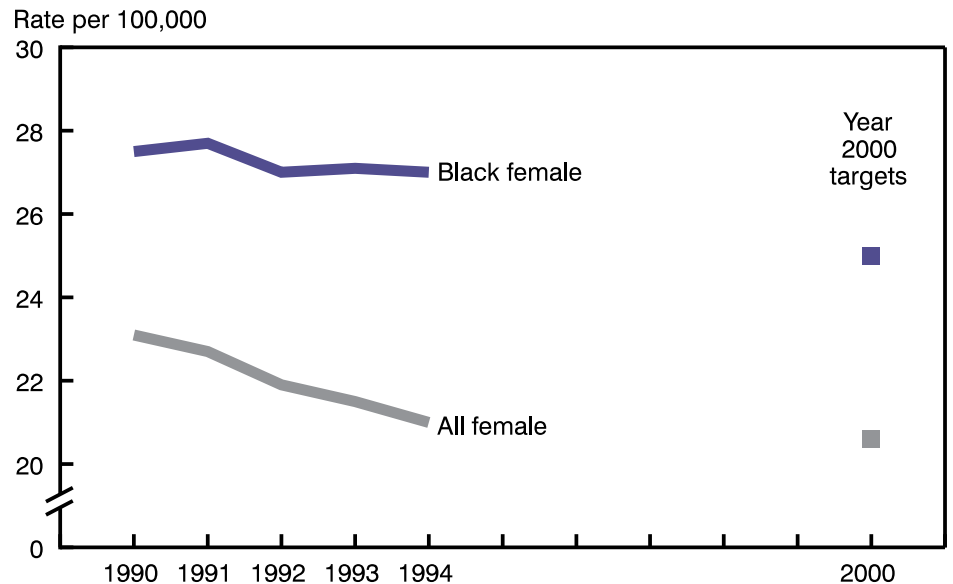
**Figure W. Proportion of adults who have had their blood cholesterol checked: United States, 1993, and year 2000 target for objective 15.14**



## Cancer

In the 5 years between 1990 and 1994, age-adjusted death rates for breast cancer have declined 8 percent for all females. For black females, there has been a 2-percent decline.

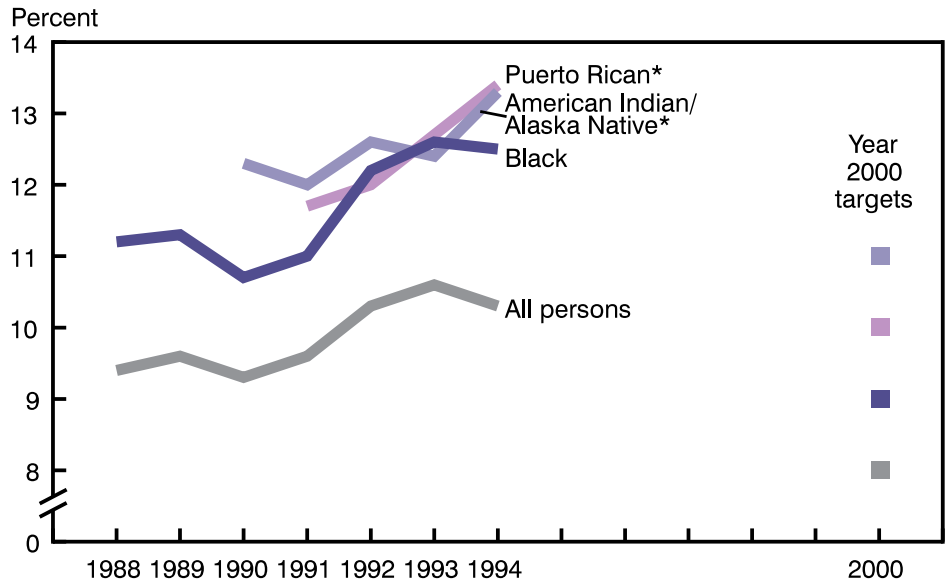
**Figure Y. Age-adjusted death rates for breast cancer: United States, 1990–94, and year 2000 targets for objective 16.3**



## Chronic Disabling Conditions

Since 1991, the proportion of people who experience a limitation in major activity due to chronic conditions has been increasing for all populations.

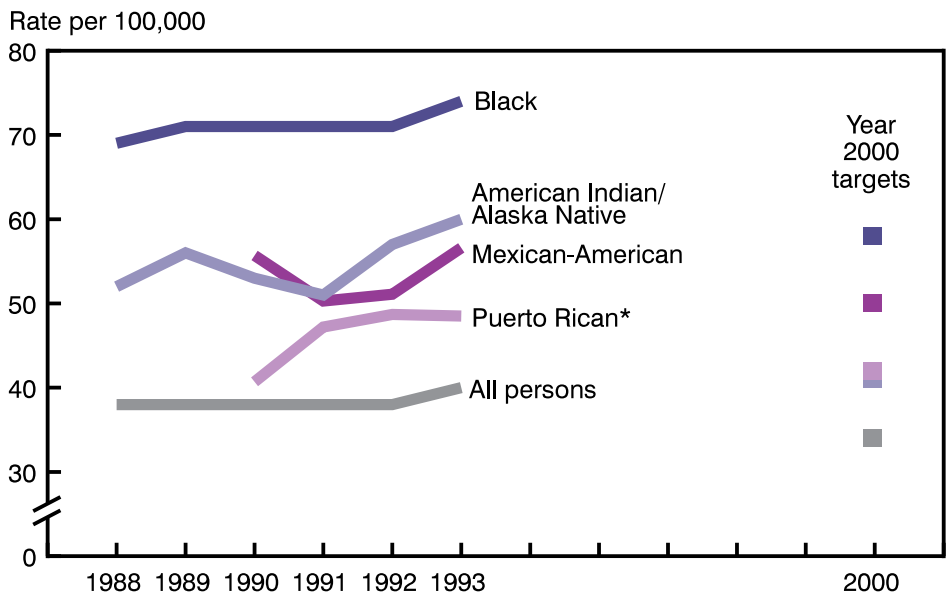
**Figure Z. Proportion of people who experience limitation in major activity due to chronic conditions: United States, 1988–94, and year 2000 targets for objective 17.2**



## Diabetes

Between 1988 and 1993, age-adjusted rates for diabetes-related deaths have increased 5 percent for all persons, 15 percent for American Indians and Alaska Natives, and 7 percent for black persons. From 1990 to 1993, diabetes-related mortality increased 19 percent among Puerto Ricans; rates have fluctuated for Mexican-Americans.

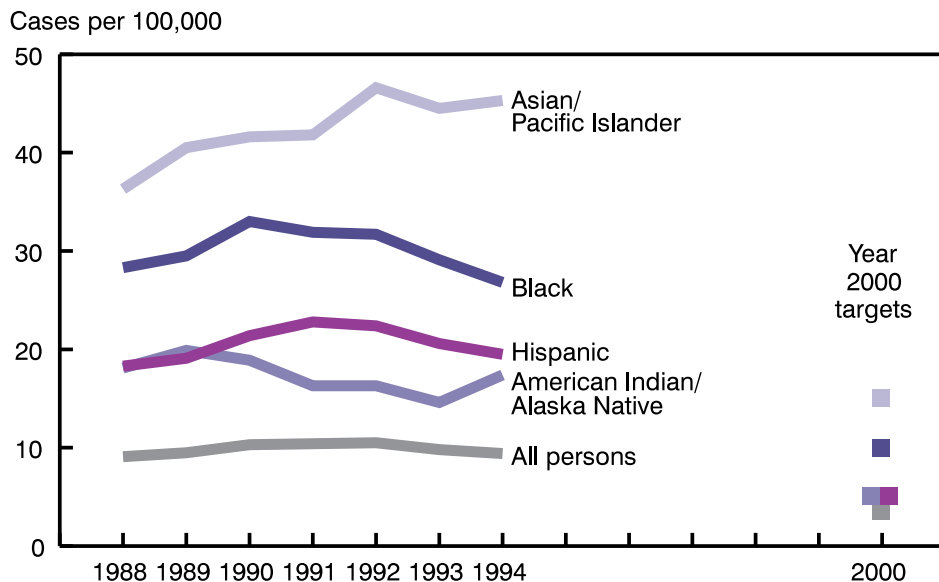
**Figure AA. Age-adjusted rates for diabetes-related deaths: United States, 1988–93, and year 2000 targets for objective 17.9**



## Infectious Diseases

The incidence of tuberculosis among black persons has been declining since 1990. For Hispanic persons the rate has declined since 1991. In contrast, among Asian and Pacific Islanders, the incidence continues to rise. Among American Indian and Alaska Native populations, the incidence has declined overall although it increased between 1993 and 1994.

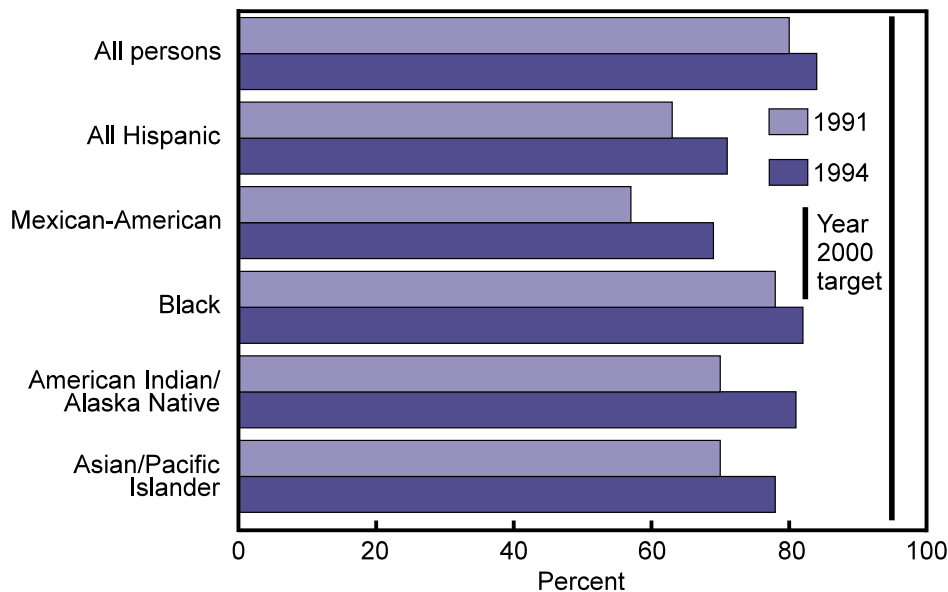
**Figure BB. Incidence of tuberculosis: United States, 1988–94, and year 2000 targets for objective 20.4**



## Primary Care

The proportion of people 18 years of age and over who have a specific source of ongoing primary care increased between 1991 and 1994 for all population groups. The largest improvements have occurred among Mexican-Americans (12 percent) and American Indians and Alaska Natives (11 percent).

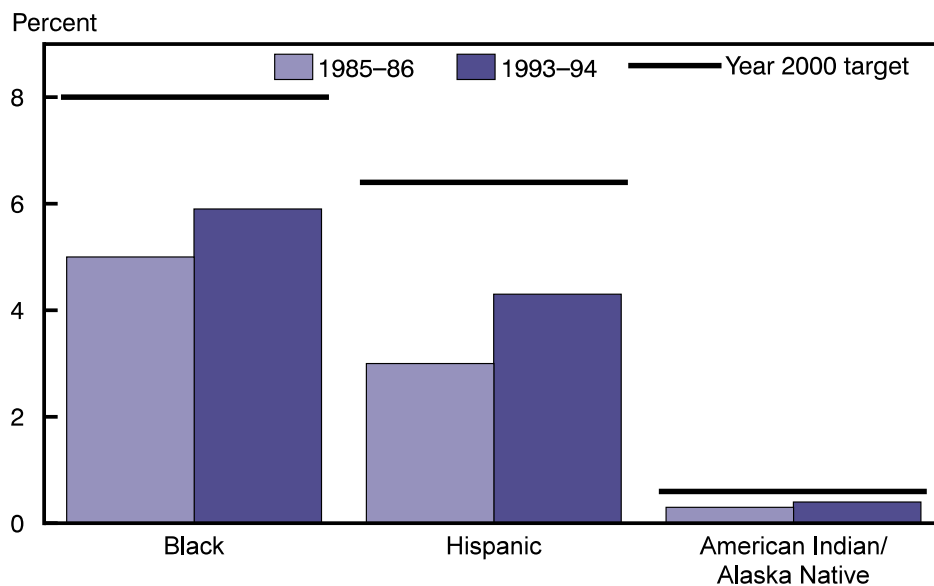
**Figure CC. Proportion of people 18 years of age and over who have a specific source of ongoing primary care: United States, 1991 and 1994, and year 2000 target for objective 21.3**



## Degrees Awarded

The proportion of all degrees in the health professions awarded to the race and ethnic groups targeted by *Healthy People 2000* has increased between the 1985–86 baseline academic year and 1993–94. In these 9 years, degrees awarded to black persons have increased 18 percent, to Hispanic persons 43 percent, and to American Indians and Alaska Natives, 33 percent.

**Figure DD. Proportion of all degrees in the health professions and associated health profession fields awarded to members of racial and ethnic minority groups: United States, 1985–86 and 1993–94, and year 2000 targets for objective 21.8**



# Data Tables for Figures A–DD

Figure A

| <i>Race</i>     | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year 2000 target</i> |
|-----------------|------|------|------|------|------|------|------|-------------------------|
| Total . . . . . | 135  | 131  | 126  | 122  | 118  | 114  | 114  | 100                     |
| Black . . . . . | 168  | 167  | 165  | 158  | 156  | 151  | 154  | 115                     |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure B

| <i>Race and sex</i>        | 1976–80 | 1988–91 | <i>Year 2000 target</i> |
|----------------------------|---------|---------|-------------------------|
| All females . . . . .      | 27      | 35      | 20                      |
| Black . . . . .            | 44      | 49      | 30                      |
| Mexican-American . . . . . | 39      | 47      | 25                      |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

Figure C

| <i>Race and sex</i>       | 1991 | 1993 | <i>Year 2000 target</i> |
|---------------------------|------|------|-------------------------|
| All males . . . . .       | 19   | 17   | 50                      |
| All females . . . . .     | 22   | 19   | 50                      |
| Hispanic male . . . . .   | 15   | 11   | 24                      |
| Hispanic female . . . . . | 13   | 16   | 22                      |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure D

| <i>Race</i>                             | 1987 | 1990 | 1994 | <i>Year 2000 target</i> |
|---|------|------|------|-------------------------|
| All persons . . . . .                   | 29%  | 25%  | 26%  | 15%                     |
| Black . . . . .                         | 33%  | 26%  | 27%  | 18%                     |
| Hispanic . . . . .                      | 24%  | 23%  | 20%  | 15%                     |
| American Indian/Alaska Native . . . . . | *    | 38%  | 40%  | 20%                     |

\*1979–87 Centers for Disease Control estimates from different tribes ranged from 42–70 percent.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure E

| <i>Race and sex</i>                     | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year 2000 target</i> |
|---|------|------|------|------|------|------|------|-------------------------|
| All persons . . . . .                   | 9.2  | 9.1  | 9.0  | 8.6  | 8.3  | 8.0  | 7.9  | 6                       |
| Black male . . . . .                    | 22.6 | 21.3 | 21.2 | 20.0 | 17.4 | 17.2 | 16.1 | 12                      |
| Hispanic . . . . .                      | ...  | ...  | ...  | 14.2 | 13.8 | 13.5 | 13.4 | 10                      |
| American Indian/Alaska Native . . . . . | 20.5 | 22.9 | 23.3 | 19.8 | 20.4 | 21.6 | 21.0 | 10                      |

... Category not applicable.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure F

| <i>Race</i>           | <i>1987</i> | <i>1988</i> | <i>1989</i> | <i>1990</i> | <i>1991</i> | <i>1992</i> | <i>1993</i> | <i>Year<br/>2000<br/>target</i> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|
| All persons . . . . . | 3.8         | 4.2         | 4.1         | 3.6         | 3.8         | 4.3         | 4.8         | 3                               |
| Black . . . . .       | ...         | ...         | ...         | 5.7         | 6.6         | 6.8         | 8.3         | 3                               |
| Hispanic . . . . .    | ...         | ...         | ...         | 4.3         | 3.9         | 5.6         | 6.4         | 3                               |

... Category not applicable.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure G

| <i>Race and sex</i>                           | <i>1987</i> | <i>1988</i> | <i>1989</i> | <i>1990</i> | <i>1991</i> | <i>1992</i> | <i>1993</i> | <i>Year<br/>2000<br/>target</i> |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|
| All persons . . . . .                         | 11.7        | 11.5        | 11.3        | 11.5        | 11.4        | 11.1        | 11.3        | 10.5                            |
| American Indian/Alaska Native males . . . . . | 20.1        | 20.2        | 19.6        | 21.0        | 19.2        | 17.9        | 18.7        | 17.0                            |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure H

| <i>Race and sex</i>                            | <i>1987</i> | <i>1988</i> | <i>1989</i> | <i>1990</i> | <i>1991</i> | <i>1992</i> | <i>1993</i> | <i>Year<br/>2000<br/>target</i> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|
| All persons* . . . . .                         | 8.5         | 8.9         | 9.2         | 10.1        | 10.8        | 10.3        | 10.6        | 7.2                             |
| Black male 15–34 years . . . . .               | 91.1        | 104.9       | 113.2       | 130.5       | 140.8       | 134.2       | 140.5       | 72.4                            |
| Hispanic male 15–34 years . . . . .            | 41.3        | 41.3        | 46.8        | 53.2        | 55.7        | 56.8        | 52.4        | 33.0                            |
| Black female 15–34 years . . . . .             | 20.2        | 21.7        | 20.5        | 22.1        | 24.1        | 22.7        | 23.7        | 16.0                            |
| American Indian/Alaska Native males* . . . . . | 11.2        | 11.5        | 12.1        | 10.7        | 12.2        | 10.3        | 10.7        | 9.0                             |

\* Age-adjusted rates.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure J

| <i>Race and sex</i>   | <i>1990</i> | <i>1993</i> | <i>Year<br/>2000<br/>Target</i> |
|-----------------------|-------------|-------------|---------------------------------|
| All persons . . . . . | 14.6        | 15.6        | 11.6                            |
| Black . . . . .       | 33.4        | 37.6        | 30.0                            |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure K

| <i>Adolescents</i>          | <i>1991</i> | <i>1993</i> | <i>1995</i> | <i>Year<br/>2000<br/>Target</i> |
|-----------------------------|-------------|-------------|-------------|---------------------------------|
| All adolescents . . . . .   | 107         | 92          | 81          | 86                              |
| Black adolescents . . . . . | 134         | 117         | 85          | 105                             |

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey.

Figure L

| <i>Race</i>           | 1992 | 1994 | <i>Year<br/>2000<br/>target</i> |
|-----------------------|------|------|---------------------------------|
| All persons . . . . . | 87%  | 86%  | 90%                             |
| Hispanic . . . . .    | 65%  | 62%  | 90%                             |
| Black . . . . .       | 81%  | 83%  | 90%                             |

SOURCE: National Center for Education Statistics, National Education Goals Panel.

Figure M

| <i>Race and sex</i>                     | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|------|---------------------------------|
| All persons . . . . .                   | 34.7 | 35.0 | 33.9 | 32.5 | 31.0 | 29.4 | 30.3 | 29.3                            |
| Black male . . . . .                    | 68.0 | 70.4 | 68.8 | 62.4 | 61.0 | 56.7 | 59.8 | 51.9                            |
| American Indian/Alaska Native . . . . . | 66.0 | 64.4 | 61.8 | 59.0 | 58.3 | 57.3 | 58.1 | 53.0                            |
| Mexican-American male . . . . .         | ...  | ...  | ...  | 53.1 | 47.2 | 46.5 | 48.6 | 43.0                            |
| White male . . . . .                    | 49.8 | 50.0 | 47.8 | 46.4 | 43.9 | 41.9 | 42.7 | 42.9                            |

... Category not applicable.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure N

| <i>Race and sex</i>                     | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|------|---------------------------------|
| All persons . . . . .                   | 1.7  | 1.8  | 1.7  | 1.5  | 1.5  | 1.4  | 1.3  | 1.2                             |
| Black male . . . . .                    | 6.4  | 7.1  | 6.0  | 5.2  | 5.1  | 4.9  | 4.6  | 4.3                             |
| Black female . . . . .                  | 3.3  | 3.4  | 3.3  | 2.7  | 2.6  | 2.3  | 2.6  | 2.6                             |
| American Indian/Alaska Native . . . . . | ...  | ...  | ...  | 2.1  | 2.3  | 2.5  | 2.5  | 1.4                             |
| Puerto Rican* . . . . .                 | ...  | ...  | ...  | 1.8  | 1.4  | 1.4  | 1.0  | 2.0                             |

... Category not applicable.

\* The baseline for Puerto Ricans has been revised considerably since the target was established; States that had between 80 and 90 percent completion on a place-of-occurrence basis are now included in the calculation of rates.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure O

| <i>Race and sex</i>    | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year<br/>2000<br/>target</i> |
|------------------------|------|------|------|------|------|------|------|---------------------------------|
| All males . . . . .    | 13.6 | 13.6 | 13.2 | 13.4 | 12.7 | 12.2 | 12.1 | 10.5                            |
| All females . . . . .  | 4.8  | 4.9  | 4.9  | 4.6  | 4.6  | 4.3  | 4.2  | 4.1                             |
| Black male . . . . .   | ...  | ...  | ...  | 29.4 | 26.9 | 27.3 | 26.2 | 26.0                            |
| Black female . . . . . | ...  | ...  | ...  | 6.9  | 6.9  | 6.0  | 5.8  | 6.9                             |

... Category not applicable.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.



Figure P

| <i>Race and sex</i>        | 1991 | 1993 | <i>Year<br/>2000<br/>target</i> |
|----------------------------|------|------|---------------------------------|
| All persons . . . . .      | 58%  | 61%  | 70%                             |
| Black . . . . .            | 43%  | 46%  | 60%                             |
| Mexican-American . . . . . | 38%  | 45%  | 60%                             |
| Puerto Rican . . . . .     | 51%  | 37%  | 60%                             |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure Q

| <i>Race</i>                             | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|------|---------------------------------|
| Total population. . . . .               | 10.1 | 10.0 | 9.8  | 9.2  | 8.9  | 8.5  | 8.4  | 7.0                             |
| Black . . . . .                         | 18.8 | 18.5 | 18.6 | 18.0 | 17.6 | 16.8 | 16.5 | 11.0                            |
| American Indian/Alaska Native . . . . . | 13.0 | 12.7 | 13.4 | 13.1 | 11.3 | ---  | ---  | 8.5                             |
| Puerto Rican . . . . .                  | 9.9  | 11.6 | 11.7 | 9.9  | 9.7  | ---  | ---  | 8.0                             |

--- Data not available.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure R

| <i>Race</i>               | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | <i>Year<br/>2000<br/>target</i> |
|---------------------------|------|------|------|------|------|------|------|------|---------------------------------|
| Total population. . . . . | 22   | 21   | 19   | 18   | 18   | 17   | 15   | 15   | 15                              |
| Black . . . . .           | ...  | ...  | ...  | ...  | 28   | 26   | 24   | 25   | 16                              |

... Category not applicable.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey.

Figure S

| <i>Race</i>                             | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|------|------|---------------------------------|
| Total . . . . .                         | 54%  | 52%  | 52%  | 53%  | 54%  | 56%  | 57%  | 60%  | 75%                             |
| Black . . . . .                         | 25%  | 23%  | 16%  | 26%  | 28%  | 31%  | 33%  | 37%  | 75%                             |
| Hispanic . . . . .                      | 51%  | 48%  | 44%  | 52%  | 52%  | 56%  | 58%  | 61%  | 75%                             |
| American Indian/Alaska Native . . . . . | 47%  | 43%  | 47%  | 46%  | 53%  | 51%  | 44%  | ---  | 75%                             |

--- Data not available.

SOURCE: Ross Laboratories Mothers Survey; for American Indian/Alaska Native mothers, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Pediatric Nutrition Surveillance System.

Figure T

| <i>Race</i>                | 1988-91 | <i>Year<br/>2000<br/>target</i> |
|----------------------------|---------|---------------------------------|
| All persons . . . . .      | 29%     | 50%                             |
| Mexican-American . . . . . | 14%     | 50%                             |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

Figure U

| <i>Race and sex</i>                                       | 1991 | 1993 | Year<br>2000<br>target |
|---|------|------|------------------------|
| All adults with high blood pressure . . . . .             | 71%  | 72%  | 90%                    |
| White male 18–34 years with high blood pressure . . . . . | 34%  | 38%  | 80%                    |
| Black male 18–34 years with high blood pressure . . . . . | 40%  | 64%  | 80%                    |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure W

| <i>Race</i>                             | 1993 | Year<br>2000<br>target |
|---|------|------------------------|
| <b>Ever checked</b>                     |      |                        |
| All adults . . . . .                    | 71%  | 75%                    |
| Black . . . . .                         | 68%  | 75%                    |
| Mexican-American . . . . .              | 55%  | 75%                    |
| American Indian/Alaska Native . . . . . | 60%  | 75%                    |
| <b>Past 2 years</b>                     |      |                        |
| All adults . . . . .                    | 54%  | 75%                    |
| Mexican-American . . . . .              | 38%  | 75%                    |
| American Indian/Alaska Native . . . . . | 50%  | 75%                    |
| Asian/Pacific Islander . . . . .        | 44%  | 75%                    |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure Y

| <i>Race and sex</i>    | 1990 | 1991 | 1992 | 1993 | 1994 | Year<br>2000<br>target |
|------------------------|------|------|------|------|------|------------------------|
| All females . . . . .  | 23.1 | 22.7 | 21.9 | 21.5 | 21.0 | 20.6                   |
| Black female . . . . . | 27.5 | 27.7 | 27.0 | 27.1 | 27.0 | 25.0                   |

NOTE: 1994 data are provisional.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure Z

| <i>Race</i>                              | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | Year<br>2000<br>target |
|--|-------|-------|-------|-------|-------|-------|-------|------------------------|
| All persons . . . . .                    | 9.4%  | 9.6%  | 9.3%  | 9.6%  | 10.3% | 10.6% | 10.3% | 8%                     |
| Puerto Rican* . . . . .                  | ...   | ...   | ...   | 11.7% | 12.0% | 12.7% | 13.4% | 10%                    |
| American Indian/Alaska Native* . . . . . | ...   | ...   | 12.3% | 12.0% | 12.6% | 12.4% | 13.3% | 11%                    |
| Black . . . . .                          | 11.2% | 11.3% | 10.7% | 11.0% | 12.2% | 12.6% | 12.5% | 9%                     |

... Category not applicable.

\* Data are 3-year averages, plotted on the last year.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure AA

| <i>Race</i>                             | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|---------------------------------|
| All persons . . . . .                   | 38   | 38   | 38   | 38   | 38   | 40   | 34                              |
| Black . . . . .                         | 69   | 71   | 71   | 71   | 71   | 74   | 58                              |
| American Indian/Alaska Native . . . . . | 52   | 56   | 53   | 51   | 57   | 60   | 41                              |
| Mexican-American . . . . .              | ...  | ...  | 55.7 | 50.3 | 51.1 | 56.6 | 50                              |
| Puerto Rican* . . . . .                 | ...  | ...  | 40.7 | 47.2 | 48.7 | 48.5 | 42                              |

... Category not applicable.

\* The baseline for Puerto Ricans has been revised considerably since the target was established; States that had between 80 and 90 percent completion on a place-of-occurrence basis are now included in calculations of rates.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Figure BB

| <i>Race</i>                             | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|------|------|------|------|------|---------------------------------|
| All persons . . . . .                   | 9.1  | 9.5  | 10.3 | 10.4 | 10.5 | 9.8  | 9.4  | 3.5                             |
| Asian/Pacific Islander . . . . .        | 36.3 | 40.5 | 41.6 | 41.8 | 46.6 | 44.5 | 45.3 | 15.0                            |
| Black . . . . .                         | 28.3 | 29.5 | 33.0 | 31.9 | 31.7 | 29.1 | 26.8 | 10.0                            |
| Hispanic . . . . .                      | 18.3 | 19.1 | 21.4 | 22.8 | 22.4 | 20.6 | 19.5 | 5.0                             |
| American Indian/Alaska Native . . . . . | 18.1 | 19.9 | 18.9 | 16.3 | 16.3 | 14.6 | 17.4 | 5.0                             |

SOURCE: Centers for Disease Control and Prevention, National Center for Prevention Services, Tuberculosis Morbidity Data.

Figure CC

| <i>Race</i>                             | 1991 | 1994 | <i>Year<br/>2000<br/>target</i> |
|---|------|------|---------------------------------|
| All persons . . . . .                   | 80%  | 84%  | 95%                             |
| All Hispanic . . . . .                  | 63%  | 71%  | 95%                             |
| Mexican-American . . . . .              | 57%  | 69%  | 95%                             |
| Black . . . . .                         | 78%  | 82%  | 95%                             |
| American Indian/Alaska Native . . . . . | 70%  | 81%  | 95%                             |
| Asian/Pacific Islander . . . . .        | 70%  | 78%  | 95%                             |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Figure DD

| <i>Race</i>                             | 1985–86 | 1993–94 | <i>Year<br/>2000<br/>target</i> |
|---|---------|---------|---------------------------------|
| Black . . . . .                         | 5.0%    | 5.9%    | 8.0%                            |
| Hispanic . . . . .                      | 3.0%    | 4.3%    | 6.4%                            |
| American Indian/Alaska Native . . . . . | 0.3%    | 0.4%    | 0.6%                            |

SOURCE: Minorities and Women in the Health Fields, Health Resources and Services Administration.



# *Priority Areas*

# Priority Area 1 Physical Activity and Fitness

## Background

Physical activity has been demonstrated to have protective effects for several chronic diseases, including coronary heart disease, hypertension, noninsulin-dependent diabetes mellitus, osteoporosis, colon cancer, and depression and anxiety (1). On average, physically active people outlive those who are inactive (2). Regular physical activity can also help to maintain the functional independence of older adults and enhance the quality of life for people of all ages (3).

## Midcourse Modifications

Objective 1.13, reducing the difficulty of older persons performing self-care activities, was added as a shared objective of objective 17.3 because physical activity can help older adults maintain their abilities to perform self-care activities.

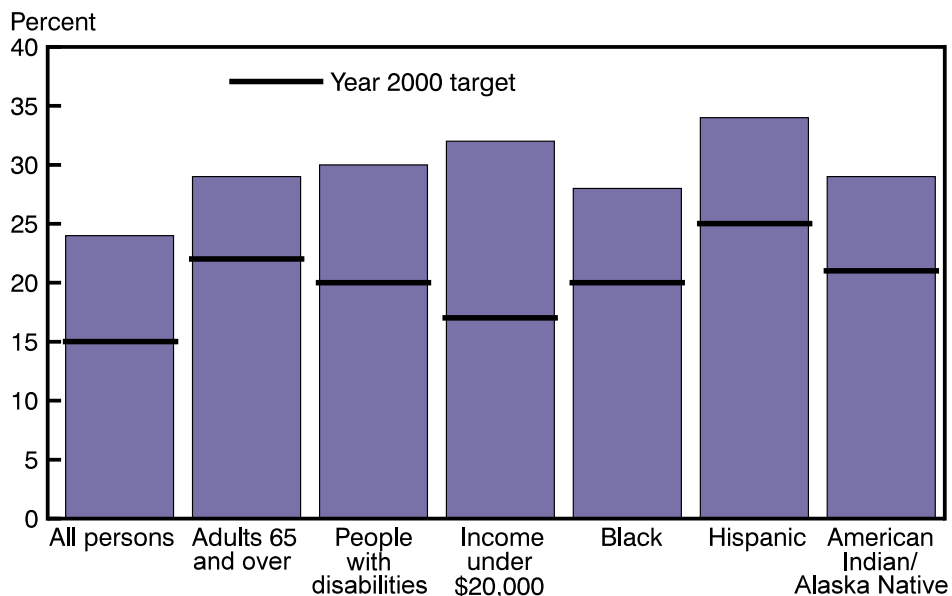
New subobjectives were added for the following objectives: Hispanics for light to moderate activity (1.3); blacks and Hispanics for vigorous activity (1.4); blacks, Hispanics, and American Indians/Alaska Natives for no leisure time physical activity (1.5); and Hispanic males and females for overweight people practicing safe weight-loss practices (1.7).

## Data Summary

### Highlights

Coronary heart disease death rates (objective 1.1) have declined for the total population. Overweight prevalence (1.2) has increased, moving further away from the target for the total population and for all special population subobjectives. Data from 1988–91 for adolescents and adults indicate that the prevalence of overweight has increased substantially since the 1976–80 baseline. Physical activity (1.3, 1.4, 1.6) has been increasing. However, participation in daily school physical education (1.8) has been decreasing for students in grades 9–12. The proportion of worksites

**Figure 2. Proportion of people 18 years and over who do not engage in leisure-time physical activity: United States, 1991, and year 2000 targets for objective 1.5**



|   | 1991 | Year 2000 target |
|---|------|------------------|
| All persons . . . . .                   | 24   | 15               |
| People 65 years and over . . . . .      | 29   | 22               |
| People with disabilities . . . . .      | 30   | 20               |
| Income less than \$20,000 . . . . .     | 32   | 17               |
| Black . . . . .                         | 28   | 20               |
| Hispanic . . . . .                      | 34   | 25               |
| American Indian/Alaska Native . . . . . | 29   | 21               |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

offering employer-sponsored physical activity and fitness programs (1.10) has increased substantially, surpassing the year 2000 targets.

### Summary of Progress

Of the 13 physical activity and fitness objectives, 1 has surpassed the target (1.10), 4 show progress toward the year 2000 targets (1.1, 1.3, 1.4, and 1.6), while 4 are moving away from the targets (1.2, 1.7, 1.8, and 1.9). Objectives 1.5 and 1.13 (noninstitutionalized population only) show no change. Data to update progress for two objectives (1.11 and 1.12) are not yet available.

### Data Issues

### Definitions

Physical activity and fitness as a recognized risk factor for health

outcomes is a relatively new concept, contributing to present difficulties in tracking some objectives. Calculations vary from simple counts (for example, weight-training 3 or more times a week) to complex formulas (for example, calculating average kilocalories expended per kilogram per day) (4). The intent of objective 1.3 (light to moderate physical activity) is to generate calorie-burning activity from a health standpoint by emphasizing the importance of regular physical activity that can be sustained throughout the lifespan. The sum of all physical activities performed at least 30 minutes per occasion 5 or more or 7 or more times a week regardless of the intensity has been defined as measuring this objective. To measure the proportion of adults performing vigorous physical activity (1.4), the predicted maximum cardiorespiratory capacity was estimated using age- and sex-based regression

equations and then multiplying by 50 percent (see Note with the text of objective 1.4). Then all the activities that were performed for at least 20 minutes that had a kilocalorie value that was equal to or greater than that 50 percent level were counted (5,6). The estimated number of people who exercise vigorously were respondents who performed these activities 3 or more times per week.

Overweight (objective 1.2) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 NHANES II reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective 1.2).

The data on inquiry for objective 1.12 refer to the proportion of providers who routinely provided service to 81–100 percent of their clients. Data on formulation of an exercise plan represent the proportion of providers who routinely provide this service to 81–100 percent of their clients who need this intervention.

### Comparability of Data Sources

Overweight (1.2) is being tracked with two data sources. The primary data source is the National Health and Nutrition Examination Survey (NHANES), which provided baseline data for most of the overweight objectives and the 1988–91 updates; these data are derived from measured height and weight. The second data source is the National Health Interview Survey (NHIS). This survey provides interim estimates shown in an earlier publication (7), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective 1.3 (light to moderate physical activity) is being tracked with the NHIS. Because the questionnaire changed in 1991, databases for all 3 years of data (1985, 1990, and 1991) were made as similar as possible before

calculating estimates. This process involved limiting the age group to 18–74 years (to correspond to the 1985 and 1990 surveys), and limiting the specific activities listed to those asked in all 3 years.

Data for objective 1.12, clinician counseling about physical activity, were obtained from two different surveys, making statements about trends problematic. The 1988 baseline of 30 percent from the American College of Physicians (ACP) survey was a random stratified sample of ACP members drawn from 21 geographic regions yielding an initial sample of 1,251 internists. The sampling frame for internists in the 1992 Primary Care Provider Surveys (PCPS) also contained a random stratified sample of ACP members, but was drawn from four geographic regions with oversampling of female members, yielding an initial sample of 1,200 internists.

### Proxy Measures

Regular performance of physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility (1.6) generally requires participation in a variety of physical activities as not all activities will satisfy all three factors. However, scoring parameters for strength, endurance, and flexibility are not yet available. Until research into these areas can provide such measures, for adults this objective will be tracked using data on an activity that increases muscular strength (weight-lifting) and an activity that increases flexibility (stretching) from the NHIS. The 1991, 1993, and 1995 data shown for students in grades 9–12 are based on self-reported participation in stretching exercises or strengthening exercises that were done 4 or more days per week from the Youth Risk Behavior Survey.

Objective 1.7 is to increase to at least 50 percent the proportion of overweight people who use sound dietary practices combined with regular physical activity to attain appropriate body weight. Respondents who reported they were overweight and were currently trying to lose weight or control their weight by eating fewer calories and exercising more were included in this objective. However, an assessment of the quality of dietary practices has not yet been coupled with a measure of regular physical activity. The 1985 questionnaire asked respondents

specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991 and 1993, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, “Are you currently doing any of these things to control your weight?” Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

Objective 1.9 targets time spent in school physical education classes devoted to activities that may be readily carried into adulthood because their performance requires only one or two people (such as swimming, bicycling, jogging, and racquet sports). The proxy measure for this objective is the percent of class time spent in actual physical activity. The 1983 baseline data show the percent of physical education class time spent being physically active for all students. The YRBS data for students in grades 9–12 show the percent who exercised in physical education class 21 or more minutes 3–5 times a week and 30 or more minutes 1 or more times per week. The 1995 data from the School Health Policies and Programs Study (SHPPS) show the proportion of physical education teachers devoting class time to specific activities.

### Data Availability

Data to update the physical activity objectives (1.3, 1.4, and 1.5) will be available in 1997 from the 1995 NHIS.

The 1984–85 baseline figures for 1.13 were derived by combining estimates for the noninstitutionalized population from the NHIS with data for the nursing home population from the National Nursing Home Survey (NNHS). At the present time, only data for the noninstitutionalized population are available to update progress. Update data for the total U.S. population will be available by combining data from the 1994 NHIS Second Supplement on Aging with data from the 1995 NNHS.

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**Table 1. Physical activity and fitness objective status**

|             | <i>Objective</i>   | <i>Baseline</i>       | <i>1992</i>         | <i>1993</i>       | <i>1994</i>       | <i>Target<br/>2000</i> |
|-------------|--|-----------------------|---------------------|-------------------|-------------------|------------------------|
| <b>1.1*</b> | <b>Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .                  | <sup>1</sup> 135      | 114                 | 114               | ---               | 100                    |
|             | a. Blacks . . . . .  | <sup>1</sup> 168      | 151                 | 154               | ---               | 115                    |
| <b>1.2*</b> | <b>Overweight prevalence</b>   |                       |                     |                   |                   |                        |
|             | (Based on measured height and weight unless otherwise indicated)                           |                       |                     |                   |                   |                        |
|             | Adults 20–74 years . . . . .   | <sup>2</sup> 26%      | <sup>3,4</sup> 34%  | ---               | ---               | 20%                    |
|             | Males . . . . .  | <sup>2</sup> 24%      | <sup>3,5</sup> 32%  | ---               | ---               | 20%                    |
|             | Females . . . . .  | <sup>2</sup> 27%      | <sup>3,6</sup> 36%  | ---               | ---               | 20%                    |
|             | Adolescents 12–19 years . . . . .  | <sup>2</sup> 15%      | <sup>3</sup> 21%    | ---               | ---               | 15%                    |
|             | a. Low-income females 20–74 years . . . . .  | <sup>2</sup> 37%      | <sup>3</sup> 47%    | ---               | ---               | 25%                    |
|             | b. Black females 20–74 years . . . . .   | <sup>2</sup> 44%      | <sup>3,7</sup> 49%  | ---               | ---               | 30%                    |
|             | c. Hispanic females 20–74 years . . . . .  | ---                   | ---                 | ---               | ---               | 25%                    |
|             | Hispanic females 20 years and over (self-reported) . . . . .                               | ...                   | <sup>8</sup> 32%    | <sup>8</sup> 33%  | ---               | ...                    |
|             | Mexican-American females 20–74 years . . . . .   | <sup>9</sup> 39%      | <sup>3,10</sup> 47% | ---               | ---               | ...                    |
|             | Cuban females 20–74 years . . . . .  | <sup>9</sup> 34%      | ---                 | ---               | ---               | ...                    |
|             | Puerto Rican females 20–74 years . . . . .   | <sup>9</sup> 37%      | ---                 | ---               | ---               | ...                    |
|             | d. American Indians/Alaska Natives 20 years and over . . . . .                             | <sup>11</sup> 29–75%  | <sup>8</sup> 36%    | <sup>8</sup> 48%  | ---               | 30%                    |
|             | e. People with disabilities 20 years and over (self-reported) . . . . .                    | <sup>8,12</sup> 36%   | <sup>8</sup> 37%    | <sup>8</sup> 38%  | ---               | 25%                    |
|             | f. Females with high blood pressure 20–74 years . . . . .                                  | <sup>2</sup> 50%      | ---                 | ---               | ---               | 41%                    |
|             | g. Males with high blood pressure 20–74 years . . . . .                                    | <sup>2</sup> 39%      | ---                 | ---               | ---               | 35%                    |
|             | h. Mexican American males 20–74 years . . . . .  | <sup>9</sup> 30%      | <sup>3,13</sup> 36% | ---               | ---               | 25%                    |
| <b>1.3*</b> | <b>Moderate physical activity</b>  |                       |                     |                   |                   |                        |
|             | People 6 years and over . . . . .  | ---                   | ---                 | ---               | ---               | 30%                    |
|             | People 18–74 years   |                       |                     |                   |                   |                        |
|             | 5 or more times per week . . . . .   | <sup>12</sup> 22%     | <sup>14</sup> 24%   | ---               | ---               | 30%                    |
|             | 7 or more times per week . . . . .   | <sup>12</sup> 16%     | <sup>14</sup> 17%   | ---               | ---               | 30%                    |
|             | a. Hispanics 18 years and over   |                       |                     |                   |                   |                        |
|             | 5 or more times per week . . . . .   | <sup>14</sup> 20%     | ---                 | ---               | ---               | 25%                    |
| <b>1.4</b>  | <b>Vigorous physical activity</b>  |                       |                     |                   |                   |                        |
|             | Children and adolescents 6–17 years . . . . .  | ---                   | ---                 | ---               | ---               | 75%                    |
|             | Children and adolescents 10–17 years . . . . .   | <sup>15</sup> 66%     | ---                 | ---               | ---               | 75%                    |
|             | Students in grades 9–12 . . . . .  | ...                   | <sup>16</sup> 37%   | 66%               | 64%               | 75%                    |
|             | People 18 years and over . . . . .   | <sup>12</sup> 12%     | <sup>14</sup> 16%   | ---               | ---               | 20%                    |
|             | a. Lower-income people 18 years and over . . . . .   | <sup>12</sup> 7%      | <sup>14</sup> 15%   | ---               | ---               | 12%                    |
|             | b. Blacks 18 years and over . . . . .  | <sup>14,a</sup> 12.8% | ---                 | ---               | ---               | 17%                    |
|             | c. Hispanics 18 years and over . . . . .   | <sup>14,a</sup> 13.6% | ---                 | ---               | ---               | 17%                    |
| <b>1.5</b>  | <b>Sedentary lifestyle</b>   |                       |                     |                   |                   |                        |
|             | People 6 years and over . . . . .  | ---                   | ---                 | ---               | ---               | 15%                    |
|             | People 18 years and over . . . . .   | <sup>12</sup> 24%     | <sup>14</sup> 24%   | ---               | ---               | 15%                    |
|             | a. People 65 years and over . . . . .  | <sup>12</sup> 43%     | <sup>14</sup> 29%   | ---               | ---               | 22%                    |
|             | b. People with disabilities . . . . .  | <sup>12</sup> 35%     | <sup>14</sup> 30%   | ---               | ---               | 20%                    |
|             | c. Low-income people . . . . .   | <sup>12</sup> 32%     | <sup>14</sup> 32%   | ---               | ---               | 17%                    |
|             | d. Blacks 18 years and over . . . . .  | <sup>14</sup> 28%     | ---                 | ---               | ---               | 20%                    |
|             | e. Hispanics 18 years and over . . . . .   | <sup>14</sup> 34%     | ---                 | ---               | ---               | 25%                    |
|             | f. American Indian/Alaska Natives 18 years and over . . . . .                              | <sup>14</sup> 29%     | ---                 | ---               | ---               | 21%                    |
| <b>1.6</b>  | <b>Muscular strength, endurance, and flexibility</b>                                       |                       |                     |                   |                   |                        |
|             | People 6 years and over . . . . .  | ---                   | ---                 | ---               | ---               | 40%                    |
|             | Students in grades 9–12  |                       |                     |                   |                   |                        |
|             | Stretching 4 or more times per week . . . . .  | ...                   | <sup>14</sup> 43%   | 55%               | <sup>17</sup> 53% | ...                    |
|             | Strengthening 4 or more times per week . . . . .   | ...                   | <sup>14</sup> 37%   | 52%               | <sup>17</sup> 50% | ...                    |
|             | People 18–64 years   |                       |                     |                   |                   |                        |
|             | Weightlifting . . . . .  | ...                   | <sup>16</sup> 11%   | <sup>14</sup> 16% | ---               | ...                    |
|             | Stretching . . . . .   | ...                   | <sup>14</sup> 27%   | ---               | ---               | ...                    |
| <b>1.7*</b> | <b>Sound weight loss practices among overweight<br/>people 12 years and over</b> . . . . . | ---                   | ---                 | ---               | ---               | 50%                    |
|             | Overweight males 18 years and over . . . . .   | <sup>12</sup> 25%     | <sup>14</sup> 19%   | 17%               | ---               | 50%                    |
|             | Overweight females 18 years and over . . . . .   | <sup>12</sup> 30%     | <sup>14</sup> 22%   | 19%               | ---               | 50%                    |
|             | a. Overweight Hispanic males 18 years and over . . . . .                                   | <sup>14</sup> 15%     | ---                 | 11%               | ---               | 24%                    |
|             | b. Overweight Hispanic females 18 years and over . . . . .                                 | <sup>14</sup> 13%     | ---                 | 16%               | ---               | 22%                    |



**Table 1. Physical activity and fitness objective status—Con.**

|             | <i>Objective</i>  | <i>Baseline</i>                          | <i>1992</i>         | <i>1993</i> | <i>1994</i>         | <i>Target<br/>2000</i>    |
|-------------|---|--|---------------------|-------------|---------------------|---------------------------|
| <b>1.8</b>  | <b>Daily school physical education</b>                                    |  |                     |             |                     |                           |
|             | Students in grades 1–12 . . . . .   | <sup>18</sup> 36%                        | ---                 | ---         | ---                 | 50%                       |
|             | Students in grades 9–12 . . . . .   | ...                                      | <sup>14</sup> 42%   | 34%         | <sup>17</sup> 25%   | ...                       |
|             | Students in middle/junior high schools                                    |  |                     |             |                     |                           |
|             | For 1 year . . . . .  | ...                                      | ...                 | ...         | <sup>17</sup> 13.0% | ...                       |
|             | For 2 or more years . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 33.4% | ...                       |
|             | Students in senior high schools   |  |                     |             |                     |                           |
|             | For 1 year . . . . .  | ...                                      | ...                 | ...         | <sup>17</sup> 31.9% | ...                       |
|             | For 2 years . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 20.1% | ...                       |
|             | For 3 years . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 9.2%  | ...                       |
| <b>1.9</b>  | <b>Active physical education class time</b>                               |  |                     |             |                     |                           |
|             | All students . . . . .  | <sup>19</sup> 27%                        | ---                 | ---         | ---                 | 50%                       |
|             | Students in grades 9–12   |  |                     |             |                     |                           |
|             | 21 or more minutes, 3–5 times per week . . . . .                          | ...                                      | <sup>14</sup> 36.7% | 35.3%       | <sup>17</sup> 33.3% | ...                       |
|             | 30 or more minutes, 1 or more times per week . . . . .                    | ...                                      | <sup>14</sup> 24.2% | 24.6%       | <sup>17</sup> 21.8% | ...                       |
|             | Physical education teachers devoting class time to:                       |  |                     |             |                     |                           |
|             | Jogging . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 46.5% | ...                       |
|             | Tennis . . . . .  | ...                                      | ...                 | ...         | <sup>17</sup> 30.3% | ...                       |
|             | Aerobic dance . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 29.6% | ...                       |
|             | Walking . . . . .   | ...                                      | ...                 | ...         | <sup>17</sup> 14.7% | ...                       |
|             | Swimming . . . . .  | ...                                      | ...                 | ...         | <sup>17</sup> 13.6% | ...                       |
| <b>1.10</b> | <b>Worksite fitness programs</b>  |  |                     |             |                     |                           |
|             | 50–99 employees . . . . .   | <sup>12</sup> 14%                        | 33%                 | ---         | ---                 | 20%                       |
|             | 100–249 employees . . . . .   | <sup>12</sup> 23%                        | 47%                 | ---         | ---                 | 35%                       |
|             | 250–749 employees . . . . .   | <sup>12</sup> 32%                        | 66%                 | ---         | ---                 | 50%                       |
|             | 750 and more employees . . . . .  | <sup>12</sup> 54%                        | 83%                 | ---         | ---                 | 80%                       |
|             | Group classes, workshops, or lectures . . . . .                           | ...                                      | 21%                 | ---         | <sup>17</sup> 19%   | ...                       |
| <b>1.11</b> | <b>Community fitness facilities</b>                                       |  |                     |             |                     |                           |
|             | Hiking, biking, and fitness trail miles . . . . .                         | <sup>20</sup> 1 per<br>71,000<br>people  | ---                 | ---         | ---                 | 1 per<br>10,000<br>people |
|             | Public swimming pools . . . . .   | <sup>20</sup> 1 per<br>53,000<br>people  | ---                 | ---         | ---                 | 1 per<br>25,000<br>people |
|             | Acres of park and recreation open space . . . . .                         | <sup>20</sup> 1.8 per<br>1,000<br>people | ---                 | ---         | ---                 | 4 per<br>1,000<br>people  |
| <b>1.12</b> | <b>Clinician counseling about physical activity</b>                       |  |                     |             |                     |                           |
|             | Percent of sedentary patients . . . . .                                   | <sup>21</sup> 30%                        | ---                 | ---         | ---                 | 50%                       |
|             | Percent of clinicians routinely providing services to 81–100% of patients |  |                     |             |                     |                           |
|             | Inquiry about exercise habits   |  |                     |             |                     |                           |
|             | Pediatricians . . . . .   | ...                                      | 16%                 | ---         | ---                 | 50%                       |
|             | Nurse practitioners . . . . .   | ...                                      | 30%                 | ---         | ---                 | 50%                       |
|             | Obstetricians/gynecologists . . . . .                                     | ...                                      | 14%                 | ---         | ---                 | 50%                       |
|             | Internists . . . . .  | ...                                      | 40%                 | ---         | ---                 | 50%                       |
|             | Family physicians . . . . .   | ...                                      | 19%                 | ---         | ---                 | 50%                       |
|             | Formulation of an exercise plan   |  |                     |             |                     |                           |
|             | Pediatricians . . . . .   | ...                                      | 16%                 | ---         | ---                 | 50%                       |
|             | Nurse practitioners . . . . .   | ...                                      | 14%                 | ---         | ---                 | 50%                       |
|             | Obstetricians/gynecologists . . . . .                                     | ...                                      | 13%                 | ---         | ---                 | 50%                       |
|             | Internists . . . . .  | ...                                      | 25%                 | ---         | ---                 | 50%                       |
|             | Family physicians . . . . .   | ...                                      | 18%                 | ---         | ---                 | 50%                       |

**Table 1. Physical activity and fitness objective status—Con.**

|              | <i>Objective</i>                                  | <i>Baseline</i>     | <i>1992</i>       | <i>1993</i>       | <i>1994</i> | <i>Target<br/>2000</i> |
|--------------|---|---------------------|-------------------|-------------------|-------------|------------------------|
| <b>1.13*</b> | <b>People with self care problems (per 1,000)</b> |                     |                   |                   |             |                        |
|              | People 65 years and over . . . . .                | 22111               | ---               | ---               | ---         | 90                     |
|              | Noninstitutionalized population . . . . .         | ...                 | <sup>15</sup> 777 | <sup>20</sup> 777 | ---         | ...                    |
|              | a. People 85 years and over . . . . .             | <sup>22</sup> 371   | ---               | ---               | ---         | 325                    |
|              | Noninstitutionalized population . . . . .         | ...                 | <sup>15</sup> 223 | <sup>20</sup> 204 | ---         | ...                    |
|              | b. Blacks 65 years and over . . . . .             | <sup>22,a</sup> 132 | ---               | ---               | ---         | 98                     |
|              | Noninstitutionalized population . . . . .         | ...                 | <sup>15</sup> 104 | <sup>20</sup> 112 | ---         | ...                    |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1976–80 data.

<sup>3</sup>1988–91 data.

<sup>4</sup>33 percent for ages 20 years and over.

<sup>5</sup>31 percent for ages 20 years and over.

<sup>6</sup>35 percent for ages 20 years and over.

<sup>7</sup>49 percent for ages 20 years and over.

<sup>8</sup>Estimate derived from self-reported height and weight.

<sup>9</sup>1982–84 data.

<sup>10</sup>47 percent for ages 20 years and over.

<sup>11</sup>1984–88 data for different tribes.

<sup>12</sup>1985 data.

<sup>13</sup>39 percent for ages 20 years and over.

<sup>14</sup>1991 data.

<sup>15</sup>1984 data.

<sup>16</sup>1990 data.

<sup>17</sup>1984–86 data.

<sup>18</sup>1995 data.

<sup>19</sup>1983 data.

<sup>20</sup>1986 data.

<sup>21</sup>1988 data.

<sup>22</sup>1984–85 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 1.1*, 1.1a              | National Vital Statistics System, CDC, NCHS.   |
| 1.2*, 1.2a,b,f,g        | National Health and Nutrition Examination Survey, CDC, NCHS.   |
| 1.2c, h                 | Data for Hispanics: National Health Interview Survey, CDC, NCHS.<br>Baseline for Mexican-Americans, Cubans, Puerto Ricans: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.<br>Updates for Mexican-Americans: National Health and Nutrition Examination Survey, CDC, NCHS.   |
| 1.2d                    | Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 1.2e                    | National Health Interview Survey, CDC, NCHS.   |
| 1.3*, 1.3a              | National Health Interview Survey, CDC, NCHS.   |
| 1.4                     | Baseline: For ages 10–17, National Children and Youth Fitness Study I, OASH, ODPHP.<br>Updates for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.<br>Baseline and updates for ages 18 and over: National Health Interview Survey, CDC, NCHS.   |
| 1.4a–c                  | National Health Interview Survey, CDC, NCHS.   |
| 1.5, 1.5a–f             | National Health Interview Survey, CDC, NCHS.   |
| 1.6                     | For students in grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.<br>For people 18–64: National Health Interview Survey, CDC, NCHS.   |
| 1.7*, 1.7a–b            | National Health Interview Survey, CDC, NCHS.   |
| 1.8                     | Baseline for grades 5–12: National Children and Youth Fitness Study I, OASH, ODPHP.<br>Baseline for grades 1–4: National Children and Youth Fitness Study II, OASH, ODPHP.<br>Baseline and updates for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.<br>For students in middle/junior and senior high schools: School Health Policies and Programs Study, CDC, NCCDPHP. |
| 1.9                     | Baseline for all students: Siedentop D. Developing Teaching Skills in Physical Education. Palo Alto, CA, Mayfield. 1983.<br>Updates for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP.   |

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 1.10                    | For physical education teachers: School Health Policies and Programs Study, CDC, NCCDPHP.<br>National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>1995 Update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. |
| 1.11                    | Baseline: McDonald BL and Cordell HK. Local Opportunities for Americans: Final Report of the Municipal and County Park and Recreation Study, Alexandria, VA: National Recreation and Park Association. 1988.                                |
| 1.12                    | 1988 Baseline: American College of Physicians Membership Survey of Prevention Practices in Adult Medicine.<br>1992 Baseline: Primary Care Provider Surveys, OASH, ODPHP.  |
| 1.13*, 1.13a            | Baseline: National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 1.13b                   | National Health Interview Survey, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.

# Physical Activity and Fitness Objectives

**1.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 2.1, 3.1, and 15.1

**1.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000.

Duplicate objectives: 2.1a, 3.1a, and 15.1a

**1.2\*:** Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 2.3, 15.10, and 17.12

**1.2a\*:** Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 2.3a, 15.10a, and 17.12a

**1.2b\*:** Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 2.3b, 15.10b, and 17.12b

**1.2c\*:** Reduce overweight to a prevalence of no more than

25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 2.3c, 15.10c, and 17.12c

**1.2d\*:** Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 2.3d, 15.10d, and 17.12d

**1.2e\*:** Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 2.3e, 15.10e, and 17.12e

**1.2f\*:** Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 2.3f, 15.10f, and 17.12f

**1.2g\*:** Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 2.3g, 15.10g, and 17.12g

**1.2h\*:** Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 2.3h, 15.10h, and 17.12h

**1.3\*:** Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

*NOTE: Light to moderate physical activity is activity that requires sustained, rhythmic muscular movements and is at least equivalent to sustained walking. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include walking, swimming, cycling, and dancing; gardening and yardwork; various domestic and occupational activities; and games and other childhood pursuits.*

Duplicate objectives: 15.11 and 17.13

**1.3a\*:** Increase to at least 25 percent the proportion of

Hispanics aged 18 and older who engage in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 15.11a and 17.13a

**1.4:** Increase to at least 20 percent the proportion of people aged 18 and older and to at least 75 percent the proportion of children and adolescents aged 6–17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

*NOTE: Vigorous physical activities are rhythmic, repetitive physical activities that use large muscle groups at 60 percent or more of maximum heart rate for age. An exercise heart rate of 60 percent of maximum heart rate for age is about 50 percent of maximal cardiorespiratory capacity and is sufficient for cardiorespiratory conditioning. Maximum heart rate equals roughly 220 beats per minute minus age.*

**1.4a:** Increase to at least 12 percent the proportion of lower-income people aged 18 and older (annual family income less than \$20,000) who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

**1.4b:** Increase to at least 17 percent the proportion of blacks aged 18 and older who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

**1.4c:** Increase to at least 17 percent the proportion of Hispanics aged 18 and older who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

**1.5:** Reduce to no more than 15 percent the proportion of people aged 6 and older who engage in no leisure-time physical activity.

*NOTE: For this objective, people with disabilities are people who report any limitation in activity due to chronic conditions.*

**1.5a:** Reduce to no more than 22 percent the proportion of people aged 65 and older who engage in no leisure-time physical activity.

**1.5b:** Reduce to no more than 20 percent the proportion of people with disabilities who engage in no leisure-time physical activity.

**1.5c:** Reduce to no more than 17 percent the proportion of lower-income people aged 18 and older (annual family income less than \$20,000) who engage in no leisure-time physical activity.

**1.5d:** Reduce to no more than 20 percent the proportion of blacks aged 18 and older who engage in no leisure-time physical activity.

**1.5e:** Reduce to no more than 25 percent the proportion of Hispanics aged 18 and older who engage in no leisure-time physical activity.

**1.5f:** Reduce to no more than 21 percent the proportion of American Indians/Alaska Natives aged 18 and older who engage in no leisure-time physical activity.

**1.6:** Increase to at least 40 percent the proportion of people aged 6 and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility.

**1.7\*:** Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7

**1.7a\*:** Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7a

**1.7b\*:** Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted

sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7b

**1.8:** Increase to at least 50 percent the proportion of children and adolescents in 1st–12th grade who participate in daily school physical education.

**1.9:** Increase to at least 50 percent the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities.

*NOTE: Lifetime activities are activities that may be readily carried into adulthood because they generally need only one or two people. Examples include swimming, bicycling, jogging, and racquet sports. Also counted as lifetime activities are vigorous social activities such as dancing. Competitive group sports and activities typically played only by young children such as group games are excluded.*

**1.10:** Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs as follows:

| Worksites with—       | 2000 target (percent) |
|-----------------------|-----------------------|
| 50–99 employees       | 20                    |
| 100–249 employees     | 35                    |
| 250–749 employees     | 50                    |
| 750 or more employees | 80                    |

**1.11:** Increase community availability and accessibility of physical activity and fitness facilities as follows:

Hiking, biking, and fitness trail miles: 1 per 10,000 people

Public swimming pools: 1 per 25,000 people

Acres of park and recreation open space: 4 per 1,000 people (250 people per managed acre)

**1.12:** Increase to at least 50 percent the proportion of primary care providers who routinely assess and counsel their patients regarding the frequency, duration, type, and intensity of each patient’s physical activity practices.

**1.13\*:** Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

*NOTE: Personal care activities are bathing, dressing, using the toilet, getting in and out of bed or chair, and eating.*

Duplicate objective: 17.3 and age-related objective for people aged 65 and older

**1.13a\*:** Reduce to no more than 325 per 1,000 people the proportion of all people aged 85 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3a

**1.13b\*:** Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3b

\*Duplicate objective.

## Priority Area 2 Nutrition

### Background

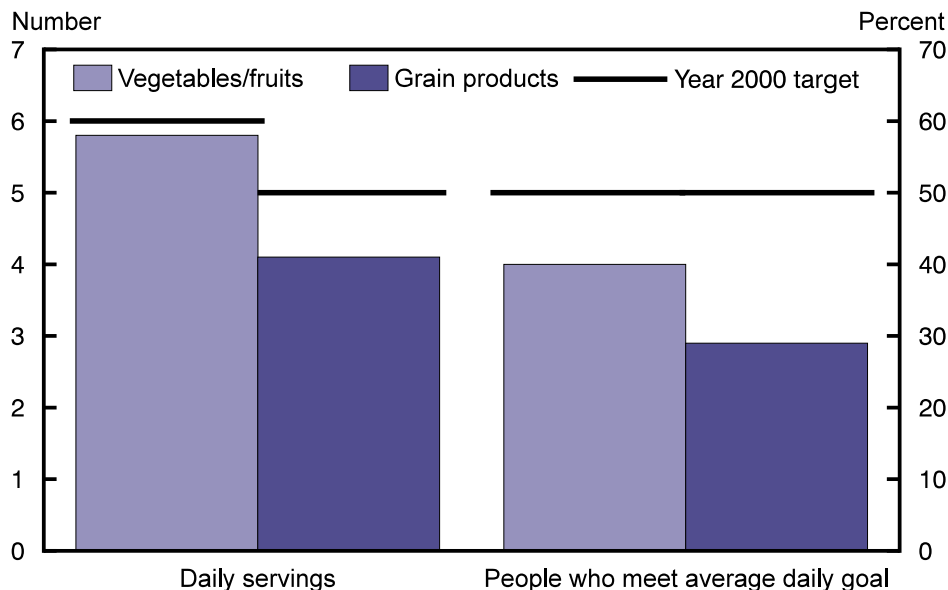
Dietary factors contribute substantially to preventable illness and premature death in the United States. For the majority of adults who do not smoke and do not drink excessively, what they eat is the most significant controllable risk factor affecting their long-term health (1). Five major causes of death are associated with dietary factors: coronary heart disease, some types of cancer, stroke, noninsulin-dependent diabetes mellitus, and coronary artery disease (2). In general, once-prevalent nutrient deficiencies have been replaced by excesses and imbalances of other food components in the diet. Undernutrition still occurs in some groups of people, however, including those who are isolated or economically deprived.

### Midcourse Modifications

Four objectives were modified in the Nutrition Priority Area. Objective 2.5 (fat intake) and objective 2.6 (fruit, vegetable, and grain intake) will now include measurement of the proportion of people who meet the average daily goals of the *Dietary Guidelines* for fat intake as a percentage of calories and for the number of servings of fruits, vegetables, and grains. To be consistent with the *Dietary Guidelines* and the *Food Guide Pyramid*, objective 2.6 will include people 2 years and over and objective 2.8 (calcium-rich food intake) will measure milk and milk product consumption for children 2–10 years of age. In addition, objective 2.8 was revised to include people 11–24 years of age, to be consistent with the age grouping in the Recommended Dietary Allowances. A new subobjective for females 11–24 years of age was added because adolescent and young adult females, in particular, should increase consumption of calcium-rich food to decrease the risks of osteoporosis in later life. The wording for objective 2.19 (nutrition education in schools) changed from “quality” to “comprehensive” school health education.

Six objectives were added to the Nutrition Priority Area from other

**Figure 3. Vegetable, fruit, and grain consumption: United States, 1989–91, and year 2000 targets for objective 2.6**



|  | Vegetables and fruits | Grain products |
|--|-----------------------|----------------|
| Average number of daily servings . . . . .   | 4.1                   | 5.8            |
| Year 2000 target . . . . .                   | 5.0                   | 6.0            |
| People who meet average daily goal . . . . . | 29.0                  | 40.0           |
| Year 2000 target . . . . .                   | 50.0                  | 50.0           |

SOURCE: U.S. Department of Agriculture, Continuing Survey of Food Intakes by Individuals.

priority areas. These are: stroke deaths (2.22), colorectal cancer deaths (2.23), diabetes incidence and prevalence (2.24), high blood cholesterol prevalence (2.25), controlled high blood pressure (2.26), and mean serum cholesterol levels (2.27).

In addition to the new subobjective for intake of calcium-rich foods described previously, the following new subobjectives were added: blacks for cancer deaths (2.2), Mexican-American men for overweight prevalence (2.3), Hispanic males and females for overweight people practicing sound weight-loss practices (2.7), and black and Hispanic caregivers for the adoption of infant feeding practices to reduce baby bottle tooth decay (2.12).

### Data Summary

#### Highlights

Overweight prevalence (2.3) has increased for the total population and for all special population subobjectives.

Data from 1988–91 for adolescents and adults indicate that the prevalence of overweight has increased substantially since the 1976–80 baseline. In relation to increased overweight prevalence, the proportion of overweight adults who use exercise and dieting to lose weight (2.7) has decreased. Data for 1992–94 indicate an increase in diabetes incidence (2.24).

There has been improvement in a number of nutrition objectives. Coronary heart disease (2.1), cancer (2.2), and stroke (2.22) mortality continue to decline for the total population. The age-adjusted death rate for colorectal cancer (2.23) surpassed the year 2000 target. The average dietary fat intake among people age 2 years and over (expressed as percent of calories from fat) has decreased (2.5) as has growth retardation among low-income children age 5 years and under (2.4). More processed foods have useful and informative nutrition labeling (2.14) and an increased proportion of restaurants are offering low-fat and low-calorie

selections (2.16). Additionally, the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees has increased (2.20).

## Summary of Progress

Of the 27 objectives in this area, 4 objectives (2.4, 2.15, 2.23, and 2.25) have met or surpassed the target. Progress toward the targets has been made on 10 objectives (2.1, 2.2, 2.5, 2.11, 2.14, 2.16, 2.20, 2.22, 2.26, and 2.27). Four objectives moved away from the target: 2.3, 2.7, 2.9, and 2.24. Objective 2.13 shows no change from the baseline and objective 2.10 shows mixed results for anemia prevalence. Seven objectives have no new data beyond the baseline (2.6, 2.8, 2.12, 2.17, 2.18, 2.19, and 2.21).

## Data Issues

### Definitions

Overweight (2.3) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 NHANES II reference population 20–29 years of age. For adolescents, overweight is defined as the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective 2.3).

Objective 2.12 addresses feeding practices that prevent baby bottle tooth decay. The measure used to establish a baseline for this objective for the total population, caregivers with less than a high school education (2.12a), blacks (2.12c), and Hispanics (2.12d) is for children 6–23 months old. For this objective, feeding practices to prevent baby bottle tooth decay include child no longer using a bottle, never used a bottle, or if the child is still using a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

The data on inquiry about diet and nutrition for objective 2.21 refer to the proportion of providers who routinely provided these services to 81–100 percent of their clients. The data on formulation of a diet and nutrition plan represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the plan.

Objective 2.26 addresses the proportion of people with hypertension

whose blood pressure is under control. High blood pressure is defined as blood pressure greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as using antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

### Data Source Description

Growth retardation among low-income children (2.4) is tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in the scope of surveillance could affect the comparability of estimates.

### Comparability of Data Sources

Overweight (2.3) is being tracked with two data sources. The primary data source is the National Health and Nutrition Examination Survey (NHANES), which provided baseline data for most of the overweight objectives and the 1988–91 updates; these data are derived from measured height and weight. The second data source is the National Health Interview Survey (NHIS). This survey provides interim estimates shown in an earlier publication (3), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

For the use of food labels by adults (2.13) the 1988 baseline measure and 1990 and 1994 updates are from the Health and Diet Survey, Food and Drug Administration. After receiving a description of food labels, respondents were asked if they read food labels. The 1991 and 1993 updates from the NHIS asked respondents how often they read food labels for calories, fat and/or cholesterol content. Respondents answering “always,” “often,” or “sometimes” were considered to be

making nutritious food selections using the food labels.

## Proxy Measures

Objective 2.7 is to increase to at least 50 percent the proportion of overweight people who use sound dietary practices combined with regular physical activity to attain appropriate body weight. Respondents who reported they were overweight and were currently trying to lose weight or control their weight by eating fewer calories and exercising more were included in this objective. However, an assessment of the quality of dietary practices has not yet been coupled with a measure of regular physical activity. The 1985 questionnaire asked respondents specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991 and 1993, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, “Are you currently doing any of these things to control your weight?” Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

### Data Availability

Updates for objectives 2.3, 2.5, 2.25, 2.26, and 2.27 will be obtained from the National Health and Nutrition Examination Survey (NHANES III), Phase II, available in 1997.

## References

1. U.S. Department of Health and Human Services. The Surgeon General's report on nutrition and health. Washington: Public Health Service. 1988.
2. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington: Public Health Service. 1991.
3. National Center for Health Statistics. Healthy people 2000 review, 1992. Hyattsville, Maryland: Public Health Service. 1993.

**Table 2. Nutrition objective status**

|             | <i>Objective</i>   | <i>Baseline</i>      | <i>1992</i>         | <i>1993</i>       | <i>1994</i>       | <i>Target<br/>2000</i> |
|-------------|--|----------------------|---------------------|-------------------|-------------------|------------------------|
| <b>2.1*</b> | <b>Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .    | <sup>1</sup> 135     | 114                 | 114               | ---               | 100                    |
|             | a. Blacks . . . . .  | <sup>1</sup> 168     | 151                 | 154               | ---               | 115                    |
| <b>2.2*</b> | <b>Cancer deaths (age adjusted per 100,000)</b> . . . . .                    | <sup>1</sup> 134     | 133                 | 133               | <sup>2</sup> 132  | 130                    |
|             | a. Blacks . . . . .  | <sup>3</sup> 182     | 178                 | 177               | <sup>2</sup> 176  | 175                    |
| <b>2.3*</b> | <b>Overweight prevalence</b>   |                      |                     |                   |                   |                        |
|             | (Based on measured height and weight unless otherwise indicated)             |                      |                     |                   |                   |                        |
|             | Adults 20–74 years . . . . .   | <sup>4</sup> 26%     | <sup>5,6</sup> 34%  | ---               | ---               | 20%                    |
|             | Males . . . . .  | <sup>4</sup> 24%     | <sup>5,7</sup> 32%  | ---               | ---               | 20%                    |
|             | Females . . . . .  | <sup>4</sup> 27%     | <sup>5,8</sup> 36%  | ---               | ---               | 20%                    |
|             | Adolescents 12–19 years . . . . .  | <sup>4</sup> 15%     | <sup>5</sup> 21%    | ---               | ---               | 15%                    |
|             | a. Low-income females 20–74 years . . . . .                                  | <sup>4</sup> 37%     | <sup>5</sup> 47%    | ---               | ---               | 25%                    |
|             | b. Black females 20–74 years . . . . .                                       | <sup>4</sup> 44%     | <sup>5,9</sup> 49%  | ---               | ---               | 30%                    |
|             | c. Hispanic females 20–74 years . . . . .                                    | ---                  | ---                 | ---               | ---               | 25%                    |
|             | Hispanic females 20 years and over (self-reported) . . . . .                 | ...                  | <sup>10</sup> 32%   | <sup>10</sup> 33% | ---               | ...                    |
|             | Mexican-American females 20–74 years . . . . .                               | <sup>11</sup> 39%    | <sup>5,12</sup> 47% | ---               | ---               | ...                    |
|             | Cuban females 20–74 years . . . . .  | <sup>11</sup> 34%    | ---                 | ---               | ---               | ...                    |
|             | Puerto Rican females 20–74 years . . . . .                                   | <sup>11</sup> 37%    | ---                 | ---               | ---               | ...                    |
|             | d. American Indians/Alaska Natives 20 years and over . . . . .               | <sup>13</sup> 29–75% | <sup>10</sup> 36%   | <sup>10</sup> 48% | ---               | 30%                    |
|             | e. People with disabilities 20 years and over (self-reported) . . . . .      | <sup>10,14</sup> 36% | <sup>10</sup> 37%   | <sup>10</sup> 38% | ---               | 25%                    |
|             | f. Females with high blood pressure 20–74 years . . . . .                    | <sup>4</sup> 50%     | ---                 | ---               | ---               | 41%                    |
|             | g. Males with high blood pressure 20–74 years . . . . .                      | <sup>4</sup> 39%     | ---                 | ---               | ---               | 35%                    |
|             | h. Mexican-American males 20–74 years . . . . .                              | <sup>11</sup> 30%    | <sup>5,15</sup> 36% | ---               | ---               | 25%                    |
| <b>2.4</b>  | <b>Growth retardation among low-income children</b>                          |                      |                     |                   |                   |                        |
|             | <b>5 years and under</b> . . . . .   | <sup>16</sup> 11%    | 8%                  | 8%                | 8%                | 10%                    |
|             | a. Low-income black children under 1 year . . . . .                          | <sup>16</sup> 15%    | 15%                 | 16%               | 16%               | 10%                    |
|             | b. Low-income Hispanic children under 1 year . . . . .                       | <sup>16</sup> 13%    | 8%                  | 7%                | 7%                | 10%                    |
|             | c. Low-income Asian children 1 year . . . . .                                | <sup>16</sup> 16%    | 9%                  | 9%                | 8%                | 10%                    |
|             | d. Low-income Asian/Pacific Islander children 1 year . . . . .               | <sup>16</sup> 14%    | 12%                 | 11%               | 11%               | 10%                    |
|             | e. Low-income Asian/Pacific Islander children age 2–4 years . . . . .        | <sup>16</sup> 16%    | 11%                 | 10%               | 10%               | 10%                    |
| <b>2.5*</b> | <b>Dietary fat intake among people 2 years and over</b>                      |                      |                     |                   |                   |                        |
|             | National Health and Nutrition Examination Survey                             |                      |                     |                   |                   |                        |
|             | Average percent of calories from total fat <sup>17</sup> . . . . .           | <sup>4,18</sup> 36%  | <sup>5</sup> 34%    | ---               | ---               | 30%                    |
|             | Average percent of calories from saturated fat <sup>17</sup> . . . . .       | <sup>4,18</sup> 13%  | <sup>5</sup> 12%    | ---               | ---               | 10%                    |
|             | Percent who met goal for fat <sup>19</sup> . . . . .                         | <sup>5</sup> 21%     | ---                 | ---               | ---               | 50%                    |
|             | Percent who met goal for saturated fat <sup>19</sup> . . . . .               | <sup>5</sup> 21%     | ---                 | ---               | ---               | 50%                    |
|             | Continuing Survey of Food Intakes by Individuals                             |                      |                     |                   |                   |                        |
|             | Average percent of calories from total fat <sup>17</sup> . . . . .           | <sup>20</sup> 34%    | ---                 | ---               | 33%               | 30%                    |
|             | Average percent of calories from saturated fat <sup>17</sup> . . . . .       | <sup>20</sup> 12%    | ---                 | ---               | 11%               | 10%                    |
|             | Percent who met goal for fat . . . . .                                       | <sup>20,21</sup> 22% | ---                 | ---               | <sup>19</sup> 32% | 50%                    |
|             | Percent who met goal for saturated fat . . . . .                             | <sup>20,21</sup> 21% | ---                 | ---               | <sup>19</sup> 34% | 50%                    |
| <b>2.6*</b> | <b>Average daily intake of vegetables, fruits, and grain products</b>        |                      |                     |                   |                   |                        |
|             | People 2 years and over <sup>22</sup>  |                      |                     |                   |                   |                        |
|             | Average number of servings   |                      |                     |                   |                   |                        |
|             | Vegetables and fruits . . . . .  | <sup>20</sup> 4.1    | ---                 | ---               | ---               | 5.0                    |
|             | Grain products . . . . .   | <sup>20</sup> 5.8    | ---                 | ---               | ---               | 6.0                    |
|             | Proportion who met Dietary Guidelines' goal                                  |                      |                     |                   |                   |                        |
|             | Vegetables and fruits . . . . .  | <sup>20</sup> 29%    | ---                 | ---               | ---               | 50%                    |
|             | Grain products . . . . .   | <sup>20</sup> 40%    | ---                 | ---               | ---               | 50%                    |
| <b>2.7*</b> | <b>Sound weight loss practices among overweight people 12 years and over</b> |                      |                     |                   |                   |                        |
|             | Overweight males 18 years and over . . . . .                                 | ---                  | ---                 | ---               | ---               | 50%                    |
|             | Overweight females 18 years and over . . . . .                               | <sup>14</sup> 25%    | <sup>22</sup> 19%   | 17%               | ---               | 50%                    |
|             | a. Overweight Hispanic males 18 years and over . . . . .                     | <sup>14</sup> 30%    | <sup>22</sup> 22%   | 19%               | ---               | 50%                    |
|             | b. Overweight Hispanic females 18 years and over . . . . .                   | <sup>22</sup> 15%    | ---                 | 11%               | ---               | 24%                    |
|             |  | <sup>22</sup> 13%    | ---                 | 16%               | ---               | 22%                    |
| <b>2.8</b>  | <b>Foods rich in calcium (percent who consume)</b>                           |                      |                     |                   |                   |                        |
|             | Average of 3 or more servings daily  |                      |                     |                   |                   |                        |
|             | People 11–24 years . . . . .   | <sup>20,21</sup> 20% | ---                 | ---               | ---               | 50%                    |
|             | Pregnant and lactating females . . . . .                                     | <sup>20,21</sup> 22% | ---                 | ---               | ---               | 50%                    |
|             | Average of 2 or more servings daily  |                      |                     |                   |                   |                        |



**Table 2. Nutrition objective status—Con.**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>         | <i>1993</i>       | <i>1994</i>         | <i>Target<br/>2000</i> |
|--------------|---|----------------------|---------------------|-------------------|---------------------|------------------------|
|              | Children 2–10 years . . . . .   | <sup>19,20</sup> 48% | ---                 | ---               | ---                 | 75%                    |
|              | People 25 years and over <sup>23</sup> . . . . .  | <sup>19,20</sup> 21% | ---                 | ---               | ---                 | 50%                    |
|              | Proportion who met average daily goal   |                      |                     |                   |                     |                        |
|              | a. Females 11–24 years . . . . .  | <sup>20</sup> 13%    | ---                 | ---               | ---                 | 50%                    |
| <b>2.9</b>   | <b>Salt and sodium intake</b>   |                      |                     |                   |                     |                        |
|              | Prepare foods without adding salt . . . . .   | <sup>24</sup> 43%    | ---                 | ---               | ---                 | 65%                    |
|              | People who rarely or never use salt at table . . . . .  | <sup>20</sup> 60%    | ---                 | ---               | 56%                 | 80%                    |
|              | Adults who regularly purchase foods with reduced salt and sodium content. . . . .               | <sup>16</sup> 20%    | ---                 | ---               | <sup>25</sup> 19%   | 40%                    |
| <b>2.10</b>  | <b>Iron deficiency prevalence</b>   |                      |                     |                   |                     |                        |
|              | Children 1–4 years . . . . .  | ---                  | ---                 | ---               | ---                 | 3%                     |
|              | Children 1–2 years . . . . .  | 49%                  | ---                 | ---               | ---                 | 3%                     |
|              | Children 3–4 years . . . . .  | 44%                  | ---                 | ---               | ---                 | 3%                     |
|              | Females of childbearing age (20–44 years). . . . .  | 45%                  | ---                 | ---               | ---                 | 3%                     |
|              | a. Low-income children 1–2 years. . . . .   | 421%                 | ---                 | ---               | ---                 | 10%                    |
|              | b. Low-income children 3–4 years. . . . .   | 410%                 | ---                 | ---               | ---                 | 5%                     |
|              | c. Low-income females 20–44 years . . . . .   | 48%                  | ---                 | ---               | ---                 | 4%                     |
|              | Anemia prevalence   |                      |                     |                   |                     |                        |
|              | d. Alaska Native children 1–5 years . . . . .   | <sup>26</sup> 22–28% | <sup>27</sup> 31%   | <sup>27</sup> 29% | <sup>27</sup> 27%   | 10%                    |
|              | e. Black, low-income pregnant females 15–44 years (third trimester). . . . .                    | <sup>16</sup> 41%    | 43%                 | 44%               | 43%                 | 20%                    |
| <b>2.11*</b> | <b>Breastfeeding</b>  |                      |                     |                   |                     |                        |
|              | During early postpartum period <sup>28</sup> . . . . .  | <sup>16</sup> 54%    | <sup>29</sup> 56%   | <sup>30</sup> 57% | <sup>25</sup> 60%   | 75%                    |
|              | a. Low-income mothers. . . . .  | <sup>16</sup> 32%    | <sup>29</sup> 38%   | <sup>30</sup> 40% | <sup>25</sup> 42%   | 75%                    |
|              | b. Black mothers. . . . .   | <sup>16</sup> 25%    | <sup>29</sup> 31%   | <sup>30</sup> 33% | <sup>25</sup> 37%   | 75%                    |
|              | c. Hispanic mothers . . . . .   | <sup>16</sup> 51%    | <sup>29</sup> 56%   | <sup>30</sup> 58% | <sup>25</sup> 61%   | 75%                    |
|              | d. American Indian/Alaska Native mothers . . . . .  | <sup>16</sup> 47%    | 55%                 | 51%               | 44%                 | 75%                    |
|              | At age 5–6 months . . . . .   | <sup>16</sup> 21%    | <sup>29</sup> 21%   | <sup>30</sup> 21% | <sup>25</sup> 23%   | 50%                    |
|              | a. Low-income mothers. . . . .  | <sup>16</sup> 9%     | <sup>29</sup> 10%   | <sup>30</sup> 11% | <sup>25</sup> 12%   | 50%                    |
|              | b. Black mothers. . . . .   | <sup>16</sup> 8%     | <sup>29</sup> 9%    | <sup>30</sup> 10% | <sup>25</sup> 12%   | 50%                    |
|              | c. Hispanic mothers . . . . .   | <sup>16</sup> 16%    | <sup>29</sup> 18%   | <sup>30</sup> 19% | <sup>25</sup> 21%   | 50%                    |
|              | d. American Indian/Alaska Native mothers . . . . .  | <sup>16</sup> 28%    | 24%                 | 28%               | 24%                 | 50%                    |
| <b>2.12*</b> | <b>Baby bottle tooth decay</b>  |                      |                     |                   |                     |                        |
|              | Parents and caregivers who use preventive feeding practices . . . . .                           | <sup>22</sup> 55%    | ---                 | ---               | ---                 | 75%                    |
|              | a. Parent and caregivers with less than high school education . . . . .                         | <sup>22</sup> 36%    | ---                 | ---               | ---                 | 65%                    |
|              | b. American Indian/Alaska Native parents and caregivers . . . . .                               | <sup>31</sup> 74%    | ---                 | ---               | ---                 | 65%                    |
|              | c. Black parents and caregivers . . . . .   | <sup>22</sup> 48%    | ---                 | ---               | ---                 | 65%                    |
|              | d. Hispanic parents and caregivers . . . . .  | <sup>22</sup> 39%    | ---                 | ---               | ---                 | 65%                    |
| <b>2.13</b>  | <b>Use of food labels.</b> . . . .  | <sup>16</sup> 74%    | <sup>3</sup> 76%    | ---               | 74%                 | 85%                    |
|              | Read food labels for calories, fat, and/or cholesterol content . . . . .                        | ...                  | <sup>22</sup> 64%   | 66%               | ---                 | ...                    |
| <b>2.14</b>  | <b>Informative nutrition labeling</b>   |                      |                     |                   |                     |                        |
|              | Processed foods . . . . .   | <sup>16</sup> 60%    | <sup>22</sup> 66%   | 76%               | <sup>25</sup> 96%   | 100%                   |
|              | Fresh produce . . . . .   | <sup>32</sup> 77%    | ...                 | ---               | 81%                 | 90%                    |
|              | Fresh seafood. . . . .  | <sup>32,a</sup> 74%  | ...                 | ---               | 77%                 | 90%                    |
|              | Fresh meat/poultry . . . . .  | <sup>25</sup> 72%    | ...                 | ...               | ...                 | 40%                    |
|              | Carry-away foods . . . . .  | ---                  | ---                 | ---               | ---                 | 40%                    |
| <b>2.15</b>  | <b>Availability of reduced-fat processed foods</b> . . . . .                                    | <sup>33</sup> 2,500  | <sup>22</sup> 5,618 | ---               | ---                 | 5,000                  |
| <b>2.16</b>  | <b>Low-fat, low-calorie restaurant food choices (number of brand items)</b>                     |                      |                     |                   |                     |                        |
|              | Proportion of large chain restaurants offering at least one low-fat, low-calorie item . . . . . | <sup>34</sup> 70%    | <sup>3</sup> 75%    | ---               | ---                 | 90%                    |
| <b>2.17</b>  | <b>Nutritious school and child care food services.</b> . . . .                                  | ---                  | ---                 | ---               | ---                 | 90%                    |
|              | Schools offering lunches with an average of:  |                      |                     |                   |                     |                        |
|              | 30% or less of calories from total fat . . . . .  | <sup>32</sup> 1%     | ...                 | ---               | ---                 | ...                    |
|              | Less than 10% of calories from saturated fat . . . . .  | <sup>32</sup> 1%     | ...                 | ---               | ---                 | ...                    |
|              | Schools offering breakfasts in USDA program with an average of:                                 |                      |                     |                   |                     |                        |
|              | 30% or less of calories from total fat . . . . .  | <sup>32</sup> 44%    | ...                 | ---               | ---                 | ...                    |
|              | Less than 10% of calories from saturated fat . . . . .  | <sup>32</sup> 4%     | ...                 | ---               | ---                 | ...                    |
|              | Schools with initiatives to reduce fat  |                      |                     |                   |                     |                        |
|              | Drained browned meat prior to serving . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 84.9% | ...                    |
|              | Spooned solid fat from chilled meat or poultry . . . . .  | ...                  | ...                 | ...               | <sup>25</sup> 69.6% | ...                    |
|              | Baked french fries instead of frying . . . . .  | ...                  | ...                 | ...               | <sup>25</sup> 45.1% | ...                    |

**Table 2. Nutrition objective status—Con.**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>         | <i>1993</i>       | <i>1994</i>         | <i>Target<br/>2000</i> |
|--------------|---|----------------------|---------------------|-------------------|---------------------|------------------------|
|              | Did not provide butter or margarine   |                      |                     |                   |                     |                        |
|              | Middle/junior high schools . . . . .  | ...                  | ...                 | ...               | <sup>25</sup> 28.9% | ...                    |
|              | Senior high schools . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 27.1% | ...                    |
|              | Schools offering fresh fruit  |                      |                     |                   |                     |                        |
|              | Daily . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 44.0% | ...                    |
|              | More than once a week . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 22.1% | ...                    |
|              | Schools offering fresh vegetables   |                      |                     |                   |                     |                        |
|              | Daily . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 19.2% | ...                    |
|              | More than once a week . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 23.7% | ...                    |
| <b>2.18</b>  | <b>In need of home-delivered meals for older adults</b> . . . . .             | <sup>22</sup> 7%     | ---                 | ---               | ---                 | 80%                    |
| <b>2.19</b>  | <b>Nutrition education in schools</b> . . . . .                               | <sup>3</sup> 60%     | ---                 | ---               | ---                 | 75%                    |
|              | Dietary and nutrition education in at least one class                         |                      |                     |                   |                     |                        |
|              | Middle/junior high schools . . . . .  | ...                  | ...                 | ...               | <sup>25</sup> 83.2% | ...                    |
|              | Senior high schools . . . . .   | ...                  | ...                 | ...               | <sup>25</sup> 85.0% | ...                    |
| <b>2.20</b>  | <b>Worksite nutrition/weight management programs</b>                          |                      |                     |                   |                     |                        |
|              | Nutrition education . . . . .   | <sup>14</sup> 17%    | 31%                 | ---               | ---                 | 50%                    |
|              | Weight control . . . . .  | <sup>14</sup> 15%    | 24%                 | ---               | ---                 | 50%                    |
|              | Nutrition education and/or weight control . . . . .                           | ...                  | 37%                 | ---               | ---                 | 50%                    |
|              | Nutrition or cholesterol group classes, workshops, or lectures . . . . .      | ...                  | 17%                 | ---               | <sup>25</sup> 18%   | 50%                    |
|              | Weight management group classes, workshops, or lectures . . . . .             | ...                  | 15%                 | ---               | <sup>25</sup> 14%   | 50%                    |
| <b>2.21</b>  | <b>Nutrition assessment, counseling, and referral by clinicians</b> . . . . . | <sup>16</sup> 40–50% | ---                 | ---               | ---                 | 75%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients      |                      |                     |                   |                     |                        |
|              | Inquiry about diet/nutrition  |                      |                     |                   |                     |                        |
|              | Pediatricians . . . . .   | ...                  | 53%                 | ---               | ---                 | 75%                    |
|              | Nurses . . . . .  | ...                  | 46%                 | ---               | ---                 | 75%                    |
|              | Obstetricians/gynecologists . . . . .   | ...                  | 15%                 | ---               | ---                 | 75%                    |
|              | Internists . . . . .  | ...                  | 36%                 | ---               | ---                 | 75%                    |
|              | Family physicians . . . . .   | ...                  | 19%                 | ---               | ---                 | 75%                    |
|              | Formulation of a diet/nutrition plan  |                      |                     |                   |                     |                        |
|              | Pediatricians . . . . .   | ...                  | 31%                 | ---               | ---                 | 75%                    |
|              | Nurses . . . . .  | ...                  | 31%                 | ---               | ---                 | 75%                    |
|              | Obstetricians/gynecologists . . . . .   | ...                  | 19%                 | ---               | ---                 | 75%                    |
|              | Internists . . . . .  | ...                  | 33%                 | ---               | ---                 | 75%                    |
|              | Family physicians . . . . .   | ...                  | 24%                 | ---               | ---                 | 75%                    |
| <b>2.22*</b> | <b>Stroke deaths (age adjusted per 100,000)</b> . . . . .                     | <sup>1,a</sup> 30.4  | 26.2                | 26.5              | <sup>2</sup> 26.7   | 20.0                   |
|              | a. Blacks . . . . .   | <sup>1</sup> 52.5    | 45.0                | 45.0              | <sup>2</sup> 44.2   | 27.0                   |
| <b>2.23*</b> | <b>Colorectal cancer deaths (age adjusted per 100,000)</b> . . . . .          | <sup>1,a</sup> 14.7  | 13.2                | 13.1              | ---                 | 13.2                   |
|              | a. Blacks . . . . .   | <sup>3</sup> 18.1    | 17.3                | 17.6              | ---                 | 16.5                   |
| <b>2.24*</b> | <b>Diabetes incidence and prevalence</b>                                      |                      |                     |                   |                     |                        |
|              | Total population (per 1,000)  |                      |                     |                   |                     |                        |
|              | Incidence of diabetes . . . . .   | <sup>35</sup> 2.9    | <sup>36</sup> 2.4   | <sup>37</sup> 2.8 | <sup>38</sup> 3.1   | 2.5                    |
|              | Prevalence of diabetes . . . . .  | <sup>35</sup> 28     | <sup>36</sup> 28    | <sup>37</sup> 30  | <sup>38</sup> 30    | 25                     |
|              | Prevalence of diabetes (per 1,000)  |                      |                     |                   |                     |                        |
|              | a. American Indians/Alaska Natives <sup>39</sup> . . . . .                    | 169                  | 67                  | 70                | 73                  | 62                     |
|              | b. Puerto Ricans (ages 20–74) . . . . .                                       | <sup>11</sup> 55     | ---                 | ---               | ---                 | 49                     |
|              | c. Mexican-Americans (ages 20–74) . . . . .                                   | <sup>11</sup> 54     | ---                 | ---               | ---                 | 49                     |
|              | d. Cuban Americans (ages 20–74) . . . . .                                     | <sup>11</sup> 36     | ---                 | ---               | ---                 | 32                     |
|              | e. Blacks . . . . .   | <sup>35</sup> 36     | <sup>36</sup> 36    | <sup>37</sup> 38  | <sup>38</sup> 40    | 32                     |
| <b>2.25*</b> | <b>High blood cholesterol prevalence</b>                                      |                      |                     |                   |                     |                        |
|              | People 20–74 years . . . . .  | <sup>4,40</sup> 27%  | <sup>5,40</sup> 20% | ---               | ---                 | 20%                    |
|              | Males 20–74 years . . . . .   | <sup>4,40</sup> 25%  | <sup>5,40</sup> 19% | ---               | ---                 | 20%                    |
|              | Females 20–74 years . . . . .   | <sup>4,40</sup> 29%  | <sup>5,40</sup> 20% | ---               | ---                 | 20%                    |

**Table 2. Nutrition objective status—Con.**

| <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>          | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---|----------------------|----------------------|-------------|-------------|------------------------|
| <b>2.26* Controlled high blood pressure</b>                         |                      |                      |             |             |                        |
| People 18–74 years with high blood pressure . . . . .               | 411%                 | <sup>5</sup> 29%     | ---         | ---         | 50%                    |
| a. Males 18–74 years with high blood pressure. . . . .              | 46%                  | <sup>5</sup> 22%     | ---         | ---         | 40%                    |
| b. Mexican-Americans 18–74 years with high blood pressure . . . . . | <sup>5</sup> 14%     | ---                  | ---         | ---         | 50%                    |
| c. Females 70 years and over with high blood pressure . . . . .     | <sup>5</sup> 19%     | ---                  | ---         | ---         | 50%                    |
| <b>2.27* Mean serum cholesterol level (mg/dL)</b>                   |                      |                      |             |             |                        |
| People 20–74 years . . . . .  | 4,40 <sup>2</sup> 13 | 5,40 <sup>2</sup> 05 | ---         | ---         | 200                    |
| Males 20–74 years . . . . .   | 4,40 <sup>2</sup> 11 | 5,40 <sup>2</sup> 05 | ---         | ---         | 200                    |
| Females 20–74 years . . . . .                                       | 4,40 <sup>2</sup> 15 | 5,40 <sup>2</sup> 05 | ---         | ---         | 200                    |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>Provisional data.

<sup>3</sup>1990 data.

<sup>4</sup>1976–80 data.

<sup>5</sup>1988–91 data.

<sup>6</sup>33 percent for ages 20 years and over.

<sup>7</sup>31 percent for ages 20 years and over.

<sup>8</sup>35 percent for ages 20 years and over.

<sup>9</sup>49 percent for ages 20 years and over.

<sup>10</sup>Estimate derived from self-reported height and weight.

<sup>11</sup>1982–84 data.

<sup>12</sup>47 percent for ages 20 years and over.

<sup>13</sup>1984–88 data for different tribes.

<sup>14</sup>1985 data.

<sup>15</sup>39 percent for ages 20 years and over.

<sup>16</sup>1988 data.

<sup>17</sup>One-day dietary data.

<sup>18</sup>Up to 74 years.

<sup>19</sup>Two-day dietary data.

<sup>20</sup>1989–91 data.

<sup>21</sup>Three-day dietary data.

<sup>22</sup>1991 data.

<sup>23</sup>Excluding pregnant/lactating females.

<sup>24</sup>1989–90 data.

<sup>25</sup>1995 data.

<sup>26</sup>1983–85 data from three American Indian communities.

<sup>27</sup>Low-income children 1–4 years.

<sup>28</sup>Breastfed in hospital.

<sup>29</sup>1993 data.

<sup>30</sup>1994 data.

<sup>31</sup>1985–89 data.

<sup>32</sup>1992 data.

<sup>33</sup>1986 data.

<sup>34</sup>1989 data.

<sup>35</sup>1986–88 data.

<sup>36</sup>1990–92 data.

<sup>37</sup>1991–93 data.

<sup>38</sup>1992–94 data.

<sup>39</sup>Data are for American Indian/Alaska Natives 15 years and over in Indian Health Service areas only.

<sup>40</sup>Crude rates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 2.1*, 2.1a              | National Vital Statistics System, CDC, NCHS.  |
| 2.2*, 2.2a              | National Vital Statistics System, CDC, NCHS.  |
| 2.3*, 2.3a,b,f,g        | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 2.3c,h                  | Data for Hispanics: National Health Interview Survey, CDC, NCHS.  |
|                         | Baseline for Mexican-Americans, Cubans, Puerto Ricans: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. |
|                         | Updates for Mexican-Americans: National Health and Nutrition Examination Survey, CDC, NCHS.                         |

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 2.3d                    | Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.<br>Updates: National Health Interview Survey, CDC, NCHS.   |
| 2.3e                    | National Health Interview Survey, CDC, NCHS.  |
| 2.4, 2.4a–e             | Pediatric Nutrition Surveillance System, CDC, NCCDPHP.  |
| 2.5*                    | 1976–80 and 1988–91 data: National Health and Nutrition Examination Survey, CDC, NCHS.<br>1989–91 baselines and 1994 updates: Continuing Survey of Food Intakes by Individuals, USDA.   |
| 2.6*                    | Baseline: Continuing Survey of Food Intakes by Individuals, USDA.   |
| 2.7*, 2.7a–b            | National Health Interview Survey, CDC, NCHS.  |
| 2.8, 2.8a               | Baseline: Continuing Survey of Food Intakes by Individuals, USDA.   |
| 2.9                     | 1989–90 and 1988–91 Baselines and 1994 update: Continuing Survey of Food Intakes by Individuals, USDA.<br>1988 Baseline and 1995 update: Health and Diet Survey, FDA.   |
| 2.10, 2.10a–c           | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 2.10d                   | Baseline: Survey of American Indians/Alaska Natives, CDC and Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.<br>Updates: Pediatric Nutrition Surveillance System, CDC, NCCDPHP.                              |
| 2.10e                   | Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.  |
| 2.11*, 2.11a–c          | Ross Laboratories Mothers Survey.   |
| 2.11d                   | Pediatric Nutrition Surveillance System, CDC, NCCDPHP.  |
| 2.12*, 2.12a,c,d        | National Health Interview Survey, CDC, NCHS.  |
| 2.12b                   | 1990 Baby Bottle Tooth Decay 5-years Evaluation Report, IHS.  |
| 2.13                    | 1988 Baseline, 1990 and 1994 updates: Health and Diet Survey, FDA.<br>1991 Baseline and 1993 update: National Health Interview Survey, CDC, NCHS.   |
| 2.14                    | Data for processed foods: Food Label and Package Survey, FDA.<br>Data for fresh produce and seafood: Labeling of Raw Produce and Raw Fish, FDA.<br>Data for fresh meat/poultry: Nutritional Labeling/Safe Handling Information Study: Raw Meat and Poultry, USDA. |
| 2.15                    | Nielsen Company National Scantrack.   |
| 2.16                    | Survey of Chain Operators, National Restaurant Association.   |
| 2.17                    | For lunches and breakfasts: School Nutrition and Dietary Assessment Study, USDA.<br>For initiatives, fresh fruits and vegetables: School Health Policies and Programs Study, CDC, NCCDPHP.  |
| 2.18                    | National Health Interview Survey, CDC, NCHS.  |
| 2.19                    | Baseline: National Survey of School Health Education Activities, CDC, NCCDPHP.<br>Update: School Health Policies and Programs Study, CDC, NCCDPHP.  |
| 2.20                    | National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>1995 Update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.  |
| 2.21                    | 1988 Baseline: Lewis CE. Disease prevention and health promotion practices of primary care physicians in the United States. <i>Am J Prev Med</i> 4:9–16. 1988.<br>1992 Baseline: Primary Care Provider Surveys, OASH, ODPHP.                                      |
| 2.22*, 2.22a            | National Vital Statistics System, CDC, NCHS.  |
| 2.23*, 2.23a            | National Vital Statistics System, CDC, NCHS.  |
| 2.24*, 2.24e            | National Health Interview Survey, CDC, NCHS.  |
| 2.24a                   | Ambulatory Utilization Data, Indian Health Service.   |
| 2.24b–d                 | Hispanic Health and Nutrition Examination Survey, CDC, NCHS.  |
| 2.25*                   | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 2.26*, 2.26a–c          | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 2.27*                   | National Health and Nutrition Examination Survey, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.

# Nutrition Objectives

**2.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 3.1, and 15.1

**2.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 3.1a, and 15.1a

**2.2\*:** Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

*NOTE: In its publications, the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 175 per 100,000.*

Duplicate objective: 16.1

**2.2a\*:** Reverse the rise in cancer deaths to achieve a rate of no more than 175 per 100,000 blacks.

Duplicate objective: 16.1a

**2.3\*:** Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 15.10, and 17.12

**2.3a\*:** Reduce overweight to a prevalence of no more than

25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 15.10a, and 17.12a

**2.3b\*:** Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 15.10b, and 17.12b

**2.3c\*:** Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 15.10c, and 17.12c

**2.3d\*:** Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 15.10d, and 17.12d

**2.3e\*:** Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 15.10e, and 17.12e

**2.3f\*:** Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 15.10f, and 17.12f

**2.3g\*:** Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 15.10g, and 17.12g

**2.3h\*:** Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 1.2h, 15.10h, and 17.12h

**2.4:** Reduce growth retardation among low-income children aged 5 and younger to less than 10 percent.

*NOTE: Growth retardation is defined as height-for-age below the fifth percentile of children in the National Center for Health Statistics' reference population derived from 1971–74 NHANES I.*

**2.4a:** Reduce growth retardation among low-income black children younger than age 1 to less than 10 percent.

**2.4b:** Reduce growth retardation among low-income Hispanic children younger than age 1 to less than 10 percent.

**2.4c:** Reduce growth retardation among low-income Hispanic children aged 1 to less than 10 percent.

**2.4d:** Reduce growth retardation among low-income Asian and Pacific Islander children aged 1 to less than 10 percent.

**2.4e:** Reduce growth retardation among low-income Asian and Pacific Islander children aged 2–4 to less than 10 percent.

**2.5\*:** Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 15.9 and 16.7

**2.6\*:** Increase complex carbohydrate and fiber-containing foods in the diets of people aged 2 and older to an average of five or more daily servings for vegetables (including legumes) and fruits, and to an average of six or more daily servings for grain products. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of five or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of six or more servings of grain products.

*NOTE: The definition of vegetables, fruits, grain products, and serving size designations are derived from The Food Guide Pyramid. Vegetable, fruit, and grain ingredients from mixtures are included in the total, and fractions of servings are counted.*

Duplicate objective: 16.8

**2.7\*:** Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7

**2.7a\*:** Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7a

**2.7b\*:** Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7b

**2.8:** Increase calcium intake so at least 50 percent of people aged 11–24 and 50 percent of pregnant and lactating women consume an average of three or more daily servings of foods rich in calcium, and at least 75 percent of children aged 2–10 and 50 percent of people aged 25 and older consume an average of two or more servings daily.

*NOTE: Calcium-rich foods are defined for this purpose as milk and milk products, and the recommended number of servings and the age groupings are based on The Food Guide Pyramid and on the National Research Council's Recommended Dietary Allowance (RDA) for calcium, respectively. Milk and milk product ingredients in mixtures are included, and fractions of servings are counted.*

**2.8a:** Increase calcium intake so at least 50 percent of females aged 11–24 consume an average of three or more daily servings of foods rich in calcium.

**2.9:** Decrease salt and sodium intake so at least 65 percent of home meal preparers prepare foods without adding salt, at least 80 percent of people avoid using salt at the table, and at least 40 percent of adults regularly purchase foods modified or lower in sodium.

**2.10:** Reduce iron deficiency to less than

3 percent among children aged 1 through 4 and among women of childbearing age.

*NOTE: Iron deficiency is defined as having abnormal results for two or more of the following tests: mean corpuscular volume, erythrocyte protoporphyrin, and transferrin saturation. Anemia is used as an index of iron deficiency. Anemia among Alaska Native children was defined as hemoglobin less than 11 gm/dL or hematocrit less than 34 percent. For pregnant women in the third trimester, anemia was defined according to CDC criteria. The above prevalences of iron deficiency and anemia may be due to inadequate dietary iron intakes or to inflammatory conditions and infections. For anemia, genetics may also be a factor.*

**2.10a:** Reduce iron deficiency to less than 10 percent among low-income children aged 1–2.

**2.10b:** Reduce iron deficiency to less than 5 percent among low-income children aged 3–4.

**2.10c:** Reduce iron deficiency to less than 4 percent among low-income women of childbearing age.

**2.10d:** Reduce the prevalence of anemia to less than 10 percent among Alaska Native children aged 1–5.

**2.10e:** Reduce the prevalence of anemia to less than 20 percent among black, low-income pregnant women (third trimester).

**2.11\*:** Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9

*NOTE: The definition used for breastfeeding includes exclusive use of human milk or the use of human milk with a supplemental bottle of formula or cow's milk.*

**2.11a\*:** Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9a

**2.11b\*:** Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9b

**2.11c\*:** Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9c

**2.11d\*:** Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9d

**2.12\*:** Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11

**2.12a\*:** Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11a

**2.12b\*:** Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11b

**2.12c\*:** Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11c

**2.12d\*:** Increase to at least 65 percent the proportion of Hispanic parents and caregivers

who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11d

**2.13:** Increase to at least 85 percent the proportion of people aged 18 and older who use food labels to make nutritious food selections.

**2.14:** Achieve useful and informative nutrition labeling for virtually all processed foods and at least 40 percent of ready-to-eat carry-away foods. Achieve compliance by at least 90 percent of retailers with the voluntary labeling of fresh meats, poultry, seafood, fruits, and vegetables.

**2.15:** Increase to at least 5,000 brand items the availability of processed food products that are reduced in fat and saturated fat.

*NOTE: A brand item is defined as a particular flavor and/or size of a specific brand and is typically the consumer unit of purchase.*

**2.16:** Increase to at least 90 percent the proportion of restaurants and institutional food service operations that offer identifiable low-fat, low-calorie food choices, consistent with the Dietary Guidelines for Americans.

**2.17:** Increase to at least 90 percent the proportion of school lunch and breakfast services and child care food services with menus that are consistent with the nutrition principles in the Dietary Guidelines for Americans.

**2.18:** Increase to at least 80 percent the receipt of home food services by people aged 65 and older who have difficulty in preparing their own meals or are otherwise in need of home-delivered meals.

**2.19:** Increase to at least 75 percent the proportion of the Nation's schools that provide nutrition education from preschool–12th grade, preferably as part of comprehensive school health education.

**2.20:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees.

**2.21:** Increase to at least 75 percent the proportion of primary care providers who provide nutrition assessment and counseling and/or referral to qualified nutritionists or dietitians.

**2.22\*:** Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 3.18 and 15.2

**2.22a\*:** Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 3.18a and 15.2a

**2.23\*:** Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 16.5

**2.23a\*:** Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000.

Duplicate objective: 16.5a

**2.24\*:** Reduce diabetes to an incidence of no more than 2.5 per 1,000 people and a prevalence of no more than 25 per 1,000 people.

Duplicate objective: 17.11

**2.24a\*:** Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 17.11a

**2.24b\*:** Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11b

**2.24c\*:** Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11c

**2.24d\*:** Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11d

**2.24e\*:** Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11e

**2.25\*:** Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 15.7

**2.26\*:** Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

*NOTE: People with high blood pressure have blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or take antihypertensive medication. Blood pressure control is defined as maintaining a blood pressure less than 140 mm Hg systolic and 90 mm Hg diastolic. Control of hypertension does not include nonpharmacologic treatment.*

Duplicate objective: 15.4

**2.26a\*:** Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4a

**2.26b\*:** Increase to at least 50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4b

**2.26c\*:** Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4c

**2.27\*:** Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

Duplicate objective: 15.6

\*Duplicate objective.

# Priority Area 3 Tobacco

## Background

Tobacco use is responsible for approximately one of every five deaths in the United States and is the single most important preventable cause of death and disease in our society (1,2). Cigarette smoking accounts for approximately 400,000 deaths yearly (2), including 21 percent of all coronary heart disease deaths, 87 percent of all lung cancer deaths, and 82 percent of all deaths from chronic obstructive pulmonary disease (1). Smoking is responsible for more than 5 million years of potential life lost each year (2). About one-half of all regular smokers will eventually die due to this addictive behavior (3).

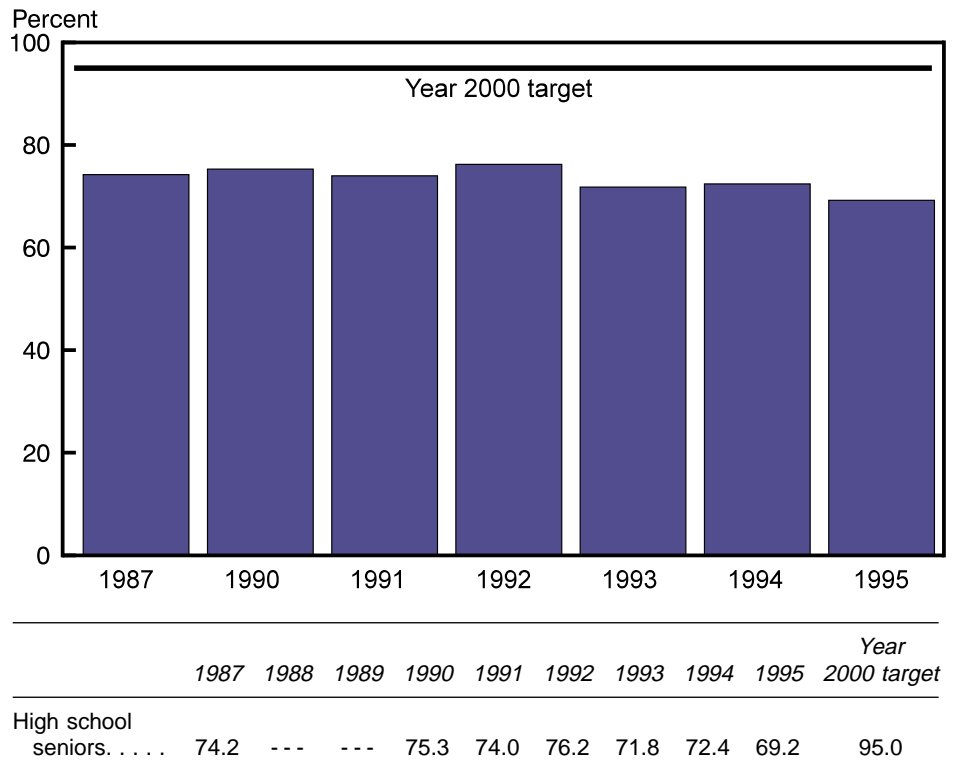
Smoking contributes substantially to chronic morbidity and disability as well. In 1993, smoking-related illnesses cost the Nation \$50 billion in health care costs (4). In 1990, estimated indirect losses due to smoking were approximately \$47 billion (5). Cigarette smoking during pregnancy accounts for 17–26 percent of low-birthweight babies (6). Environmental tobacco smoke also causes disease, including lung cancer in healthy nonsmokers and respiratory problems in young children and infants (7). The prevalence of smoking remains disproportionately high among blue-collar workers, military personnel, and American Indians and Alaska Natives.

## Midcourse Modifications

Four new objectives were added to the tobacco priority area: increasing the tobacco excise tax (3.23), increasing the number of health plans that offer nicotine addiction treatment (3.24), reducing preemptive clean indoor air laws (3.25), and enacting laws to ban cigarette vending machines in places accessible to minors (3.26).

Five objectives were modified in Priority Area 3. The age was lowered from 20 to 18 years and over for objective 3.4 (smoking prevalence) for the total population, blue-collar workers, blacks, and Hispanics. Objective 3.10 (tobacco use prevention curricula) changed the wording of the objective

**Figure 4. Proportion of high school seniors who perceive disapproval toward smoking one or more packs of cigarettes per day: United States, 1987–95, and year 2000 target for objective 3.2**



--- Data not available.

SOURCE: National Institutes for Health, National Institute for Drug Abuse, Monitoring the Future (High School Senior Survey).

from “quality” to “comprehensive” school health education. Smokefree indoor air laws banning or limiting smoking to separately ventilated areas was specified in objective 3.12. An addition to objective 3.13, concerning the sale and distribution of tobacco to youth, measures the enforcement of laws prohibiting such sales. The District of Columbia was added to objectives 3.12, 3.13, and 3.14. For lung cancer deaths (3.2), new subobjectives were added for females and black males.

Six objectives that existed previously in other priority areas are now part of the tobacco priority area. Three of these objectives are oral cancer deaths (3.17), stroke deaths (3.18), and average age of first use of cigarettes (3.19). The other three objectives added cigarettes to their list of substances targeted. These include use of cigarettes in the past month by young people (3.20), social disapproval of cigarette smoking (3.21), and physical or psychological harm associated with regular tobacco use (3.22).

## Data Summary

### Highlights

Recent data show some progress toward achieving the objectives in the tobacco priority area. Coronary heart disease mortality (3.1) is declining for the total population. Lung cancer mortality (3.2) has slowed to a rate that will stay below the year 2000 target. Chronic obstructive lung disease mortality (3.3) declined in 1992 but rose again in 1993. The rate since 1987 indicates that if current trends continue, the objective will be met. Cigarette smoking prevalence (3.4) has declined somewhat since the 1987 baseline. Smoking by high school seniors was essentially unchanged from the mid-1980’s to the early 1990’s but has increased in recent years (8). Smoking cessation attempts among the general public have increased slightly (3.6) but they have decreased among pregnant women (3.7). Smokeless tobacco use (3.9) has decreased for males 18–24 years; however, for males 12–17 years,



there was an increase in use in 1994. There has been an increase in the proportion of schools and worksites with smoking policies (3.10 and 3.11) and slight increases in the proportion of schools that provide anti-tobacco education. All States have enacted laws prohibiting the sale and distribution of tobacco products to youth under 18 years of age (3.13); however, these laws are often not enforced (9). The average age of first use for cigarettes has increased (3.19), even though the perception of social disapproval by high school seniors for smoking cigarettes has decreased slightly (3.21).

## Summary of Progress

One objective (3.13) has met the target for laws, but not for enforcement. Data for 14 objectives (3.1–3.4, 3.6, 3.8–3.11, 3.14, 3.16–3.18, and 3.26) show improvements toward the year 2000 targets. Although data for objective 3.19 indicate mixed progress overall, use of cigarettes has moved toward the year 2000 target. Objectives 3.7, 3.21 (cigarette smoking), 3.23, and 3.25 are moving away from the target, and objectives 3.5 and 3.12 show no change from the baseline. Data beyond baseline were not available for two objectives (3.15 and 3.24). Because of survey changes, progress is unknown for objective 3.20 for cigarettes (see following text). Objective 3.22 shows mixed progress for cigarette smoking and smokeless tobacco use.

## Data Issues

### Definitions

Beginning in 1992 the definition of current smoker (3.4) was modified to specifically include persons who smoked only “some days.” Prior to 1992, a current smoker was defined by the questions “Have you ever smoked 100 cigarettes in your lifetime?” and “Do you smoke now?” In 1992, data were collected and analyzed for half the respondents using these smoking questions and for the other half of respondents using a revised smoking question: “Do you smoke everyday, some days, or not at all?” The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking

prevalence. The effect of the new definition is a small increase in the number of smokers.

The baseline for objective 3.7 (cessation of cigarette smoking early in pregnancy, with abstinence throughout pregnancy) is from a 1986 telephone interview of white women selected from the respondents to the 1985 National Health Interview Survey (NHIS) (10). Beginning with 1991, progress toward the target is being tracked using periodic supplements to the NHIS. The 1985 and 1991 surveys used different definitions for smoking before pregnancy and for the duration of quitting during pregnancy. The 1991 measure, focused on women who quit during the first trimester, is closer to the objective, but not comparable to the 1985 baseline that counted women who quit any time during pregnancy.

For objective 3.8 (children’s exposure to tobacco smoke at home), the definition of regular exposure is defined as the occurrence of tobacco smoking anywhere in the home on more than 3 days each week.

The Primary Care Providers Survey data on inquiry for objective 3.16 refer to the proportion of providers who routinely provided service to 81–100 percent of their clients. Counseling data to discuss strategies to quit smoking represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention.

Objective 3.25 seeks to reduce the number of States with preemptive clean indoor air laws. Preemptive laws prevent local jurisdictions from enacting more stringent restrictions than the State law or restrictions that vary from the State law (11).

### Comparability of Data Sources

Information on objective 3.9 (smokeless tobacco use by males 12–24 years of age) is tracked by two surveys. Males 12–17 years of age are tracked by the National Household Survey on Drug Abuse (NHSDA). In this survey smokeless tobacco use is defined as any use of snuff or chewing tobacco in the preceding month. For males 18–24 years of age, information is obtained from the NHIS. The NHIS defines a smokeless tobacco user as someone who has used either snuff or chewing tobacco at least 20 times and who currently uses either of these substances every day or some days. Information for males 18–25 years

of age is also available from the NHSDA using the same definition as for the younger age group. According to the NHSDA, smokeless tobacco use among males 18–24 years shows a similar downward trend to that observed from the NHIS. The smokeless tobacco use prevalence estimate from NHSDA is higher than the NHIS estimate (11.7 percent compared with 8.2 percent in 1992). Differences between the NHSDA and the NHIS may be due to differences in the definition of smokeless tobacco use between the two surveys and/or methodological differences in survey administration (written answer sheets in the NHSDA and verbal responses in the NHIS).

The NHSDA is used to measure objective 3.20 regarding substance use among adolescents and young people. Beginning in 1991, the survey was expanded to include college students living in residence halls. In 1994, an improved questionnaire and editing procedures were introduced, which affects comparability with previous years. Additionally, in 1994 data were collected for cigarettes using a self-administered questionnaire, unlike previous years where questions regarding cigarette smoking were asked by the interviewers. This change in questionnaire administration greatly increased the cigarette use estimates among adolescents.

### Proxy Measures

The proportion of people 20–24 years of age who currently smoke cigarettes is used as a proxy measure for initiation of cigarette smoking by children and youth (objective 3.5).

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**Table 3. Tobacco objective status**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>        | <i>1993</i> | <i>1994</i>            | <i>Target 2000</i> |
|--------------|---|----------------------|--------------------|-------------|------------------------|--------------------|
| <b>3.1*</b>  | <b>Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .                                 | <sup>1</sup> 135     | 114                | 114         | ---                    | 100                |
|              | a. Blacks . . . . .   | <sup>1</sup> 168     | 151                | 154         | ---                    | 115                |
| <b>3.2*</b>  | <b>Slow the rise in lung cancer deaths (age adjusted per 100,000)</b> . .                                 | <sup>1</sup> 38.5    | 39.3               | 39.3        | ---                    | 42                 |
|              | a. Females . . . . .  | <sup>2</sup> 25.6    | 26.3               | 26.5        | ---                    | 27                 |
|              | b. Black males . . . . .  | <sup>2</sup> 86.1    | 81.2               | 80.7        | ---                    | 91                 |
| <b>3.3</b>   | <b>Slow the rise in chronic obstructive pulmonary disease deaths (age adjusted per 100,000)</b> . . . . . | <sup>1</sup> 18.9    | 19.9               | 21.4        | <sup>3</sup> 20.9      | 25                 |
| <b>3.4*</b>  | <b>Cigarette smoking prevalence</b>   |                      |                    |             |                        |                    |
|              | People 18 years and over . . . . .  | <sup>1</sup> 29%     | 27%                | 25%         | 26%                    | 15%                |
|              | Males . . . . .   | <sup>1</sup> 31%     | 29%                | 28%         | 28%                    | 15%                |
|              | Females . . . . .   | <sup>1</sup> 27%     | 25%                | 22%         | 23%                    | 15%                |
|              | a. People with high school education or less 20 years and over . . . .                                    | <sup>1</sup> 34%     | 32%                | 30%         | 31%                    | 20%                |
|              | b. Blue-collar workers 18 years and over . . . . .  | <sup>1</sup> 41%     | 36%                | 34%         | 39%                    | 20%                |
|              | c. Military personnel . . . . .   | <sup>4</sup> 42%     | 35%                | ---         | ---                    | 20%                |
|              | d. Blacks 18 years and over . . . . .   | <sup>1</sup> 33%     | 28%                | 26%         | 27%                    | 18%                |
|              | e. Hispanics 18 years and over . . . . .  | <sup>1</sup> 24%     | 21%                | 20%         | 20%                    | 15%                |
|              | f. American Indians/Alaska Natives 18 years and over . . . . .  | <sup>5</sup> 42–70%  | 40%                | 39%         | 40%                    | 20%                |
|              | g. Southeast Asian males . . . . .  | <sup>6</sup> 55%     | ---                | ---         | ---                    | 20%                |
|              | h. Females of reproductive age (18–44 years) . . . . .  | <sup>1</sup> 29%     | 28%                | 26%         | 27%                    | 12%                |
|              | i. Pregnant females . . . . .   | <sup>7</sup> 25%     | <sup>8</sup> 20%   | 20%         | ---                    | 10%                |
|              | j. Females who use oral contraceptives . . . . .  | <sup>9</sup> 36%     | <sup>4</sup> 26%   | ---         | ---                    | 10%                |
| <b>3.5</b>   | <b>Smoking initiation by children and adolescents</b> . . . . .   | <sup>1</sup> 30%     | 28%                | 27%         | 30%                    | 15%                |
|              | a. Lower socioeconomic status people 20–24 years . . . . .  | <sup>1</sup> 40%     | 38%                | 38%         | 39%                    | 18%                |
| <b>3.6</b>   | <b>Smoking cessation attempts</b> . . . . .   | <sup>10</sup> 34%    | 37%                | 38%         | 38%                    | 50%                |
| <b>3.7</b>   | <b>Smoking cessation during pregnancy</b> . . . . .   | <sup>7,11</sup> 39%  | <sup>8</sup> 31%   | ---         | ---                    | 60%                |
|              | a. Females with less than a high school education . . . . .   | <sup>7,11</sup> 28%  | <sup>8</sup> 21%   | ---         | ---                    | 45%                |
| <b>3.8*</b>  | <b>Children’s exposure to smoke at home</b> . . . . .   | <sup>10</sup> 39%    | <sup>8</sup> 32%   | 27%         | 27%                    | 20%                |
| <b>3.9*</b>  | <b>Smokeless tobacco use</b>  |                      |                    |             |                        |                    |
|              | Males 12–17 years . . . . .   | <sup>4</sup> 6.6%    | 4.8%               | 3.9%        | 5.1%                   | 4%                 |
|              | Males 18–24 years . . . . .   | <sup>1</sup> 8.9%    | 8.2%               | 7.8%        | 6.9%                   | 4%                 |
|              | a. American Indian/Alaska Natives 18–24 years . . . . .   | <sup>12</sup> 18–64% | <sup>13</sup> 7.3% | 13.---      | 13.---                 | 10%                |
| <b>3.10</b>  | <b>Tobacco-use prevention education and tobacco-free schools</b>  |                      |                    |             |                        |                    |
|              | School districts providing tobacco-free environments . . . . .  | <sup>4</sup> 17%     | ---                | ---         | <sup>14,15</sup> 28.5% | 100%               |
|              | School districts providing anti-smoking education   |                      |                    |             |                        |                    |
|              | High school . . . . .   | <sup>4</sup> 78%     | ---                | ---         | ---                    | 100%               |
|              | Middle school . . . . .   | <sup>4</sup> 81%     | ---                | ---         | ---                    | 100%               |
|              | Elementary school . . . . .   | <sup>4</sup> 75%     | ---                | ---         | ---                    | 100%               |
| <b>3.11*</b> | <b>Worksites with smoking policies</b>  |                      |                    |             |                        |                    |
|              | 50 or more employees  |                      |                    |             |                        |                    |
|              | Any smoking policy . . . . .  | ...                  | 86%                | ---         | <sup>15</sup> 87%      | 100%               |
|              | Policy that bans smoking or limits it to separately ventilated areas . .                                  | <sup>7</sup> 27%     | 59%                | ---         | ---                    | 100%               |
|              | Medium and large companies  |                      |                    |             |                        |                    |
|              | Any smoking policy . . . . .  | <sup>1</sup> 54%     | <sup>8</sup> 85%   | ---         | ---                    | 100%               |
| <b>3.12*</b> | <b>Number of States with comprehensive laws for clean indoor air in—<sup>16</sup></b>                     |                      |                    |             |                        |                    |
|              | Private workplaces . . . . .  | <sup>15,a1</sup>     | ...                | ...         | <sup>17</sup> 1        | <sup>18</sup> 51   |
|              | Public workplaces . . . . .   | <sup>15,a9</sup>     | ...                | ...         | <sup>17</sup> 9        | <sup>18</sup> 51   |
|              | Restaurants . . . . .   | <sup>15,2</sup>      | ...                | ...         | <sup>17</sup> 3        | <sup>18</sup> 51   |
|              | Public transportation . . . . .   | <sup>15,17,a17</sup> | ...                | ...         | <sup>17,18</sup> 17    | <sup>18</sup> 51   |
|              | Hospitals . . . . .   | <sup>15,8</sup>      | ...                | ...         | <sup>17</sup> 8        | <sup>18</sup> 51   |
|              | Day care centers . . . . .  | <sup>15,21</sup>     | ...                | ...         | <sup>17</sup> 21       | <sup>18</sup> 51   |
|              | Grocery stores . . . . .  | <sup>15,a4</sup>     | ...                | ...         | <sup>17</sup> 4        | <sup>18</sup> 51   |

**Table 3. Tobacco objective status—Con.**

|              | <i>Objective</i>  | <i>Baseline</i>                   | <i>1992</i> | <i>1993</i> | <i>1994</i>         | <i>Target<br/>2000</i>         |
|--------------|---|-----------------------------------|-------------|-------------|---------------------|--------------------------------|
| <b>3.13</b>  | <b>Number of States with tobacco product sale and distribution to youth laws</b> . . . . .    | 2,1845                            | 1849        | 1851        | 1851                | 1851                           |
|              | Number of States enforcing laws to achieve buy rates no higher than 20 percent . . . . .      | ---                               | ---         | ---         | ---                 | 1851                           |
| <b>3.14</b>  | <b>Number of States with plans to reduce tobacco use</b> . . . . .                            | 1912                              | 1835        | ---         | 1839                | 1851                           |
| <b>3.15</b>  | <b>Tobacco product advertising and promotion to youth</b> . . . . .                           | <sup>2</sup> Minimal restrictions | ---         | ---         | ---                 | Eliminate or severely restrict |
| <b>3.16</b>  | <b>Cessation counseling and followup by clinicians</b>  |                                   |             |             |                     |                                |
|              | Percent of clinicians routinely providing service to at least 75% of patients                 |                                   |             |             |                     |                                |
|              | Inquiry about smoking   |                                   |             |             |                     |                                |
|              | General dentists . . . . .  | <sup>10</sup> 26%                 | ---         | ---         | 32.8%               | 75%                            |
|              | Advised patients about smoking (among patients reporting smoking)                             |                                   |             |             |                     |                                |
|              | General dentists . . . . .  | <sup>10</sup> 35%                 | ---         | ---         | 64.8%               | 75%                            |
|              | Internists (including subspecialists) . . . . .   | <sup>10</sup> 52%                 | ---         | ---         | ---                 | 75%                            |
|              | Primary care providers . . . . .  | <sup>10</sup> 63%                 | ---         | ---         | ---                 | 75%                            |
|              | Inquiry about smokeless tobacco use   |                                   |             |             |                     |                                |
|              | General dentists . . . . .  | ...                               | ---         | ---         | 14.4%               | ...                            |
|              | Advised patients about smokeless tobacco use (among patients reporting smokeless tobacco use) |                                   |             |             |                     |                                |
|              | General dentists . . . . .  | ...                               | ---         | ---         | 75.0%               | ...                            |
|              | Percent of clinicians routinely providing service to 81–100% of patients                      |                                   |             |             |                     |                                |
|              | Inquiry about tobacco use   |                                   |             |             |                     |                                |
|              | Pediatricians . . . . .   | ...                               | 33%         | ---         | ---                 | 75%                            |
|              | Nurse practitioners . . . . .   | ...                               | 51%         | ---         | ---                 | 75%                            |
|              | Obstetricians/gynecologists . . . . .   | ...                               | 49%         | ---         | ---                 | 75%                            |
|              | Internists . . . . .  | ...                               | 75%         | ---         | ---                 | 75%                            |
|              | Family physicians . . . . .   | ...                               | 59%         | ---         | ---                 | 75%                            |
|              | Discussion of strategies to quit smoking  |                                   |             |             |                     |                                |
|              | Pediatricians . . . . .   | ...                               | 19%         | ---         | ---                 | 75%                            |
|              | Nurse practitioners . . . . .   | ...                               | 20%         | ---         | ---                 | 75%                            |
|              | Obstetricians/gynecologists . . . . .   | ...                               | 28%         | ---         | ---                 | 75%                            |
|              | Internists . . . . .  | ...                               | 50%         | ---         | ---                 | 75%                            |
|              | Family physicians . . . . .   | ...                               | 43%         | ---         | ---                 | 75%                            |
| <b>3.17*</b> | <b>Oral cancer deaths (per 100,000)</b>   |                                   |             |             |                     |                                |
|              | Males 45–74 years . . . . .   | <sup>1</sup> 13.6                 | 12.2        | 12.1        | ---                 | 10.5                           |
|              | Females 45–74 years . . . . .   | <sup>1</sup> 4.8                  | 4.3         | 4.2         | ---                 | 4.1                            |
|              | a. Black males 45–74 years . . . . .  | <sup>2</sup> 29.4                 | 27.3        | 26.2        | ---                 | 26.0                           |
|              | b. Black females 45–74 years . . . . .  | <sup>2</sup> 6.9                  | 6.0         | 5.8         | ---                 | 6.9                            |
| <b>3.18*</b> | <b>Stroke deaths (age adjusted per 100,000)</b> . . . . .                                     | <sup>1</sup> 30.4                 | 26.2        | 26.5        | <sup>3</sup> 26.7   | 20.0                           |
|              | a. Blacks . . . . .   | <sup>1</sup> 52.5                 | 45.0        | 45.0        | <sup>3</sup> 44.2   | 27.0                           |
| <b>3.19*</b> | <b>Average age of first use (adolescents 12–17 years)</b>                                     |                                   |             |             |                     |                                |
|              | Cigarettes . . . . .  | <sup>4</sup> 11.6                 | 11.7        | 11.7        | 12.2                | 12.6                           |
|              | Alcohol . . . . .   | <sup>4</sup> 13.1                 | 13.0        | 12.9        | 12.8                | 14.1                           |
|              | Marijuana . . . . .   | <sup>4</sup> 13.4                 | 13.8        | 13.9        | 14.1                | 14.4                           |
| <b>3.20*</b> | <b>Use in past month by adolescents and young adults</b>                                      |                                   |             |             |                     |                                |
|              | Alcohol   |                                   |             |             |                     |                                |
|              | 12–17 years . . . . .   | <sup>4</sup> 25.2%                | 15.7%       | 18.0%       | <sup>20</sup> 21.6% | 12.6%                          |
|              | 18–20 years . . . . .   | <sup>4</sup> 57.9%                | 50.3%       | 49.9%       | <sup>20</sup> 54.6% | 29.0%                          |
|              | Hispanics 12–17 years . . . . .   | <sup>8</sup> 22.5%                | 16.2%       | 17.5%       | <sup>20</sup> 18.3% | 12.0%                          |
|              | Marijuana   |                                   |             |             |                     |                                |
|              | 12–17 years . . . . .   | <sup>4</sup> 6.4%                 | 4.0%        | 4.9%        | <sup>20</sup> 6.0%  | 3.2%                           |
|              | 18–25 years . . . . .   | <sup>4</sup> 15.5%                | 11.0%       | 11.1%       | <sup>20</sup> 12.1% | 7.8%                           |
|              | Cocaine   |                                   |             |             |                     |                                |
|              | 12–17 years . . . . .   | <sup>4</sup> 1.1%                 | 0.3%        | 0.4%        | <sup>20</sup> 0.3%  | 0.6%                           |
|              | 18–25 years . . . . .   | <sup>4</sup> 4.5%                 | 1.8%        | 1.5%        | <sup>20</sup> 1.2%  | 2.3%                           |

**Table 3. Tobacco objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>       | <i>1992</i>         | <i>1993</i>         | <i>1994</i>         | <i>Target 2000</i> |
|--------------|--|-----------------------|---------------------|---------------------|---------------------|--------------------|
|              | Hispanics 12–17 years . . . . .                                      | <sup>8</sup> 1.3%     | 1.2%                | 1.0%                | <sup>20</sup> 0.7%  | 0.6%               |
|              | Hispanics 18–25 years . . . . .                                      | <sup>8</sup> 2.7%     | 1.8%                | 2.1%                | <sup>20</sup> 2.2%  | 1.0%               |
|              | Cigarettes   |                       |                     |                     |                     |                    |
|              | 12–17 years . . . . .  | <sup>8</sup> 10.8%    | 9.6%                | 9.6%                | <sup>20</sup> 18.9% | 6.0%               |
| <b>3.21*</b> | <b>Perception of social disapproval by high school seniors</b>       |                       |                     |                     |                     |                    |
|              | Heavy use of alcohol . . . . .                                       | <sup>19</sup> 56.4%   | <sup>21</sup> 58.5% | <sup>22</sup> 59.1% | <sup>15</sup> 58.0% | 70.0%              |
|              | Occasional use of marijuana . . . . .                                | <sup>19</sup> 71.1%   | <sup>21</sup> 73.8% | <sup>22</sup> 69.1% | <sup>15</sup> 65.4% | 85.0%              |
|              | Trying cocaine once or twice . . . . .                               | <sup>19</sup> 88.9%   | <sup>21</sup> 91.1% | <sup>22</sup> 91.4% | <sup>15</sup> 91.1% | 95.0%              |
|              | Smoking one or more packs of cigarettes per day . . . . .            | <sup>17</sup> 4.2%    | <sup>21</sup> 7.18% | <sup>22</sup> 7.24% | <sup>15</sup> 69.2% | 95.0%              |
| <b>3.22*</b> | <b>Perception of harm by high school seniors</b>                     |                       |                     |                     |                     |                    |
|              | Heavy use of alcohol . . . . .                                       | <sup>19</sup> 44.0%   | <sup>21</sup> 48.3% | <sup>22</sup> 46.5% | <sup>15</sup> 45.2% | 70.0%              |
|              | Regular use of marijuana . . . . .                                   | <sup>19</sup> 77.5%   | <sup>21</sup> 72.5% | <sup>22</sup> 65.0% | <sup>15</sup> 60.8% | 90.0%              |
|              | Trying cocaine once or twice . . . . .                               | <sup>19</sup> 54.9%   | <sup>21</sup> 57.6% | <sup>22</sup> 57.2% | <sup>15</sup> 53.7% | 80.0%              |
|              | Smoking one or more packs of cigarettes per day . . . . .            | <sup>16</sup> 8.6%    | <sup>21</sup> 69.5% | <sup>22</sup> 67.6% | <sup>15</sup> 65.6% | 95.0%              |
|              | Using smokeless tobacco regularly . . . . .                          | <sup>1,a</sup> 30.0%  | <sup>21</sup> 38.9% | <sup>22</sup> 36.6% | <sup>15</sup> 33.2% | 95.0%              |
| <b>3.23</b>  | <b>Tobacco excise tax (percent of retail price)</b>                  |                       |                     |                     |                     |                    |
|              | Cigarettes . . . . .   | <sup>21</sup> 31.4%   | ...                 | ...                 | 31.0%               | 50%                |
|              | Smokeless tobacco . . . . .  | <sup>21</sup> 11.8%   | ...                 | ...                 | ---                 | 50%                |
| <b>3.24</b>  | <b>Treatment for nicotine addiction</b>                              |                       |                     |                     |                     |                    |
|              | Health plans offering treatment . . . . .                            | <sup>7</sup> 11%      | ---                 | ---                 | ---                 | 100%               |
| <b>3.25*</b> | <b>Preemptive clean indoor air laws States with laws</b>             | <sup>15</sup> 17      | ...                 | ...                 | <sup>17</sup> 18    | 0                  |
| <b>3.26</b>  | <b>Number of States with laws banning cigarette vending machines</b> | <sup>15,18,a</sup> 12 | ...                 | ...                 | <sup>17,18</sup> 13 | <sup>17</sup> 51   |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1990 data.

<sup>3</sup>Provisional data.

<sup>4</sup>1988 data.

<sup>5</sup>1979–87 data.

<sup>6</sup>1984–88 data.

<sup>7</sup>1985 data.

<sup>8</sup>1991 data.

<sup>9</sup>1983 data.

<sup>10</sup>1986 data.

<sup>11</sup>Baseline for white females 20–44 years.

<sup>12</sup>1986–87 data.

<sup>13</sup>Relative standard error greater than 30 percent, which results in variable estimates.

<sup>14</sup>Middle/junior high and senior high schools only.

<sup>15</sup>1995 data.

<sup>16</sup>Smoking not allowed anywhere or limited to separately ventilated areas.

<sup>17</sup>1996 data.

<sup>18</sup>Includes the District of Columbia.

<sup>19</sup>1989 data.

<sup>20</sup>Questionnaire modified.

<sup>21</sup>1993 data.

<sup>22</sup>1994 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 3.1*, 3.1a              | National Vital Statistics System, CDC, NCHS.  |
| 3.2*, 3.2a,b            | National Vital Statistics System, CDC, NCHS.  |
| 3.3                     | National Vital Statistics System, CDC, NCHS.  |
| 3.4*, 3.4a,b,d,e,h      | National Health Interview Survey, CDC, NCHS.  |
| 3.4c                    | Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DOD, OASD.   |
| 3.4f                    | Baseline: CDC, 1987.<br>Updates: National Health Interview Survey, CDC, NCHS.   |
| 3.4g                    | Baseline: Local surveys.  |
| 3.4i                    | Baseline and 1991 update: National Health Interview Survey, CDC, NCHS.<br>1993 Update: National Health and Pregnancy Survey, NIH, NIDA. |

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 3.4j                    | Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.  |
| 3.5, 3.5a               | National Health Interview Survey, CDC, NCHS.   |
| 3.6                     | Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 3.7, 3.7a               | National Health Interview Survey, CDC, NCHS.   |
| 3.8*                    | Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 3.9*                    | For males 18–24 years of age, National Health Interview Survey, CDC, NCHS.<br>For males 12–17 years of age, National Household Survey on Drug Abuse, SAMHSA.   |
| 3.9a                    | Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHS.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 3.10                    | Baseline: National Survey of School Districts' Nonsmoking Policies, NSBA, ACS, ALA, and AHA.<br>Updates: School Health Policies and Programs Study, CDC, NCCDPHP.  |
| 3.11*                   | For worksites with 50 or more employees, National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>For medium and large companies, Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.<br>1995 Update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.   |
| 3.12*                   | Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.   |
| 3.13                    | Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF.<br>Updates: Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.   |
| 3.14                    | Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF.<br>Updates: Association of State and Territorial Health Officials Survey of State Activities Prevention and Control, PHF.  |
| 3.15                    | Federal Trade Commission data reported by Office on Smoking and Health, CDC, NCCDPHP.  |
| 3.16                    | Baseline for Internists: Wells, et al. Physicians Practice Study, AJP 76:1009–13. 1986.<br>Baseline for Dentists: Secker-Walker, et al. Statewide Survey of Dentists' Smoking Cessation Advice. JADA 118:37–40. 1989.<br>1992 Baseline: Primary Care Provider Surveys, OASH, ODPHP.<br>Updates for dentists: National Survey of Dentists; and Hygienists' Tobacco Control Activities, University of Florida. |
| 3.17*, 3.17a–b          | National Vital Statistics System, CDC, NCHS.   |
| 3.18*, 3.18a            | National Vital Statistics System, CDC, NCHS.   |
| 3.19*                   | National Household Survey on Drug Abuse, SAMHSA, OAS.  |
| 3.20*                   | National Household Survey on Drug Abuse, SAMHSA, OAS.  |
| 3.21*                   | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 3.22*                   | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 3.23                    | "The Tax Burden on Tobacco," The Tobacco Institute, 1995, and CDC, Office on Smoking and Health.   |
| 3.24                    | Gelb, B.D. "Preventive Medicine and Employee Productivity," Harvard Business Review 64(2):12.  |
| 3.25*                   | Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.   |
| 3.26                    | Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.   |

\*Duplicate objective. See full text of objective following this table.

# Tobacco Objectives

**3.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 15.1

**3.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 2.1a, and 15.1a

**3.2\*:** Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

*NOTE: In its publications, the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target values for this objective differ from those presented here.*

Duplicate objective: 16.2

**3.2a\*:** Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.

Duplicate objective: 16.2a

**3.2b\*:** Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.

Duplicate objective: 16.2b

**3.3:** Slow the rise in deaths from chronic obstructive pulmonary disease to achieve a rate of no more than 25 per 100,000 people.

*NOTE: Deaths from chronic obstructive pulmonary disease include deaths due to chronic bronchitis, emphysema, asthma, and other chronic obstructive pulmonary diseases and allied conditions.*

**3.4\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 15.12 and 16.6

**3.4a\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among people with a high school education or less aged 20 and older.

Duplicate objectives: 15.12a and 16.6a

**3.4b\*:** Reduce cigarette smoking to a prevalence of no more than

20 percent among blue-collar workers aged 18 and older.

Duplicate objectives: 15.12b and 16.6b

**3.4c\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 15.12c and 16.6c

**3.4d\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.

Duplicate objectives: 15.12d and 16.6d

**3.4e\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.

Duplicate objectives: 15.12e and 16.6e

**3.4f\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 15.12f and 16.6f

**3.4g\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 15.12g and 16.6g

**3.4h\*:** Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 15.12h and 16.6h

**3.4i\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 15.12i and 16.6i

**3.4j\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 15.12j and 16.6j

**3.5:** Reduce the initiation of cigarette smoking by children and youth so that

no more than 15 percent have become regular cigarette smokers by age 20.

**3.5a:** Reduce the initiation of cigarette smoking by lower socioeconomic status youth so that no more than 18 percent have become regular cigarette smokers by age 20.

**3.6:** Increase to at least 50 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for at least one day during the preceding year.

**3.7:** Increase smoking cessation during pregnancy so that at least 60 percent of women who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

**3.7a:** Increase smoking cessation during pregnancy so that at least 45 percent of women with less than a high school education who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

**3.8\*:** Reduce to no more than 20 percent the proportion of children aged 6 and younger who are regularly exposed to tobacco smoke at home.

*NOTE: Regular exposure to tobacco smoke at home is defined as the occurrence of tobacco smoking anywhere in the home on more than three days each week.*

Duplicate objective: 11.17

**3.9\*:** Reduce smokeless tobacco use by males aged 12–24 to a prevalence of no more than 4 percent.

*NOTE: For males aged 12–17, a smokeless tobacco user is someone who has used snuff or chewing tobacco in the preceding month. For males aged 18–24, a smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco.*

Duplicate objective: 13.17

**3.9a\*:** Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.

Duplicate objective: 13.17a

|   |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
|---|---|-------------------|-----------------------|----------|--|-------------|------|-------------|------|------------|--|-------------|-----|-------------|-----|----------|--|-------------|-----|-------------|-----|-------------------|-----------------------|----------|--|----------------------|------|----------|--|----------------------|-----|----------------------|-----|-------------|--|-------------|-----|--|-----------------------|----------------------|----|--|--|-----------------------|----------------------|----|--------------------------|----|------------------------------|----|---|----|-----------------------------------|----|
| <p><b>3.10:</b> Establish tobacco-free environments and include tobacco-use prevention in the curricula of all elementary, middle, and secondary schools, preferably as part of comprehensive school health education.</p> <p><b>3.11*:</b> Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.</p> <p>Duplicate objective: 10.18</p> <p><b>3.12*:</b> Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.</p> <p>Duplicate objective: 10.19</p> <p><b>3.13:</b> Enact in 50 States and the District of Columbia laws prohibiting the sale and distribution of tobacco products to youth younger than age 18. Enforce these laws so that the buy rate in compliance checks conducted in all 50 States and the District of Columbia is no higher than 20 percent.</p> <p><b>3.14:</b> Establish in 50 States and the District of Columbia plans to reduce tobacco use, especially among youth.</p> <p><b>3.15:</b> Eliminate or severely restrict all forms of tobacco product advertising and promotion to which youth younger than age 18 are likely to be exposed.</p> <p><b>3.16:</b> Increase to at least 75 percent the proportion of primary care and oral health care providers who routinely advise cessation and provide assistance and followup for all of their tobacco-using patients.</p> <p><b>3.17*:</b> Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.</p> <p>Duplicate objectives: 13.7 and 16.17</p> <p><b>3.17a*:</b> Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.</p> <p>Duplicate objectives: 13.7a and 16.17a</p> <p><b>3.17b*:</b> Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per</p> | <p>100,000 among black females aged 45–74.</p> <p>Duplicate objectives: 13.7b and 16.17b</p> <p><b>3.18*:</b> Reduce stroke deaths to no more than 20 per 100,000 people.</p> <p>Duplicate objectives: 2.22 and 15.2</p> <p><b>3.18a*:</b> Reduce stroke deaths among blacks to no more than 27 per 100,000.</p> <p>Duplicate objectives: 2.22a and 15.2a</p> <p><b>3.19*:</b> Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.</p> <p>Duplicate objective: 4.5</p> <p><b>3.20*:</b> Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes in the past month as follows:</p> <table border="0"> <tr> <td>Substance and age</td> <td>2000 target (percent)</td> </tr> <tr> <td>Alcohol:</td> <td></td> </tr> <tr> <td>  12–17 years</td> <td>12.6</td> </tr> <tr> <td>  18–20 years</td> <td>29.0</td> </tr> <tr> <td>Marijuana:</td> <td></td> </tr> <tr> <td>  12–17 years</td> <td>3.2</td> </tr> <tr> <td>  18–25 years</td> <td>7.8</td> </tr> <tr> <td>Cocaine:</td> <td></td> </tr> <tr> <td>  12–17 years</td> <td>0.6</td> </tr> <tr> <td>  18–25 years</td> <td>2.3</td> </tr> <tr> <td>Use in past month</td> <td>2000 target (percent)</td> </tr> <tr> <td>Alcohol:</td> <td></td> </tr> <tr> <td>  Hispanic 12–17 years</td> <td>12.0</td> </tr> <tr> <td>Cocaine:</td> <td></td> </tr> <tr> <td>  Hispanic 12–17 years</td> <td>0.6</td> </tr> <tr> <td>  Hispanic 18–25 years</td> <td>1.0</td> </tr> <tr> <td>Cigarettes:</td> <td></td> </tr> <tr> <td>  12–17 years</td> <td>6.0</td> </tr> </table> <p><i>NOTE: The targets of this objective are consistent with the goals established by the Office of National Drug Control Policy, Executive Office of the President.</i></p> <p>Duplicate objective: 4.6</p> <p><b>3.21*:</b> Increase the proportion of high school seniors who perceive social disapproval of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:</p> <table border="0"> <tr> <td></td> <td>2000 target (percent)</td> </tr> <tr> <td>Heavy use of alcohol</td> <td>70</td> </tr> </table> | Substance and age | 2000 target (percent) | Alcohol: |  | 12–17 years | 12.6 | 18–20 years | 29.0 | Marijuana: |  | 12–17 years | 3.2 | 18–25 years | 7.8 | Cocaine: |  | 12–17 years | 0.6 | 18–25 years | 2.3 | Use in past month | 2000 target (percent) | Alcohol: |  | Hispanic 12–17 years | 12.0 | Cocaine: |  | Hispanic 12–17 years | 0.6 | Hispanic 18–25 years | 1.0 | Cigarettes: |  | 12–17 years | 6.0 |  | 2000 target (percent) | Heavy use of alcohol | 70 | <p>Occasional use of marijuana 85</p> <p>Trying cocaine once or twice 95</p> <p>Smoking one or more packs of cigarettes per day 95</p> <p><i>NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.</i></p> <p>Duplicate objective: 4.9</p> <p><b>3.22*:</b> Increase the proportion of high school seniors who associate physical or psychological harm with the heavy use of alcohol, occasional use of marijuana, experimentation with cocaine, or regular use of tobacco, as follows:</p> <table border="0"> <tr> <td></td> <td>2000 target (percent)</td> </tr> <tr> <td>Heavy use of alcohol</td> <td>70</td> </tr> <tr> <td>Regular use of marijuana</td> <td>90</td> </tr> <tr> <td>Trying cocaine once or twice</td> <td>80</td> </tr> <tr> <td>Smoking one or more packs of cigarettes per day</td> <td>95</td> </tr> <tr> <td>Using smokeless tobacco regularly</td> <td>95</td> </tr> </table> <p><i>NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.</i></p> <p>Duplicate objective: 4.10</p> <p><b>3.23:</b> Increase the average (State and Federal combined) tobacco excise tax to at least 50 percent of the average retail price of all cigarettes and smokeless tobacco.</p> <p><b>3.24:</b> Increase to 100 percent the proportion of health plans that offer treatment of nicotine addiction (e.g., tobacco use cessation counseling by health care providers, tobacco use cessation classes, prescriptions for nicotine replacement therapies, and/or other cessation services).</p> <p><b>3.25*:</b> Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.</p> <p>Duplicate objective: 10.20</p> <p><b>3.26:</b> Enact in 50 States and the District of Columbia laws banning cigarette vending machines except in places inaccessible to minors.</p> <p>* Duplicate objective.</p> |  | 2000 target (percent) | Heavy use of alcohol | 70 | Regular use of marijuana | 90 | Trying cocaine once or twice | 80 | Smoking one or more packs of cigarettes per day | 95 | Using smokeless tobacco regularly | 95 |
| Substance and age   | 2000 target (percent)   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Alcohol:  |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 12–17 years   | 12.6  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 18–20 years   | 29.0  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Marijuana:  |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 12–17 years   | 3.2   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 18–25 years   | 7.8   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Cocaine:  |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 12–17 years   | 0.6   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 18–25 years   | 2.3   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Use in past month   | 2000 target (percent)   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Alcohol:  |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Hispanic 12–17 years  | 12.0  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Cocaine:  |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Hispanic 12–17 years  | 0.6   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Hispanic 18–25 years  | 1.0   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Cigarettes:   |   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| 12–17 years   | 6.0   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
|   | 2000 target (percent)   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Heavy use of alcohol  | 70  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
|   | 2000 target (percent)   |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Heavy use of alcohol  | 70  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Regular use of marijuana  | 90  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Trying cocaine once or twice  | 80  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Smoking one or more packs of cigarettes per day   | 95  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |
| Using smokeless tobacco regularly   | 95  |                   |                       |          |  |             |      |             |      |            |  |             |     |             |     |          |  |             |     |             |     |                   |                       |          |  |                      |      |          |  |                      |     |                      |     |             |  |             |     |  |                       |                      |    |  |  |                       |                      |    |                          |    |                              |    |   |    |                                   |    |



# Priority Area 4 Substance Abuse: Alcohol and Other Drugs

## Background

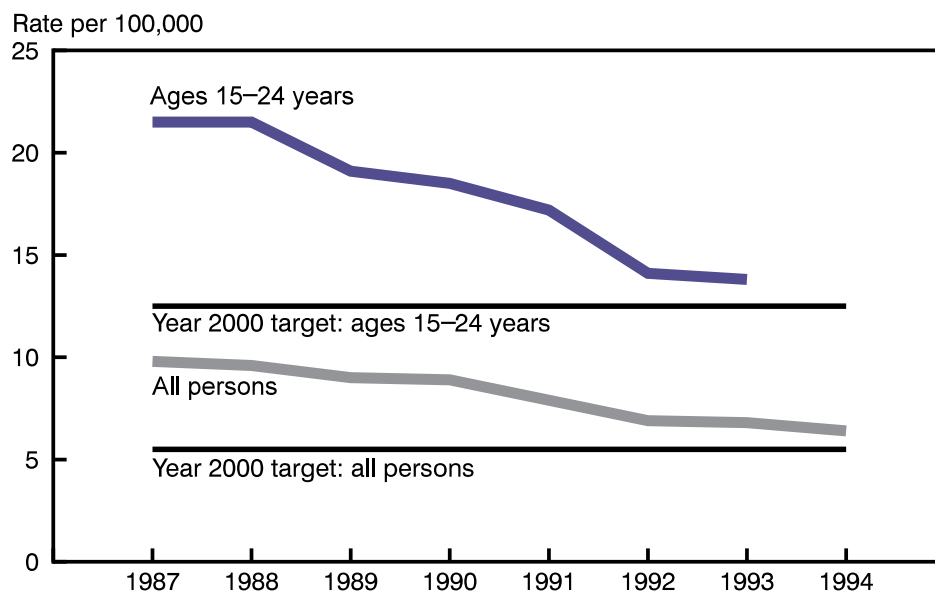
Large numbers of Americans have misused alcohol and used illicit drugs; these behaviors can have serious health and social consequences. Approximately 11 percent of preventable deaths are related to alcohol and illicit drug use (1). Alcohol is associated with motor vehicle crashes and fatal intentional injuries such as suicides and homicides (2). In 1993, 19,557 deaths were from alcohol-induced causes (3). Heavy alcohol use is increasingly common among young people; 28 percent of high school seniors and 41 percent of college students had five or more drinks on one occasion in the previous 2-week period in 1992 (4,5). Injecting drug users and their sexual partners are at high risk of infection with the human immunodeficiency virus, the eighth leading cause of death in 1993 (3). The 1994 National Household Survey on Drug Abuse (NHSDA) estimated that 17.8 million Americans had used marijuana in the past year and approximately 3.6 million had used cocaine at least once in the past year (6).

## Midcourse Modifications

Several changes were made through the midcourse review process. First, the name of this priority area was changed to: Substance Abuse: Alcohol and Other Drugs. This change reflects that the focus is on reducing the abuse of these substances. A new objective (4.20) was added to address the number of States that have Hospitality Resource Panels, organizational entities that promote responsible drinking by bringing together servers with law enforcement and licensure officials. A new subobjective (4.2c) was added to target cirrhosis deaths among Hispanics, and two new subobjectives (4.3a and b) were added to target drug-related deaths among blacks and Hispanics, respectively.

Because of early success in reducing alcohol-related motor vehicle

**Figure 5. Alcohol-related motor vehicle crash deaths: United States, 1987–94, and year 2000 targets for objective 4.1**



|                        | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | Year 2000 target |
|------------------------|------|------|------|------|------|------|------|------|------------------|
| All persons . . . . .  | 9.8  | 9.6  | 9.0  | 8.9  | 7.9  | 6.9  | 6.8  | 6.4  | 5.5              |
| Ages 15–24 years . . . | 21.5 | 21.5 | 19.1 | 18.5 | 17.2 | 14.1 | 13.8 | ---  | 12.5             |

--- Data not available.

SOURCE: U.S. Department of Transportation, Fatal Accident Reporting System.

crash deaths, the targets for objectives 4.1 and its subobjectives were made more challenging. The target for subobjective 4.2b (cirrhosis deaths among American Indians/Alaska Natives) was changed to reflect that this indicator is now measured among all American Indians and Alaska Natives, not just those who live in Reservation States. Objectives 4.6 (use of substances in the past month), 4.9 (perception of social disapproval), and 4.10 (perceived risk from using substance use) were modified to include cigarettes among the list of substances targeted. Objective 4.18 (blood alcohol concentration tolerance levels) was modified to define legal blood alcohol concentration levels of 0.08 percent for motor vehicle drivers 21 years and over and zero tolerance (0.02 percent and lower) for people under 21 years of age. These levels are consistent with the National Highway Traffic and Safety Administration.

## Data Summary

### Highlights

The prevalence of marijuana use among adolescents (objective 4.6) continued to increase in 1994 for the second year in a row. Past month use among young adults (18–25 years) increased between 1993 and 1994; although the increase is not statistically significant, it suggests that a similar trend may be occurring in this age group as well. These trends are supported by data for objectives 4.9 and 4.10, which show a continuing decline in the proportion of high school seniors who perceive social disapproval of occasional use of marijuana and physical and psychological harm from regular use of marijuana.

Alcohol-related motor vehicle crash death rates (4.1) have declined markedly since 1987 and continued to decline in 1994. These gains are attributed in part to the passage of administrative license revocation legislation in 37 States, including the District of Columbia

(4.15), and legislation to lower blood alcohol concentration tolerance levels to 0.08 percent for people 21 years and over in 11 States, including the District of Columbia, and zero tolerance (0.02 percent and lower) for drivers younger than 21 years in 20 States, including the District of Columbia (4.18). Other indicators of alcohol misuse, such as cirrhosis deaths (4.2), alcohol use in the past month by children and adolescents (4.6), heavy drinking by high school seniors and college students (4.7), and per capita alcohol consumption (4.8) have shown improvement from baseline measures; however recent trends are mixed.

## Summary of Progress

Data to assess trends toward the year 2000 targets are available for 14 out of 20 objectives in this priority area. The target for objective 4.14 has been surpassed. Progress toward targets is shown for seven objectives (4.1, 4.2, 4.7, 4.8, 4.11, 4.15, and 4.18). Trends are moving away from targets for two objectives (4.3 and 4.4). Mixed results are shown for four objectives (4.5, 4.6, 4.9, and 4.10). Data beyond baseline are not available for three objectives (4.13, 4.19, and 4.20). Three objectives have no baseline data (4.12, 4.16, 4.17).

## Data Issues

### Definitions

All deaths attributed to chronic liver disease and cirrhosis (whether or not they are specified as alcohol-related) are tracked in objective 4.2 as an indicator of abusive alcohol consumption. The entries on death certificates are often not specific enough to identify all alcohol-related liver disease deaths. Estimates of the proportion of the total chronic liver disease and cirrhosis deaths that are alcohol-related range from 41 to 95 percent (7).

Data from the National Vital Statistics System are used to track drug-related deaths (objective 4.3). Although the objective discusses drug-related deaths, it is tracked by a category of deaths that is more accurately called “drug-induced deaths.” The category includes deaths whose underlying cause was drug dependence, nondependent use of drugs, and poisoning from drugs, all of which may include medically prescribed drugs. It

excludes unintentional injuries, homicides, and other causes indirectly related to drug use. See [table III](#) for a list of specific ICD-9 codes.

## Data Source Description

Alcohol-related motor vehicle crashes (4.1) are tracked using data from the Department of Transportation’s Fatal Accident Reporting System (FARS). The FARS supplements death certificate data with information on the circumstances of the death to determine whether the death was alcohol-related. The National Vital Statistics System does not specify alcohol-related motor vehicle crashes.

The data on inquiry about alcohol consumption and other drug abuse for objective 4.19 refer to the proportion of providers who routinely provided the service to 81–100 percent of their clients. Data on referral to treatment represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention.

## Comparability of Data Sources

The NHSDA is used to measure objective 4.6 regarding substance use among adolescents and young people. Beginning in 1991, the survey was expanded to include college students living in residence halls. Thus, results for people 18–25 years old for marijuana and cocaine use and people 18–20 years old for alcohol use are not directly comparable to measures from previous years. Additionally, an improved questionnaire and editing procedures were introduced with the 1994 survey that affect comparability with previous years, especially for cigarette use among adolescents (objective 4.6).

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the Future Study, 1975–93; vol 1. Secondary school students. NIH 94–3809. 1994.

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7. National Institute on Alcohol Abuse and Alcoholism. County alcohol problem indicators 1979–85 (U.S. Alcohol Epidemiologic Data Reference Manual, vol 3, 3d ed.) Washington: U.S. Department of Health and Human Services. 1991.

**Table 4. Substance Abuse: Alcohol and other drugs objective status**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>        | <i>1993</i>         | <i>1994</i>         | <i>Target 2000</i> |
|--------------|---|----------------------|--------------------|---------------------|---------------------|--------------------|
| <b>4.1*</b>  | <b>Alcohol-related motor vehicle deaths (per 100,000)</b> . . . . .     | <sup>1</sup> 9.8     | 6.9                | 6.8                 | 6.4                 | 5.5                |
|              | a. American Indian/Alaska Native males . . . . .                        | <sup>1</sup> 40.4    | <sup>2</sup> 35.6  | <sup>3</sup> 32.9   | ---                 | 35.0               |
|              | b. People 15–24 years . . . . .   | <sup>1</sup> 21.5    | 14.1               | 13.8                | ---                 | 12.5               |
| <b>4.2</b>   | <b>Cirrhosis deaths (age adjusted per 100,000)</b> . . . . .            | <sup>1</sup> 9.2     | 8.0                | 7.9                 | <sup>4</sup> 7.9    | 6                  |
|              | a. Black males . . . . .  | <sup>1</sup> 22.6    | 17.2               | 16.1                | <sup>4</sup> 15.6   | 12                 |
|              | b. American Indians/Alaska Natives . . . . .                            | <sup>1</sup> 20.5    | 21.6               | 21.0                | ---                 | 10                 |
|              | c. Hispanics <sup>5</sup> . . . . .                                     | <sup>6,a</sup> 14.2  | 13.5               | 13.4                | ---                 | 10                 |
| <b>4.3</b>   | <b>Drug-related deaths (age adjusted per 100,000)</b> . . . . .         | <sup>1</sup> 3.8     | 4.3                | 4.8                 | ---                 | 3                  |
|              | a. Blacks . . . . .   | <sup>6</sup> 5.7     | 6.8                | 8.3                 | ---                 | 3                  |
|              | b. Hispanics <sup>5</sup> . . . . .                                     | <sup>6</sup> 4.3     | 5.6                | 6.4                 | ---                 | 3                  |
| <b>4.4</b>   | <b>Drug abuse-related emergency room visits (per 100,000)</b> . . . . . | <sup>7</sup> 175.8   | 191.4              | 203.9               | ---                 | 140.6              |
| <b>4.5*</b>  | <b>Average age of first use (adolescents 12–17 years)</b>               |                      |                    |                     |                     |                    |
|              | Cigarettes . . . . .  | <sup>2</sup> 11.6    | 11.7               | 11.7                | 12.2                | 12.6               |
|              | Alcohol . . . . .   | <sup>2</sup> 13.1    | 13.0               | 12.9                | 12.8                | 14.1               |
|              | Marijuana . . . . .   | <sup>2</sup> 13.4    | 13.8               | 13.9                | 14.1                | 14.4               |
| <b>4.6*</b>  | <b>Use in past month by adolescents and young adults</b>                |                      |                    |                     |                     |                    |
|              | Alcohol   |                      |                    |                     |                     |                    |
|              | 12–17 years . . . . .   | <sup>2</sup> 25.2%   | 15.7%              | 18.0%               | <sup>7</sup> 21.6%  | 12.6%              |
|              | 18–20 years . . . . .   | <sup>2</sup> 57.9%   | 50.3%              | 49.9%               | <sup>7</sup> 54.6%  | 29.0%              |
|              | Hispanics 12–17 years . . . . .   | <sup>8</sup> 22.5%   | 16.2%              | 17.5%               | <sup>7</sup> 18.3%  | 12.0%              |
|              | Marijuana   |                      |                    |                     |                     |                    |
|              | 12–17 years . . . . .   | <sup>2</sup> 6.4%    | 4.0%               | 4.9%                | <sup>7</sup> 6.0%   | 3.2%               |
|              | 18–25 years . . . . .   | <sup>2</sup> 15.5%   | 11.0%              | 11.1%               | <sup>7</sup> 12.1%  | 7.8%               |
|              | Cocaine   |                      |                    |                     |                     |                    |
|              | 12–17 years . . . . .   | <sup>2</sup> 1.1%    | 0.3%               | 0.4%                | <sup>7</sup> 0.3%   | 0.6%               |
|              | 18–25 years . . . . .   | <sup>2</sup> 4.5%    | 1.8%               | 1.5%                | <sup>7</sup> 1.2%   | 2.3%               |
|              | Hispanics 12–17 years . . . . .   | <sup>8</sup> 1.3%    | 1.2%               | 1.0%                | <sup>7</sup> 0.7%   | 0.6%               |
|              | Hispanics 18–25 years . . . . .   | <sup>8</sup> 2.7%    | 1.8%               | 2.1%                | <sup>7</sup> 2.2%   | 1.0%               |
|              | Cigarettes  |                      |                    |                     |                     |                    |
|              | 12–17 years . . . . .   | <sup>8</sup> 10.8%   | 9.6%               | 9.6%                | <sup>7</sup> 18.9%  | 6.0%               |
| <b>4.7</b>   | <b>Heavy drinking in past 2 weeks</b>                                   |                      |                    |                     |                     |                    |
|              | High school seniors . . . . .   | <sup>3</sup> 33.0%   | 27.9%              | 27.5%               | 28.2%               | 28.0%              |
|              | College students . . . . .  | <sup>3</sup> 41.7%   | 41.4%              | 40.2%               | 40.0%               | 32.0%              |
| <b>4.8</b>   | <b>Alcohol consumption (gallons per capita)</b> . . . . .               | <sup>1</sup> 2.54    | 2.31               | 2.25                | ---                 | 2.0                |
| <b>4.9*</b>  | <b>Perception of social disapproval by high school seniors</b>          |                      |                    |                     |                     |                    |
|              | Heavy use of alcohol . . . . .  | <sup>3</sup> 56.4%   | <sup>9</sup> 58.5% | <sup>10</sup> 59.1% | <sup>11</sup> 58.0% | 70%                |
|              | Occasional use of marijuana . . . . .                                   | <sup>3</sup> 71.1%   | <sup>9</sup> 73.8% | <sup>10</sup> 69.1% | <sup>11</sup> 65.4% | 85%                |
|              | Trying cocaine once or twice . . . . .                                  | <sup>3</sup> 88.9%   | <sup>9</sup> 91.1% | <sup>10</sup> 91.4% | <sup>11</sup> 91.1% | 95%                |
|              | Smoking one or more packs of cigarettes per day . . . . .               | <sup>1</sup> 74.2%   | <sup>9</sup> 71.8% | <sup>10</sup> 72.4% | <sup>11</sup> 69.2% | 95%                |
| <b>4.10*</b> | <b>Perception of harm by high school seniors</b>                        |                      |                    |                     |                     |                    |
|              | Heavy use of alcohol . . . . .  | <sup>3</sup> 44.0%   | <sup>9</sup> 48.3% | <sup>10</sup> 46.5% | <sup>11</sup> 45.2% | 70%                |
|              | Regular use of marijuana . . . . .                                      | <sup>3</sup> 77.5%   | <sup>9</sup> 72.5% | <sup>10</sup> 65.0% | <sup>11</sup> 60.8% | 90%                |
|              | Trying cocaine once or twice . . . . .                                  | <sup>3</sup> 54.9%   | <sup>9</sup> 57.6% | <sup>10</sup> 57.2% | <sup>11</sup> 53.7% | 80%                |
|              | Smoking one or more packs of cigarettes per day . . . . .               | <sup>1</sup> 68.6%   | <sup>9</sup> 69.5% | <sup>10</sup> 67.6% | <sup>11</sup> 65.6% | 95%                |
|              | Using smokeless tobacco regularly . . . . .                             | <sup>1,a</sup> 30.0% | <sup>9</sup> 38.9% | <sup>10</sup> 36.6% | <sup>11</sup> 33.2% | 95%                |
| <b>4.11</b>  | <b>Anabolic steroid use</b>   |                      |                    |                     |                     |                    |
|              | Male high school seniors . . . . .                                      | <sup>3</sup> 4.7%    | <sup>9</sup> 3.5%  | <sup>10</sup> 3.8%  | <sup>11</sup> 3.8%  | 3.0%               |
| <b>4.12</b>  | <b>Number of States with access to treatment programs</b> . . . . .     | ---                  | ---                | ---                 | ---                 | 50                 |
| <b>4.13</b>  | <b>Alcohol and drug education in schools</b> . . . . .                  | ---                  | ---                | ---                 | ---                 | 100%               |
|              | Provided students with some instruction . . . . .                       | <sup>1</sup> 63%     | ---                | ---                 | ---                 | ...                |
|              | Provided students with counseling . . . . .                             | <sup>1</sup> 39%     | ---                | ---                 | ---                 | ...                |
|              | Referred students for clinical assessments . . . . .                    | <sup>1</sup> 23%     | ---                | ---                 | ---                 | ...                |
|              | Provided students with instruction in at least one course               |                      |                    |                     |                     |                    |
|              | Middle/junior high schools . . . . .                                    | ...                  | ...                | ...                 | <sup>11</sup> 92.5% | ...                |
|              | Senior high schools . . . . .   | ...                  | ...                | ...                 | <sup>11</sup> 89.1% | ...                |
| <b>4.14</b>  | <b>Worksite alcohol and drug policies</b>                               |                      |                    |                     |                     |                    |
|              | Alcohol . . . . .   | <sup>12</sup> 88%    | ...                | ---                 | <sup>11</sup> 92%   | 60%                |
|              | Other drugs . . . . .   | <sup>12</sup> 89%    | ...                | ---                 | <sup>11</sup> 96%   | 60%                |

**Table 4. Substance Abuse: Alcohol and other drugs objective status—Con.**

|             | <i>Objective</i>  | <i>Baseline</i>     | <i>1992</i> | <i>1993</i>      | <i>1994</i>      | <i>Target<br/>2000</i> |
|-------------|---|---------------------|-------------|------------------|------------------|------------------------|
| <b>4.15</b> | <b>Number of States with administrative license suspension/revocation laws</b> . . . . .                | 6, <sup>13</sup> 29 | ---         | <sup>13</sup> 35 | <sup>13</sup> 38 | <sup>13</sup> 51       |
| <b>4.16</b> | <b>Number of States with policies to reduce minors' access to alcohol</b> . . .                         | ---                 | ---         | ---              | ---              | 50                     |
| <b>4.17</b> | <b>Number of States with restrictions on promotion of alcohol to children and adolescents</b> . . . . . | ---                 | ---         | ---              | ---              | 20                     |
| <b>4.18</b> | <b>Number of States with blood alcohol concentration tolerance levels</b>                               |                     |             |                  |                  |                        |
|             | .02% or less for people under 21 years . . . . .  | <sup>9</sup> 9      | ...         | ...              | <sup>13</sup> 21 | 50                     |
|             | .08% for people 21 years and over . . . . .   | <sup>9</sup> 7      | ...         | ...              | 11               | 50                     |
| <b>4.19</b> | <b>Screening, counseling, and referral by clinicians</b> . . . . .                                      | ---                 | ---         | ---              | ---              | 75%                    |
|             | Percent of clinicians routinely providing service to 81–100% of patients                                |                     |             |                  |                  |                        |
|             | Inquiry about alcohol consumption (12 years and over)   |                     |             |                  |                  |                        |
|             | Pediatricians . . . . .   | <sup>12</sup> 29%   | ...         | ---              | ---              | 75%                    |
|             | Nurse practitioners . . . . .   | <sup>12</sup> 45%   | ...         | ---              | ---              | 75%                    |
|             | Obstetricians/gynecologists . . . . .   | <sup>12</sup> 34%   | ...         | ---              | ---              | 75%                    |
|             | Internists . . . . .  | <sup>12</sup> 63%   | ...         | ---              | ---              | 75%                    |
|             | Family physicians . . . . .   | <sup>12</sup> 39%   | ...         | ---              | ---              | 75%                    |
|             | Inquiry about other drug use  |                     |             |                  |                  |                        |
|             | Pediatricians . . . . .   | <sup>12</sup> 28%   | ...         | ---              | ---              | 75%                    |
|             | Nurse practitioners . . . . .   | <sup>12</sup> 43%   | ...         | ---              | ---              | 75%                    |
|             | Obstetricians/gynecologists . . . . .   | <sup>12</sup> 32%   | ...         | ---              | ---              | 75%                    |
|             | Internists . . . . .  | <sup>12</sup> 34%   | ...         | ---              | ---              | 75%                    |
|             | Family physicians . . . . .   | <sup>12</sup> 23%   | ...         | ---              | ---              | 75%                    |
|             | Referral to alcohol treatment   |                     |             |                  |                  |                        |
|             | Pediatricians . . . . .   | <sup>12</sup> 26%   | ...         | ---              | ---              | 75%                    |
|             | Nurse practitioners . . . . .   | <sup>12</sup> 19%   | ...         | ---              | ---              | 75%                    |
|             | Obstetricians/gynecologists . . . . .   | <sup>12</sup> 24%   | ...         | ---              | ---              | 75%                    |
|             | Internists . . . . .  | <sup>12</sup> 33%   | ...         | ---              | ---              | 75%                    |
|             | Family physicians . . . . .   | <sup>12</sup> 28%   | ...         | ---              | ---              | 75%                    |
|             | Referral to drug abuse treatment  |                     |             |                  |                  |                        |
|             | Pediatricians . . . . .   | <sup>12</sup> 32%   | ...         | ---              | ---              | 75%                    |
|             | Nurse practitioners . . . . .   | <sup>12</sup> 19%   | ...         | ---              | ---              | 75%                    |
|             | Obstetricians/gynecologists . . . . .   | <sup>12</sup> 28%   | ...         | ---              | ---              | 75%                    |
|             | Internists . . . . .  | <sup>12</sup> 35%   | ...         | ---              | ---              | 75%                    |
|             | Family physicians . . . . .   | <sup>12</sup> 28%   | ...         | ---              | ---              | 75%                    |
| <b>4.20</b> | <b>Number of States with Hospitality Resource Panels</b> . . . . .                                      | <sup>10</sup> 8     | ...         | ...              | ...              | 30                     |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1988 data.

<sup>3</sup>1989 data.

<sup>4</sup>Provisional data.

<sup>5</sup>Excludes data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic origin data were not of sufficient quality.

See appendix.

<sup>6</sup>1990 data.

<sup>7</sup>Questionnaire modified.

<sup>8</sup>1991 data.

<sup>9</sup>1993 data.

<sup>10</sup>1994 data.

<sup>11</sup>1995 data.

<sup>12</sup>1992 data.

<sup>13</sup>Includes the District of Columbia.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 4.1*, 4.1a–b            | Fatal Accident Reporting System, U.S. Department of Transportation, NHTSA.   |
| 4.2, 4.2a–c             | National Vital Statistics System, CDC, NCHS.   |
| 4.3, 4.3a–b             | National Vital Statistics System, CDC, NCHS.   |
| 4.4                     | Drug Abuse Warning Network, SAMHSA, OAS.   |
| 4.5*                    | National Household Survey of Drug Abuse, SAMHSA, OAS.  |
| 4.6*                    | National Household Survey of Drug Abuse, SAMHSA, OAS.  |
| 4.7                     | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 4.8                     | Alcohol Epidemiology Data System, NIH, NIAAA.  |
| 4.9*                    | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 4.10*                   | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 4.11                    | Monitoring the Future (High School Senior Survey), NIH, NIDA.  |
| 4.13                    | Baseline: Report to Congress and the White House on the Nature and Effectiveness of Federal, State, and Local Drug Prevention Education Programs. U.S. Department of Education. 1987.<br>Updates: School Health Policies and Programs Study, CDC, NCCDPHP. |
| 4.14                    | Baseline: National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>Update: Business Responds to AIDS Benchmark Survey, NCHSTP, CDC.  |
| 4.15                    | Office of Alcohol and State Programs, NHTSA.   |
| 4.18                    | Office of Alcohol and State Programs, NHTSA.   |
| 4.19                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 4.20                    | California Coordinating Council on Responsible Beverage Service, National Survey Report.   |

\*Duplicate objective. See full text of objective following this table.

# Substance Abuse: Alcohol and Other Drugs Objectives

**4.1\*:** Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 9.23

**4.1a\*:** Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 9.23a

**4.1b\*:** Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 9.23b

**4.2:** Reduce cirrhosis deaths to no more than 6 per 100,000 people.

**4.2a:** Reduce cirrhosis deaths among black men to no more than 12 per 100,000.

**4.2b:** Reduce cirrhosis deaths among American Indians and Alaska Natives to no more than 10 per 100,000.

**4.2c:** Reduce cirrhosis deaths among Hispanics to no more than 10 per 100,000.

**4.3:** Reduce drug-related deaths to no more than 3 per 100,000 people.

**4.3a:** Reduce drug-related deaths among blacks to no more than 3 per 100,000.

**4.3b:** Reduce drug-related deaths among Hispanics to no more than 3 per 100,000.

**4.4:** Reduce drug abuse-related hospital emergency department visits by at least 20 percent.

**4.5\*:** Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.

Duplicate objective: 3.19

**4.6\*:** Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes in

the past month as follows:

| Substance and age    | 2000 target (percent) |
|----------------------|-----------------------|
| Alcohol:             |                       |
| 12–17 years          | 12.6                  |
| 18–20 years          | 29.0                  |
| Marijuana:           |                       |
| 12–17 years          | 3.2                   |
| 18–25 years          | 7.8                   |
| Cocaine:             |                       |
| 12–17 years          | 0.6                   |
| 18–25 years          | 2.3                   |
| Use in past month    | 2000 target (percent) |
| Alcohol:             |                       |
| Hispanic 12–17 years | 12.0                  |
| Cocaine:             |                       |
| Hispanic 12–17 years | 0.6                   |
| Hispanic 18–25 years | 1.0                   |
| Cigarettes:          |                       |
| 12–17 years          | 6.0                   |

*NOTE: The targets of this objective are consistent with the goals established by the Office of National Drug Control Policy, Executive Office of the President.*

Duplicate objective: 3.20

**4.7:** Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28 percent of high school seniors and 32 percent of college students.

*NOTE: Recent heavy drinking is defined as having five or more drinks on one occasion in the previous 2-week period as monitored by self-reports.*

**4.8:** Reduce alcohol consumption by people aged 14 and older to an annual average of no more than 2 gallons of ethanol per person.

**4.9\*:** Increase the proportion of high school seniors who perceive social disapproval of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:

|   | 2000 target (percent) |
|---|-----------------------|
| Heavy use of alcohol                            | 70                    |
| Occasional use of marijuana                     | 85                    |
| Trying cocaine once or twice                    | 95                    |
| Smoking one or more packs of cigarettes per day | 95                    |

*NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend. The Monitoring the*

*Future Survey defines regular use of cigarettes as smoking one or more packs daily.*

Duplicate objective: 3.21

**4.10\*:** Increase the proportion of high school seniors who associate physical or psychological harm with the heavy use of alcohol, occasional use of marijuana, experimentation with cocaine, or regular use of tobacco, as follows:

|   |    |
|---|----|
| Heavy use of alcohol                            | 70 |
| Regular use of marijuana                        | 90 |
| Trying cocaine once or twice                    | 80 |
| Smoking one or more packs of cigarettes per day | 95 |
| Using smokeless tobacco regularly               | 95 |

*NOTE: Heavy drinking is defined as having five or more drinks per occasion in the previous 2-week period. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.*

Duplicate objective: 3.22

**4.11:** Reduce to no more than 3 percent the proportion of male high school seniors who use anabolic steroids.

**4.12:** Establish and monitor in 50 States comprehensive plans to ensure access to alcohol and drug treatment programs for traditionally underserved people.

**4.13:** Provide to children in all school districts and private schools primary and secondary school educational programs on alcohol and other drugs, preferably as part of comprehensive school health education.

**4.14:** Extend adoption of alcohol and drug policies for the work environment to at least 60 percent of worksites with 50 or more employees.

**4.15:** Extend to 50 States administrative driver's license suspension/revocation laws or programs of equal effectiveness for people determined to have been driving under the influence of intoxicants.

**4.16:** Increase to 50 the number of States that have enacted and enforce policies, beyond those in existence in 1989, to reduce access to alcoholic beverages by minors.

**4.17:** Increase to at least 20 the number of States that have enacted statutes to restrict promotion of alcoholic beverages that are focused principally on young audiences.

**4.18:** Extend to 50 States legal blood alcohol concentration tolerance levels of .08 percent for motor vehicle drivers aged 21 and older and zero tolerance (.02 percent and lower) for those younger than age 21.

**4.19:** Increase to at least 75 percent the proportion of primary care providers who screen for alcohol and other drug use problems and provide counseling and referral as needed.

**4.20:** Increase to 30 the number of States with Hospitality Resource Panels (including representatives from State regulatory, public health, and highway safety agencies, law enforcement, insurance associations, alcohol retail and licensed beverage associations) to ensure a process of management and server training and define standards of responsible hospitality.

\*Duplicate objective.

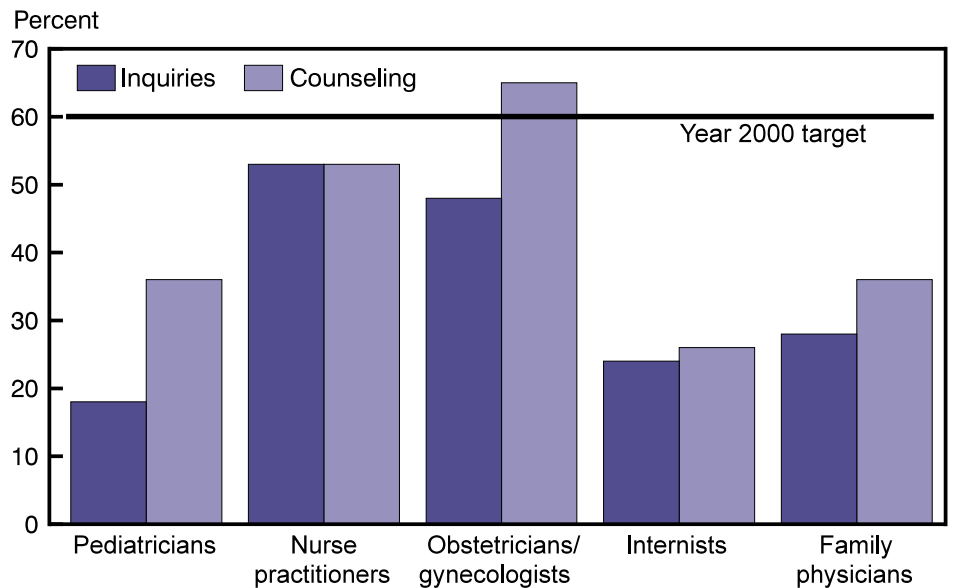
# Priority Area 5 Family Planning

## Background

The formation and growth of families have significant public health and sociopsychological impact on society and individuals (1). Family planning, defined as the process of establishing the preferred number and spacing of children in one's family and selecting the means by which this is achieved, presupposes the importance of both family and planning (2). Problems attendant to poor family planning exact serious health and social costs. Low birthweight (3), high rates of infant mortality (4), and inadequate monetary and family support (5) are some of the consequences of poor family planning. Recent research suggests that educating young potential parents about the financial, welfare, and social costs of pregnancy may improve decisionmaking, which may, in turn, reduce the likelihood of an unintended pregnancy (6). These findings are important given that two-thirds of adolescents 17 years of age have engaged in sexual intercourse and the birth rate for women 15–17 years of age has generally increased since the early 80's. Additionally, approximately 82 percent of the pregnancies among women 15–19 years of age were unintended and about half of these unintended pregnancies ended in abortion (7). Of the 12 objectives in this priority area, 5 focus on prevention efforts for the teenage population. Data from the School Health Programs and Policies Study (SHPPS) report that 80 percent of junior and senior high schools have required classes that include discussion of human sexuality; nearly 49 percent of the States require human sexuality to be taught in at least one grade.

While teenage females receive considerable attention in family planning initiatives, women 35 years and over also require assistance with family planning. The number of pregnancies is small among this population (approximately 650,000 in 1991; 10 percent of all pregnancies), but 56 percent of pregnancies among women 35–39 years of age were unintended and 77 percent of pregnancies among women 40–44 years of age were unintended (8).

**Figure 6. Primary care providers who provide age-appropriate preconception care and counseling: United States, 1992, and year 2000 target for objective 5.10**



| Primary care providers                | Inquiries | Counseling | Year 2000 target |
|---------------------------------------|-----------|------------|------------------|
| Pediatricians . . . . .               | 18        | 36         | 60               |
| Nurse practitioners . . . . .         | 53        | 53         | 60               |
| Obstetricians/gynecologists . . . . . | 48        | 65         | 60               |
| Internists . . . . .                  | 24        | 26         | 60               |
| Family physicians . . . . .           | 28        | 36         | 60               |

SOURCE: Office of the Assistant Secretary for Health, Office of Disease Prevention and Health Promotion, Primary Care Providers Survey.

For all women of child-bearing age, unintended pregnancy is an important issue. Data from the 1990 National Survey of Family Growth (NSFG) indicate that 37 percent of all live births were from unintended pregnancies; this compares with 33 percent in 1988 and 30 percent in 1982 (8).

## Midcourse Modifications

One new objective (5.12) was added during the midcourse review; it calls for increasing the use of contraceptives by females 15–44 years of age at risk for pregnancy. It includes three special population subobjectives; one targets black females, the others focus on women at two different poverty levels. In addition, a new subobjective for Hispanic women was added to objective 5.2 (unintended pregnancy); new special population subobjectives were added for black males and black

females to objective 5.4 (adolescent sexual intercourse). Two new subobjectives were added to objective 5.7 (contraceptive failure), one for black females and one for Hispanic females. The target was also revised for 5.7.

The focus of objective 5.1 (adolescent pregnancy) was narrowed to women 15–17 years of age. The focus of objective 5.9 (pregnancy counseling) was expanded and the wording of objective 5.11 (clinic services) was expanded to include groups at high risk for sexually transmitted diseases.

## Data Summary

### Highlights

While the pregnancy rate (5.1) for females 15–17 years of age has increased by about 5 percent between 1985 and 1991, the abortion rate (a component of the pregnancy rate) has



dropped by about 21 percent during the same time period (see Data Issues). Live births (another component of pregnancy) increased by 25 percent. The pregnancy rate for girls 10–14 years of age remained fairly stable during the same time period. Pregnancy rates for nonwhite adolescents and Hispanic adolescents 15–19 years of age also increased between 1985 and 1991.

## Summary of Progress

Progress for objective 5.6 (contraceptive use by sexually active adolescents) was mixed. Objective 5.8 (human sexuality discussion) showed progress; for discussion with either parents, church, or school, the target was exceeded. For discussion with parents, there was an increase from the baseline level, but some of this increase may be attributable to differences in measurement methods (see Data Issues). Objective 5.12 (contraception use) also showed progress toward the target. Objective 5.5 (adolescent abstinence) has shown mixed trends.

Objectives 5.1 (adolescent pregnancy) and 5.4 (adolescent postponement of sexual intercourse) have moved away from the targets.

Data were not available to update six objectives (5.2, 5.3, 5.7, 5.9, 5.10, and 5.11).

## Data Issues

### Data Source Description

Data for objective 5.1 (adolescent pregnancy) are based on three outcomes of pregnancy: live births, fetal losses, and abortions. Data on live births are collected annually through the National Vital Statistics System. For Hispanic births, it should be noted that the number of States reporting Hispanic origin data in their vital statistics has varied from year to year. (See appendix.) Data on fetal losses come from the NSFG, which is conducted at multiyear intervals; the most recent data available are from 1988.

Estimates of the number of abortions come from the Abortion Provider Survey, conducted by the Allan Guttmacher Institute (AGI). This is a biennial survey of clinics and other health facilities that perform abortions. Because the proportion of abortions performed in hospitals has declined and the number performed in physicians'

offices has increased, AGI staff estimate that as many as one-half of the office-based abortions may be missed in the survey. The data from the Abortion Provider Survey are adjusted using demographic characteristics of women obtaining abortions (in States that report abortions to CDC) to produce national estimates. The diversity of sources and the variability of reporting intervals complicate tracking of this objective.

The data on inquiry for objective 5.10 (counseling by clinicians) are from the Primary Care Provider Surveys (PCPS) and refer to the proportion of providers who routinely provided this service to 81–100 percent of their clients. Counseling data represent the proportion of providers who routinely deliver these services to 81–100 percent of their clients who need the particular intervention.

### Data Availability

The next updates for 5.2, 5.3, 5.7 (females), and 5.12 will come from the NSFG, which was administered in 1995 with data available in 1997.

Baseline data for objective 5.9 (adoption information from pregnancy counselors) were obtained from a one-time survey. Supplemental data to update this objective should be available from the 1995 NSFG.

An update for objective 5.11 (HIV clinic services) is not available but supplemental information should be available from the NSFG in 1997.

### Data Comparability

Baseline data for females for objectives 5.4 (adolescent postponement of sexual intercourse), 5.5 (adolescent abstinence), and 5.6 (contraception use) came from the NSFG. Baseline data for males for objectives 5.4 and 5.5 came from the National Survey of Adolescent Males (NSAM). While both surveys will be repeated in the future, the present updates are provided by the Youth Risk Behavior Survey (YRBS) and are not directly comparable to the baselines. The YRBS surveys adolescents in schools and reports data by grade rather than age. The NSFG and the NSAM survey adolescents in and not in school. Data from the 1992 National Health Interview Survey (NHIS) suggest that sexual intercourse is more common and condom use is less common among out-of-school youth 14–19 years of age, than among in-school youth in the same age group. However, estimates for

in-school youth were very close to those for the total youth population (9).

The baseline for objective 5.8 (human sexuality discussion) came from a one-time study by the Planned Parenthood Foundation and provided data on persons 13–18 years of age who had discussed sexuality with their parents. The update is from the NHIS, a population-based survey that provided data on persons 10–17 years of age.

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**Table 5. Family planning objective status**

|             | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i>       | <i>1993</i>       | <i>1994</i>      | <i>Target<br/>2000</i> |
|-------------|--|--------------------|-------------------|-------------------|------------------|------------------------|
| <b>5.1</b>  | <b>Adolescent pregnancy</b>  |                    |                   |                   |                  |                        |
|             | Pregnancies (per 1,000) <sup>1</sup>                                       |                    |                   |                   |                  |                        |
|             | Females 10–14 years  | <sup>2</sup> 3.6   | <sup>3</sup> 3.2  | ---               | ---              | ...                    |
|             | Females 15–17 years  | <sup>2</sup> 71.1  | <sup>3</sup> 74.6 | ---               | ---              | 50                     |
|             | Live births (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 10–14 years  | ...                | <sup>2</sup> 1.2  | <sup>3</sup> 1.4  | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>2</sup> 31.0 | <sup>3</sup> 38.7 | ---              | ...                    |
|             | Abortions (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 10–14 years  | ...                | <sup>2</sup> 2.0  | <sup>3</sup> 1.4  | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>2</sup> 30.6 | <sup>3</sup> 24.3 | ---              | ...                    |
|             | Fetal losses (per 1,000)   |                    |                   |                   |                  |                        |
|             | Females 10–14 years  | ...                | <sup>2</sup> 0.4  | <sup>3</sup> 0.4  | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>2</sup> 9.4  | <sup>3</sup> 11.5 | ---              | ...                    |
|             | a. Pregnancies, black adolescents (per 1,000) <sup>1</sup>                 |                    |                   |                   |                  |                        |
|             | Females 15–19 years <sup>4</sup>   | <sup>2</sup> 169   | <sup>3</sup> 178  | ---               | ---              | 120                    |
|             | Females 15–17 years  | <sup>5</sup> 158   | <sup>3</sup> 158  | ---               | ---              | ...                    |
|             | Live births (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 15–19 years <sup>4</sup>   | ...                | <sup>2</sup> 85   | <sup>3</sup> 98   | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>5</sup> 85   | <sup>3</sup> 87   | ---              | ...                    |
|             | Abortions (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 15–19 years <sup>4</sup>   | ...                | <sup>2</sup> 71   | <sup>3</sup> 66   | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>5</sup> 58   | <sup>3</sup> 55   | ---              | ...                    |
|             | Fetal losses (per 1,000)   |                    |                   |                   |                  |                        |
|             | Females 15–19 years  | ...                | <sup>2</sup> 13   | <sup>3</sup> 14   | ---              | ...                    |
|             | Females 15–17 years  | ...                | <sup>5</sup> 16   | <sup>3</sup> 16   | ---              | ...                    |
|             | b. Pregnancies, Hispanic adolescents (per 1,000) <sup>1</sup>              |                    |                   |                   |                  |                        |
|             | Females 15–19 years  | <sup>2</sup> 143   | <sup>3</sup> 180  | ---               | ---              | 105                    |
|             | Live births (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 15–19 years <sup>6</sup>   | ...                | <sup>2</sup> 80   | <sup>3</sup> 107  | ---              | ...                    |
|             | Abortions (per 1,000)  |                    |                   |                   |                  |                        |
|             | Females 15–19 years  | ...                | <sup>2</sup> 50   | <sup>3</sup> 40   | ---              | ...                    |
|             | Fetal losses (per 1,000)   |                    |                   |                   |                  |                        |
|             | Females 15–19 years  | ...                | <sup>2</sup> 13   | <sup>3</sup> 33   | ---              | ...                    |
| <b>5.2</b>  | <b>Unintended pregnancy</b>  | <sup>7</sup> 56%   | ---               | ---               | ---              | 30%                    |
|             | a. Black females   | <sup>7</sup> 78%   | ---               | ---               | ---              | 40%                    |
|             | b. Hispanic females  | <sup>7</sup> 54.9% | ---               | ---               | ---              | 30%                    |
| <b>5.3</b>  | <b>Infertility</b>   |                    |                   |                   |                  |                        |
|             | Married couples with wives 15–44 years                                     | <sup>7</sup> 7.9%  | ---               | ---               | ---              | 6.5%                   |
|             | a. Black couples   | <sup>7</sup> 12.1% | ---               | ---               | ---              | 9%                     |
|             | b. Hispanic couples  | <sup>7</sup> 12.4% | ---               | ---               | ---              | 9%                     |
| <b>5.4*</b> | <b>Adolescents who ever had sexual intercourse</b>                         |                    |                   |                   |                  |                        |
|             | Adolescents 15 years   |                    |                   |                   |                  |                        |
|             | Females  | <sup>7</sup> 27%   | ---               | <sup>3</sup> 7%   | <sup>8</sup> 38% | 15%                    |
|             | Males  | <sup>7</sup> 33%   | ---               | <sup>4</sup> 5%   | <sup>8</sup> 42% | 15%                    |
|             | Black males  | <sup>7</sup> 69%   | ---               | <sup>8</sup> 2%   | <sup>8</sup> 77% | 15%                    |
|             | Adolescents 17 years   |                    |                   |                   |                  |                        |
|             | Females  | <sup>7</sup> 50%   | ---               | <sup>6</sup> 5%   | <sup>8</sup> 67% | 40%                    |
|             | Males  | <sup>7</sup> 66%   | ---               | <sup>6</sup> 8%   | <sup>8</sup> 65% | 40%                    |
|             | Black females  | <sup>7</sup> 66%   | ---               | <sup>8</sup> 0%   | <sup>8</sup> 75% | 40%                    |
|             | Black males  | <sup>7</sup> 90%   | ---               | <sup>9</sup> 2%   | <sup>8</sup> 88% | 40%                    |
| <b>5.5*</b> | <b>Adolescent abstinence from sexual intercourse for previous 3 months</b> |                    |                   |                   |                  |                        |
|             | Ever sexually active females 15–17 years                                   | <sup>7</sup> 23.6% | ---               | <sup>2</sup> 5%   | <sup>8</sup> 23% | 40%                    |
|             | Ever sexually active males 15–17 years                                     | <sup>7</sup> 33%   | ---               | <sup>3</sup> 3%   | <sup>8</sup> 34% | 40%                    |
| <b>5.6</b>  | <b>Contraception use by sexually active adolescents</b>                    |                    |                   |                   |                  |                        |
|             | Females 15–19 years  |                    |                   |                   |                  |                        |
|             | First intercourse  | <sup>7</sup> 63%   | ---               | ---               | ---              | 90%                    |
|             | Recent intercourse   | <sup>7</sup> 78%   | ---               | <sup>8</sup> 3%   | <sup>8</sup> 83% | 90%                    |
|             | Oral contraception and condom use at most recent intercourse               | <sup>7</sup> 2%    | ---               | ---               | ---              | 90%                    |

**Table 5. Family planning objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>      | <i>1992</i>        | <i>1993</i> | <i>1994</i>       | <i>Target<br/>2000</i> |
|--------------|--|----------------------|--------------------|-------------|-------------------|------------------------|
|              | High school males  |                      |                    |             |                   |                        |
|              | Recent intercourse . . . . .   | <sup>5</sup> 78%     | ---                | 84%         | <sup>8</sup> 85%  | 90%                    |
|              | Oral contraception and condom use at most recent intercourse . . . . .           | <sup>5</sup> 2.3%    | <sup>3</sup> 3.3%  | ---         | ---               | 90%                    |
|              | Males 17–19 years  |                      |                    |             |                   |                        |
|              | Condom and oral contraception use at last intercourse . . . . .                  | <sup>7</sup> 15%     | <sup>9</sup> 14%   | ---         | ---               | 90%                    |
| <b>5.7</b>   | <b>Failure of contraceptive method . . . . .</b>                                 | <sup>7</sup> 14%     | ---                | ---         | ---               | 7%                     |
|              | a. Black females . . . . .   | <sup>7</sup> 17.6%   | ---                | ---         | ---               | 8%                     |
|              | b. Hispanic females . . . . .  | <sup>7</sup> 16.4%   | ---                | ---         | ---               | 8%                     |
| <b>5.8</b>   | <b>Discussion of human sexuality . . . . .</b>                                   | <sup>10,11</sup> 89% | ...                | ...         | ...               | 85%                    |
|              | People 13–18 years who have discussed sexuality with parents . . . . .           | <sup>12</sup> 66%    | ---                | ---         | <sup>11</sup> 73% | 85%                    |
| <b>5.9</b>   | <b>Family planning counseling . . . . .</b>                                      | <sup>13</sup> 60%    | ---                | ---         | ---               | 90%                    |
| <b>5.10*</b> | <b>Age-appropriate preconception counseling by clinicians . . . . .</b>          | ---                  | ---                | ---         | ---               | 60%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients         |                      |                    |             |                   |                        |
|              | Inquiry about family planning (females, childbearing age)                        |                      |                    |             |                   |                        |
|              | Pediatricians . . . . .  | <sup>14</sup> 18%    | ...                | ---         | ---               | 60%                    |
|              | Nurse practitioners . . . . .  | <sup>14</sup> 53%    | ...                | ---         | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>14</sup> 48%    | ...                | ---         | ---               | 60%                    |
|              | Internists . . . . .   | <sup>14</sup> 24%    | ...                | ---         | ---               | 60%                    |
|              | Family physicians . . . . .  | <sup>14</sup> 28%    | ...                | ---         | ---               | 60%                    |
|              | Counseling about family planning   |                      |                    |             |                   |                        |
|              | Pediatricians . . . . .  | <sup>14</sup> 36%    | ...                | ---         | ---               | 60%                    |
|              | Nurse practitioners . . . . .  | <sup>14</sup> 53%    | ...                | ---         | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>14</sup> 65%    | ...                | ---         | ---               | 60%                    |
|              | Internists . . . . .   | <sup>14</sup> 26%    | ...                | ---         | ---               | 60%                    |
|              | Family physicians . . . . .  | <sup>14</sup> 36%    | ...                | ---         | ---               | 60%                    |
| <b>5.11*</b> | <b>Clinic services for HIV and other sexually transmitted diseases . . . . .</b> | ---                  | ---                | ---         | ---               | 50%                    |
|              | Family planning clinics . . . . .  | <sup>15</sup> 40%    | ---                | ---         | ---               | ---                    |
| <b>5.12</b>  | <b>Contraception use</b>   |                      |                    |             |                   |                        |
|              | Females aged 15–44 . . . . .   | <sup>16</sup> 88.2%  | <sup>7</sup> 90.1% | ---         | ---               | 95%                    |
|              | a. Black females . . . . .   | <sup>16</sup> 78.9%  | <sup>7</sup> 84.7% | ---         | ---               | 95%                    |
|              | b. Females > 100% poverty . . . . .  | <sup>16</sup> 79.6%  | <sup>7</sup> 80.2% | ---         | ---               | 95%                    |
|              | c. Females aged 15–19 > 200% poverty . . . . .                                   | <sup>16</sup> 67.4%  | <sup>7</sup> 74.9% | ---         | ---               | 95%                    |

--- Data not available.

... Category not applicable.

<sup>1</sup>Pregnancy rates are calculated from the number of births, fetal losses, and abortions.

<sup>2</sup>1985 data.

<sup>3</sup>1991 data.

<sup>4</sup>Nonwhite adolescents.

<sup>5</sup>1990 data.

<sup>6</sup>Excludes data for States lacking a Hispanic item on their birth certificate.

<sup>7</sup>1988 data.

<sup>8</sup>1995 data.

<sup>9</sup>1990–91 data.

<sup>10</sup>1994 data.

<sup>11</sup>Data are from the National Health Interview Survey and represent the proportion of people aged 10–17 who had discussed human sexuality with parents. Proportions for school and church were 76% and 32%, respectively.

<sup>12</sup>1986 data.

<sup>13</sup>1984 data.

<sup>14</sup>1992 data.

<sup>15</sup>1989 data.

<sup>16</sup>1982 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 5.1, 5.1a,b             | Abortion Provider Survey, Alan Guttmacher Institute; National Vital Statistics System, CDC, NCHS;<br>National Survey of Family Growth, CDC, NCHS.  |
| 5.2, 5.2a,b             | National Survey of Family Growth, CDC, NCHS.   |
| 5.3, 5.3a,b             | National Survey of Family Growth, CDC, NCHS.   |
| 5.4*                    | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP. |
| 5.5*                    | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP. |
| 5.6                     | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP. |
| 5.7, 5.7a,b             | National Survey of Family Growth, CDC, NCHS.   |
| 5.8                     | Baseline: Planned Parenthood Federation of America, Inc., 1986.<br>Update: National Health Interview Survey, CDC, NCHS.  |
| 5.9                     | Baseline: Mech EB. Unpublished. 1984. Orientation of Pregnancy Counselors toward Adoption.   |
| 5.10*                   | Primary Care Provider Surveys, OASH, ODPHP.  |
| 5.11*                   | National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.  |
| 5.12, 5.12 a–c          | Forrest, JD and Sing S. The Sexual and Reproduction Behavior of American<br>Women, 1982–88, Family Planning Perspectives 22(5):206–14, 1990.   |

\*Duplicate objective. See full text of objective following this table.

# Family Planning Objectives

**5.1:** Reduce pregnancies among females aged 15–17 to no more than 50 per 1,000 adolescents.

*NOTE: For black and Hispanic adolescent females, baseline data are unavailable for those aged 15–17. The targets for these two populations are based on data for females aged 15–19. If more complete data become available, a 35-percent reduction from baseline figures should be used as the target.*

**5.1a:** Reduce pregnancies among black adolescent females aged 15–19 to no more than 120 per 1,000.

**5.1b:** Reduce pregnancies among Hispanic adolescent females aged 15–19 to no more than 105 per 1,000.

**5.2:** Reduce to no more than 30 percent the proportion of all pregnancies that are unintended.

**5.2a:** Reduce to no more than 40 percent the proportion of all pregnancies among black females that are unintended.

**5.2b:** Reduce to no more than 30 percent the proportion of all pregnancies among Hispanic females that are unintended.

**5.3:** Reduce the prevalence of infertility to no more than 6.5 percent.

*NOTE: Infertility is the failure of couples to conceive after 12 months of intercourse without contraception.*

**5.3a:** Reduce the prevalence of infertility among black couples to no more than 9 percent.

**5.3b:** Reduce the prevalence of infertility among Hispanic couples to no more than 9 percent.

**5.4\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 18.3 and 19.9

**5.4a\*:** Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 18.3a and 19.9a

**5.4b\*:** Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3b and 19.9b

**5.4c\*:** Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3c and 19.9c

**5.5\*:** Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse during the previous 3 months.

Duplicate objectives: 18.15 and 19.16

**5.6:** Increase to at least 90 percent the proportion of sexually active, unmarried people aged 15–24 who use contraception, especially combined method contraception that both effectively prevents pregnancy and provides barrier protection against disease.

**5.7:** Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 7 percent in the proportion of women experiencing pregnancy despite use of a contraceptive method.

**5.7a:** Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of black females experiencing pregnancy in the last year despite use of a contraceptive method.

**5.7b:** Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of Hispanic females experiencing pregnancy in the last year despite use of a contraceptive method.

**5.8:** Increase to at least 85 percent the proportion of people aged 10–18 who have discussed human sexuality, including correct anatomical names, sexual abuse, and values surrounding sexuality, with their parents and/or have

received information through another parentally endorsed source, such as youth, school, or religious programs.

**5.9:** Increase to at least 90 percent the proportion of family planning counselors who offer accurate information about all options, including prenatal care and delivery, infant care, foster care, or adoption and pregnancy termination to their patients with unintended pregnancies.

**5.10\*:** Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 14.12

**5.11\*:** Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 18.13 and 19.11

**5.12:** Increase to at least 95 percent the proportion of all females aged 15–44 at risk of unintended pregnancy who use contraception.

**5.12a:** Increase to at least 95 percent the proportion of black females aged 15–44 at risk of unintended pregnancy who use contraception.

**5.12b:** Increase to at least 95 percent the proportion of females aged 15–44 with income less than 100 percent of poverty at risk of unintended pregnancy who use contraception.

**5.12c:** Increase to at least 95 percent the proportion of females aged 15–19 years under 200 percent of poverty at risk of unintended pregnancy who use contraception.

\*Duplicate objective.

# Priority Area 6 Mental Health and Mental Disorders

## Background

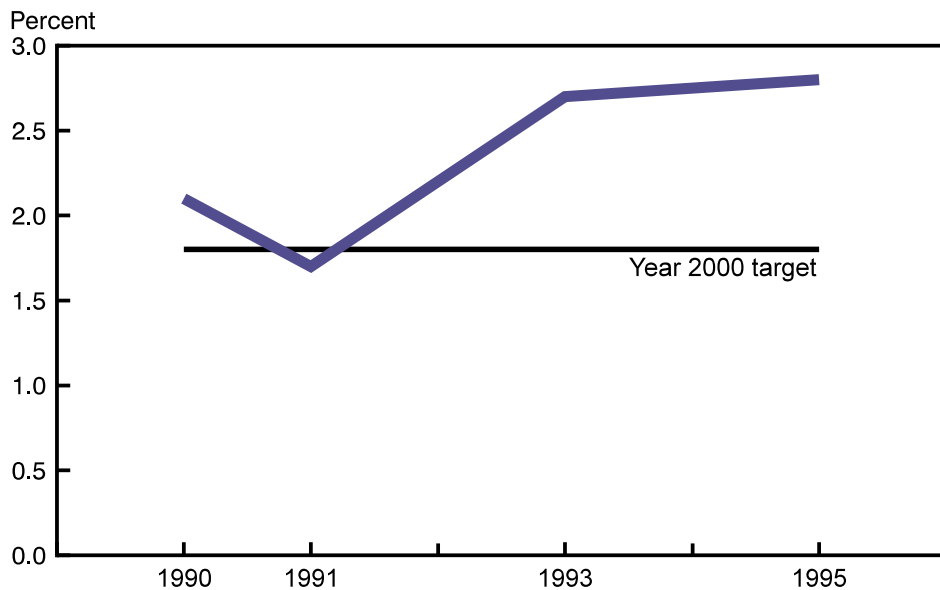
Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be affected by numerous factors ranging from biologic and genetic vulnerabilities, to acute or chronic physical dysfunction, to environmental conditions and stresses.

In 1992, nearly 3 in 10 adults in the United States had some type of mental or substance abuse disorder in the past year (1). In 1990, more than 5 million people were admitted to mental health facilities for treatment; about 62 percent were treated on an outpatient basis in hospitals, mental health clinics, and other facilities (2). Roughly 48 percent of those admitted for inpatient treatment and 35 percent of those admitted as outpatients have their treatment paid for by public insurance (3). In 1990, \$23.6 billion in public money was spent to provide treatment services for mental illness (4).

Mental and addictive disorders are the most powerful risk factors for suicide, the ninth leading cause of death in the United States. Population-based psychological autopsy studies have shown that these factors, frequently occurring in combination, are associated with over 90 percent of all suicide deaths (5). Mental disorders—especially clinical depression—and substance abuse are also the strongest risk factors for attempted suicide in both adults and youth (6,7). Prevention of suicide and suicidal behaviors continue to be targets of many programmatic initiatives, including school and community programs (8). While suicide is a violent event largely attributable to mental illness, violent events may also contribute to the development of mental illness; women who were victims of child sexual assault reported significantly higher rates of clinical depression and sexual disorders (9).

Prevention of mental illness and its consequences is a complex undertaking, but it has recently received additional impetus through advances in research

**Figure 7. Incidence of injurious suicide attempts among adolescents 14–17 years: United States, 1990–95, and year 2000 target for objective 6.2**



|                            | 1990 | 1991 | 1993 | 1995 | Year 2000 target |
|----------------------------|------|------|------|------|------------------|
| Suicide attempts . . . . . | 2.1  | 1.7  | 2.7  | 2.8  | 1.8              |

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey.

and focus from the professional community. The Institute of Medicine's report (10) calls for universal, selective, and indicated prevention efforts. The 15 objectives in this priority area support efforts to address these initiatives.

## Midcourse Modifications

One objective (6.15) relating to reduction of the prevalence of depression was added during the midcourse review; this objective also includes a subobjective targeting women. A new subobjective related to adolescent females was added to objective 6.2 (youth suicide attempts).

Targets were revised for objectives 6.3 (youth mental disorders) and 6.7 (treatment for depression). Additionally, the baseline and target were revised for subobjective 6.1d (Suicide among American Indian/Alaska Native men) to reflect the national population rather than that of Reservation States.

## Data Summary

### Highlights

The 1-year prevalence of adult mental disorders (6.4) dropped from 20 to 16 percent of adults 18–54 years of age between 1983 and 1992.

All 50 States are served by two national mental health clearinghouses (6.12), which are supported by grants from the Substance Abuse Mental Health Services Administration (SAMHSA). These clearinghouses have a mission to increase public awareness and access to mental health services.

The 1994 provisional data show a suicide rate of 11.6 per 100,000 for the total population; this reflects little change from the 1987 baseline level. Adolescent suicide rates have remained stable for the past 5 years, but are higher than the 1987 baseline. Injurious suicide attempts by adolescents (6.2) have increased.

### Summary of Progress

Six objectives (6.1, 6.4, 6.5, 6.8, 6.11, and 6.12) show progress toward

the year 2000 targets. Four objectives (6.2, 6.7, 6.9, and 6.15) have moved away from the year 2000 targets. Objective 6.10 shows no change from baseline. Four objectives (6.3, 6.6, 6.13, and 6.14) have no data beyond the baseline.

## Data Issues

### Definitions

Objective 6.1 (suicide) is monitored using data from the National Vital Statistics System (NVSS). The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (11).

Objective 6.2 (adolescent suicide attempts) is monitored with data from the Youth Risk Behavior Survey (YRBS), a school-based survey. Suicide attempts are self-reported and are limited to those that required medical attention in the last 12 months. Data from the 1992 National Health Interview Survey (NHIS) suggest that other types of violent behavior are higher among youth (14–19 years of age) not in school than among those in school; the data for in-school youth were very close to estimates for the total population. The exclusion of adolescents not in school in the data used to monitor objective 6.2 may underestimate the actual number of youth suicide attempts (12). Reliance on self-report of suicide attempts that resulted in hospitalization without validation from medical sources may also affect the accuracy of estimates. However, a recent study by CDC indicates that estimates among in-school youth are highly reliable (13).

The wording and baseline data for objective 6.10 (suicide prevention in jails) were established with States as the organizational level for monitoring and implementing suicide prevention protocols in jails. Jails are usually under the jurisdiction of counties or municipalities. State level data on jails are limited; the alternative data track the

objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, are only available for 1993 but later updates are expected. Additional data are from the American Correctional Association's (ACA) list of jails which are ACA-accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

Data for objectives 6.13 (clinical review of childhood mental functions) and 6.14 (clinical review of adult mental functions) are from the Primary Care Providers Surveys (PCPS). The data on assessment and screening represent the proportion of providers who routinely queried 81–100 percent of their patients about a particular type of mental function. Data on treatment and referral refer to the proportion of providers who provided or referred patients who needed the services.

### Comparability of Data Sources

Baselines for objectives 6.4 (adult mental disorders), 6.7 (treatment for depression), and 6.15 (prevalence of depression) came from the National Institute for Mental Health (NIMH) Epidemiological Catchment Area (ECA) studies conducted in five metropolitan areas during the early 1980's. This household survey used the Diagnostic Interview Schedule (DIS) and DSM-III criteria to estimate 1-month prevalences, which were used to set the baseline and target. The updates for these objectives come from the National Comorbidity Survey (NCS), which was a national survey that collected prevalence data using the Composite International Diagnostic Interview (CIDI) and DSM-III-R criteria. To monitor the objectives, the ECA data were reanalyzed to produce 1-year prevalence estimates and the NCS data were recoded to reflect DSM-III categories.

### References

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12. Centers for Disease Control and Prevention. Health risk behaviors among adolescents who do and do not attend school: United States, 1992. *MMWR* 43:129–32. 1994.

13. Brenner N, et al. Reliability of the Youth Risk Behavior Survey questionnaire, presented at the American Public Health Association annual meeting. Washington, DC October. 1994.

**Table 6. Mental health and mental disorders objective status**

|              | <i>Objective</i>  | <i>Baseline</i>    | <i>1992</i>        | <i>1993</i>        | <i>1994</i>       | <i>Target<br/>2000</i> |
|--------------|---|--------------------|--------------------|--------------------|-------------------|------------------------|
| <b>6.1*</b>  | <b>Suicide (age adjusted per 100,000)</b> . . . . .                                     | <sup>1</sup> 11.7  | 11.1               | 11.3               | <sup>2</sup> 11.6 | 10.5                   |
|              | a. Adolescents 15–19 years (per 100,000) . . . . .                                      | <sup>1</sup> 10.2  | 10.8               | 10.9               | ---               | 8.2                    |
|              | b. Males 20–34 years (per 100,000) . . . . .  | <sup>1</sup> 25.2  | 24.5               | 25.5               | ---               | 21.4                   |
|              | c. White males 65 years and over (per 100,000) . . . . .                                | <sup>1</sup> 46.7  | 41.0               | 40.9               | ---               | 39.2                   |
|              | d. American Indian/Alaska Native males (age adjusted per 100,000) . . . . .             | <sup>1</sup> 20.1  | 17.9               | 18.7               | ---               | 17.0                   |
| <b>6.2*</b>  | <b>Suicide attempts among adolescents 14–17 years</b> . . . . .                         | <sup>3</sup> 2.1%  | ---                | 2.7%               | <sup>5</sup> 2.8% | 1.8%                   |
|              | a. Females 14–17 years . . . . .  | <sup>4</sup> 2.5%  | ---                | 3.8%               | <sup>5</sup> 3.4% | 2.0%                   |
| <b>6.3</b>   | <b>Mental disorders</b>   |                    |                    |                    |                   |                        |
|              | Children and adolescents 18 years and under . . . . .                                   | <sup>6</sup> 20%   | ---                | ---                | ---               | 17%                    |
| <b>6.4</b>   | <b>Mental disorders among adults (1-month prevalence)</b> . . . . .                     | <sup>7</sup> 12.6% | ---                | ---                | ---               | 10.7%                  |
|              | Mental disorders among adults (1 year prevalence) . . . . .                             | ...                | <sup>7</sup> 20.4% | <sup>8</sup> 16.0% | ---               | ...                    |
| <b>6.5</b>   | <b>Adverse health effects from stress</b> . . . . .                                     | <sup>9</sup> 44.2% | ---                | 39.2%              | ---               | 35%                    |
|              | a. People with disabilities . . . . .   | <sup>9</sup> 53.5% | ---                | 54.9%              | ---               | 40%                    |
| <b>6.6</b>   | <b>Use of community support among people with severe<br/>mental disorders</b> . . . . . | <sup>10</sup> 15%  | ---                | ---                | ---               | 30%                    |
| <b>6.7</b>   | <b>Treatment for depression (6-month services)</b> . . . . .                            | <sup>7</sup> 31%   | ---                | ---                | ---               | 54%                    |
|              | Treatment for depression (1-year services) . . . . .                                    | ...                | <sup>7</sup> 34.7% | <sup>8</sup> 34.2% | ---               | ...                    |
| <b>6.8</b>   | <b>Seeking help with emotional/personal problems</b> . . . . .                          | <sup>9</sup> 11.1% | ---                | 14.3%              | ---               | 20%                    |
|              | a. People with disabilities . . . . .   | <sup>9</sup> 14.7% | ---                | 19.8%              | ---               | 30%                    |
| <b>6.9</b>   | <b>Not taking steps to control stress</b> . . . . .                                     | <sup>9</sup> 24%   | 35%                | ---                | 35%               | 5%                     |
| <b>6.10*</b> | <b>Number of States with suicide prevention in jails</b> . . . . .                      | <sup>11,a</sup> 2  | ...                | ---                | <sup>5</sup> 2    | 50                     |
|              | Proportion of jails with suicide policies . . . . .                                     | ...                | ---                | 79.5%              | ---               | ...                    |
|              | Proportion of jails with ACA Accreditation . . . . .                                    | ...                | 1%                 | 2%                 | <sup>5</sup> 2%   | ...                    |
| <b>6.11</b>  | <b>Worksite stress management programs</b> . . . . .                                    | <sup>9</sup> 26.6% | 37.0%              | ---                | ---               | 40%                    |
| <b>6.12</b>  | <b>Number of States with mutual help clearinghouses</b> . . . . .                       | <sup>5</sup> 8     | ---                | ---                | ---               | ...                    |
|              | Number of Federal Clearinghouses . . . . .  | <sup>5,12</sup> 2  | ...                | ...                | ...               | ...                    |
| <b>6.13</b>  | <b>Clinician review of patients' mental functioning</b> . . . . .                       | ---                | ---                | ---                | ---               | 60%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients                |                    |                    |                    |                   |                        |
|              | Inquiry about cognitive functioning   |                    |                    |                    |                   |                        |
|              | Nurse practitioners . . . . .   | <sup>11</sup> 35%  | ...                | ---                | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .   | <sup>11</sup> 9%   | ...                | ---                | ---               | 60%                    |
|              | Internists . . . . .  | <sup>11</sup> 18%  | ...                | ---                | ---               | 60%                    |
|              | Family physicians . . . . .   | <sup>11</sup> 7%   | ...                | ---                | ---               | 60%                    |
|              | Inquiry about emotional/behavioral functioning  |                    |                    |                    |                   |                        |
|              | Nurse practitioners . . . . .   | <sup>11</sup> 40%  | ...                | ---                | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .   | <sup>11</sup> 12%  | ...                | ---                | ---               | 60%                    |
|              | Internists . . . . .  | <sup>11</sup> 25%  | ...                | ---                | ---               | 60%                    |
|              | Family physicians . . . . .   | <sup>11</sup> 13%  | ...                | ---                | ---               | 60%                    |
|              | Treatment/referral for cognitive problems   |                    |                    |                    |                   |                        |
|              | Nurse practitioners . . . . .   | <sup>11</sup> 20%  | ...                | ---                | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .   | <sup>11</sup> 20%  | ...                | ---                | ---               | 60%                    |
|              | Internists . . . . .  | <sup>11</sup> 27%  | ...                | ---                | ---               | 60%                    |
|              | Family physicians . . . . .   | <sup>11</sup> 21%  | ...                | ---                | ---               | 60%                    |
|              | Treatment/referral for emotional/behavioral problems                                    |                    |                    |                    |                   |                        |
|              | Nurse practitioners . . . . .   | <sup>11</sup> 23%  | ...                | ---                | ---               | 60%                    |
|              | Obstetricians/gynecologists . . . . .   | <sup>11</sup> 23%  | ...                | ---                | ---               | 60%                    |
|              | Internists . . . . .  | <sup>11</sup> 35%  | ...                | ---                | ---               | 60%                    |
|              | Family physicians . . . . .   | <sup>11</sup> 27%  | ...                | ---                | ---               | 60%                    |
| <b>6.14</b>  | <b>Clinician review of childrens' mental functioning</b> . . . . .                      | ...                | ---                | ---                | ---               | 75%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients                |                    |                    |                    |                   |                        |
|              | Inquiry about cognitive functioning   |                    |                    |                    |                   |                        |
|              | Pediatricians . . . . .   | <sup>11</sup> 62%  | ...                | ---                | ---               | 75%                    |
|              | Inquiry about emotional/behavioral functioning  |                    |                    |                    |                   |                        |
|              | Pediatricians . . . . .   | <sup>11</sup> 47%  | ...                | ---                | ---               | 75%                    |
|              | Treatment/referral for cognitive problems   |                    |                    |                    |                   |                        |
|              | Pediatricians . . . . .   | <sup>11</sup> 51%  | ...                | ---                | ---               | 75%                    |
|              | Treatment/referral for emotional/behavioral problems                                    |                    |                    |                    |                   |                        |
|              | Pediatricians . . . . .   | <sup>11</sup> 45%  | ...                | ---                | ---               | 75%                    |



**Table 6. Mental health and mental disorders objective status—Con.**

|             | <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i>        | <i>1993</i>        | <i>1994</i> | <i>Target<br/>2000</i> |
|-------------|--|-------------------|--------------------|--------------------|-------------|------------------------|
|             | Inquiry about parent-child relationship                        |                   |                    |                    |             |                        |
|             | Pediatricians . . . . .  | <sup>1</sup> 55%  | ...                | ---                | ---         | 75%                    |
|             | Nurse practitioners . . . . .                                  | <sup>1</sup> 55%  | ...                | ---                | ---         | 75%                    |
|             | Family physicians . . . . .                                    | <sup>1</sup> 36%  | ...                | ---                | ---         | 75%                    |
|             | Treatment/referral for parent-child interaction problems       |                   |                    |                    |             |                        |
|             | Pediatricians . . . . .  | <sup>1</sup> 34%  | ...                | ---                | ---         | 75%                    |
|             | Nurse practitioners . . . . .                                  | <sup>1</sup> 24%  | ...                | ---                | ---         | 75%                    |
|             | Family physicians . . . . .                                    | <sup>1</sup> 29%  | ...                | ---                | ---         | 75%                    |
| <b>6.15</b> | <b>Prevalence of depression (1-month prevalence)</b> . . . . . | <sup>7</sup> 5.1% | ---                | ---                | ---         | 4.3%                   |
|             | Prevalence of depression (1-year prevalence) . . . . .         | ...               | <sup>7</sup> 10.9% | <sup>8</sup> 11.1% | ---         | ...                    |
|             | a. Women(1-month prevalence) . . . . .                         | <sup>7</sup> 6.6% | ---                | ---                | ---         | 5.5%                   |
|             | Women(1-year prevalence) . . . . .                             | ...               | <sup>7</sup> 14.2% | <sup>8</sup> 13.1% | ---         | ...                    |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>Provisional data.

<sup>3</sup>1990 data.

<sup>4</sup>1991 data.

<sup>5</sup>1995 data.

<sup>6</sup>1988 data.

<sup>7</sup>1981–85 data.

<sup>8</sup>1990–92 data.

<sup>9</sup>1985 data.

<sup>10</sup>1986 data.

<sup>11</sup>1992 data.

<sup>12</sup>Federal Clearinghouses serve all 50 States.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 6.1*, 6.1a–d            | National Vital Statistics System, CDC, NCHS.   |
| 6.2*, 6.2a              | Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 6.3                     | Baseline (revised): Bird HR. Estimates of the prevalence of childhood maladjustment in a community survey in Puerto Rico. Archives of Gen Psychiatry 45:1120–26. 1988.<br>Costello EJ, et al. Psychiatric disorders in pediatric primary care: Prevalence risk factor Archives of Gen Psychiatry 45:1107–16. 1988. |
| 6.4                     | Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. Update: National Comorbidity Survey, University of Michigan.  |
| 6.5, 6.5a               | National Health Interview Survey, CDC, NCHS.   |
| 6.6                     | Baseline: National Institute of Mental Health Community Support Program Client Follow-Up Study, SAMHSA.  |
| 6.7                     | Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. Update: National Comorbidity Survey, University of Michigan.  |
| 6.8, 6.8a               | National Health Interview Survey, CDC, NCHS.   |
| 6.9                     | Prevention Index, Rodale Press, Inc.   |
| 6.10*                   | Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives, CDC, NCIPC.<br>Baseline and update (ACA accreditation): American Correctional Association.<br>Baseline (suicide policies): National Census of Jails, DOJ, BJS.   |
| 6.11                    | National Survey of Worksite Health Promotion Activities, OASH, ODPHP.  |
| 6.12                    | Baseline: SAMHSA.<br>Updates: National Network of Mutual Help Centers.   |
| 6.13                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 6.14                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 6.15                    | Baseline: Epidemiologic Catchment Area Study, NIH, NIMH.<br>Update: National Comorbidity Survey, University of Michigan.   |

\*Duplicate objective. See full text of objective following this table.

# Mental Health and Mental Disorders Objectives

**6.1\*:** Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 7.2

**6.1a\*:** Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 7.2a

**6.1b\*:** Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 7.2b

**6.1c\*:** Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 7.2c

**6.1d\*:** Reduce suicides among American Indian and Alaska Native men to no more than 17.0 per 100,000.

Duplicate objective: 7.2d

**6.2\*:** Reduce to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 7.8

*NOTE: Data are limited to those suicide attempts that result in hospitalization and are based on self-reports.*

**6.2a\*:** Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 7.8a

**6.3:** Reduce to less than 17 percent the prevalence of mental disorders among children and adolescents.

**6.4:** Reduce the prevalence of mental disorders (exclusive of substance abuse) among adults living in the community to less than 10.7 percent.

**6.5:** Reduce to less than 35 percent the proportion of people aged 18 and older who report adverse health effects from stress within the past year.

*NOTE: For this objective, people with disabilities are people who report any*

*limitation in activity due to chronic conditions.*

**6.5a:** Reduce to less than 40 percent the proportion of people with disabilities who report adverse health effects from stress within the past year.

**6.6:** Increase to at least 30 percent the proportion of people aged 18 and older with severe, persistent mental disorders who use community support programs.

**6.7:** Increase to at least 54 percent the proportion of people with major depressive disorders who obtain treatment.

**6.8:** Increase to at least 20 percent the proportion of people aged 18 and older who seek help in coping with personal and emotional problems.

**6.8a:** Increase to at least 30 percent the proportion of people with disabilities who seek help in coping with personal and emotional problems.

**6.9:** Decrease to no more than 5 percent the proportion of people aged 18 and older who report experiencing significant levels of stress who do not take steps to reduce or control their stress.

**6.10\*:** Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 7.18

**6.11:** Increase to at least 40 percent the proportion of worksites employing 50 or more people that provide programs to reduce employee stress.

**6.12:** Establish a network to facilitate access to mutual self-help activities, resources, and information by people and their family members who are experiencing emotional distress resulting from mental or physical illness.

**6.13:** Increase to at least 60 percent the proportion of primary care providers who routinely review with patients their patients' cognitive, emotional, and behavioral functioning and the resources available to deal with any problems that are identified.

**6.14:** Increase to at least 75 percent the proportion of providers of primary care for children who include assessment of cognitive, emotional, and parent-child functioning with appropriate counseling, referral, and followup, in their clinical practices.

**6.15:** Reduce the prevalence of depressive (affective) disorders among adults living in the community to less than 4.3 percent.

**6.15a:** Reduce the prevalence of depressive (affective) disorders among women living in the community to less than 5.5 percent.

\*Duplicate objective.

# Priority Area 7 Violent and Abusive Behavior

## Background

Violent and abusive behaviors continue to be major causes of death, injury, and stress in the United States. Suicide and homicide have resulted in over 50,000 deaths annually between 1985 and 1993 (1) and victims of violence have exceeded 2 million persons annually (2). Violence produces extensive physical costs and emotional consequences for society (3). The widespread nature of these consequences may indicate that violence has become a common part of social interaction in many domestic settings (4). It may also become a mode of behavior adopted by future generations raised in such settings (5). Firearms play a major role in both interpersonal and self-directed violence, especially among younger victims (6). Handguns are the primary means for the majority of this violence; they are used in 78 percent of all firearm crimes (7). While laws limiting access to firearms and mandatory sentences for felony firearm use appear to reduce and/or prevent violent injuries (8,9), a combined effort by law enforcement and public health services will be necessary to effectively address the problem of violence.

## Midcourse Modifications

An objective was added to monitor the number of States that have laws requiring safe storage of firearms. A subobjective was added to objective 7.8 seeking reduction of suicide attempts among adolescent females.

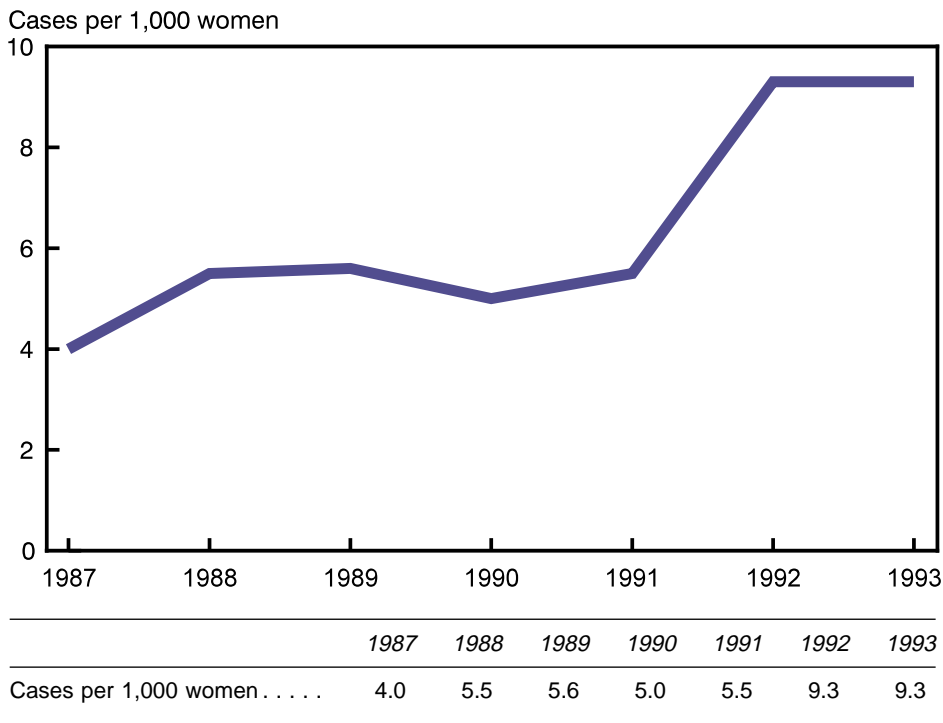
Objective 7.3 was reworded to focus on firearm deaths rather than weapons-related deaths. The targets for objective 7.4 (incidence of child abuse) and the four subobjectives were revised to reflect reanalysis of the baseline data.

## Data Summary

### Highlights

After declining in 1992, the homicide rate (7.1) rose to surpass 1991 levels in 1993; it currently is nearly

**Figure 8. Incidence of physical abuse directed at women by male partners: United States, 1987–93, objective 7.5**



SOURCE: Department of Justice, Bureau of Justice Statistics, National Crime Survey.

25 percent higher than the baseline. The homicide rate for black males also increased and is 54 percent higher than the baseline. Firearm-related deaths (7.3) increased by 6.8 percent between 1990 and 1993, and the rate for blacks increased by 12.6 percent during the same time period. Data on weapon carrying by adolescents (7.10) dropped by 24 percent between 1991 and 1995. The number of States with laws requiring secure storage of firearms has increased from 1 in 1989 to 14 in 1995.

Injuries from assaults and other violent acts (7.6) increased, and assaults against women by their partners (7.5) have more than doubled since 1987.

Data from the National Health Interview Survey (NHIS) indicate that 37.4 percent of the population report having firearms in or around the home. Among people with firearms in the home, 20 percent indicated that they were stored either loaded or unlocked; 7.2 percent of the population surveyed indicated that firearms were stored either loaded or unlocked.

## Summary of Progress

Of the 19 objectives, 6 (7.2, 7.9, 7.10, 7.13, 7.16, and 7.19) in this priority area progressed toward the year

2000 targets. Objective 7.18 shows no change from baseline. The baseline established for 7.16 (conflict resolution in schools) surpassed the year 2000 target. The data for six objectives (7.1, 7.3, 7.5, 7.6, 7.7, and 7.8) suggest movement away from the year 2000 target. Baseline data were established for objective 7.11. There were no updates for two objectives (7.4 and 7.15). Three objectives (7.12, 7.14, and 7.17) remain without baselines.

## Data Issues

### Definitions

Objective 7.1 (homicide) is monitored using data from the National Vital Statistics System (NVSS) and excludes homicides attributed to legal intervention. It should also be noted that the number of States reporting Hispanic origin data in their vital statistics has varied from year to year. (See appendix.)

Objective 7.2 (suicide deaths) is monitored using data from the NVSS. The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on

judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (10).

Data for objectives 7.6 (assault injuries) and 7.7 (rape and attempted rape) come from the National Crime Victimization Survey, which provides self-reported victimizations. The numbers of offenses reported in this survey generally exceed those reported to police and other law enforcement agencies. However, because of their personal nature, some offenses such as rape are underreported in the crime survey (11). The data for these objectives include injuries from completed rapes, attempted and completed robberies with injury, and completed aggravated and simple assaults with injury. In 1992, this survey was redesigned; the revised questions elicit higher rates for rape, other sex offenses, and crimes committed by relatives and acquaintances.

Data for objectives 7.8 (adolescent suicide attempts), 7.9 (physical fighting among adolescents), and 7.10 (weapon carrying) come from the school-based Youth Risk Behavior Survey (YRBS) and rely on student self-report. Suicide attempts are limited to those that occurred in the last 12 months and required medical attention. Data from the 1992 NHIS indicate higher levels of weapon carrying and fighting among youth (14–19 years of age) not in school than among youth the same age in school, although the estimates for in-school youth were very close to the estimates for the total population (12). The NHIS did not include data on suicide attempts; the exclusion of adolescents not in school in the data used to provide ongoing monitoring for objective 7.8 may produce underestimates of suicide attempts. The reliance on self-report without external validation of weapon carrying, suicide attempts, and fighting may affect the validity of these estimates, although a recent study by CDC indicated that the results are highly reliable (13).

Objective 7.11 (inappropriate firearm storage) is measured using data from the NHIS. The numerator is the

number of people who have a firearm in or around the house that is stored, loaded, or unlocked. The denominator is the number of people who report having a firearm in or around the house. Data on the proportion of the total population with unlocked or loaded guns are also footnoted in the summary table.

The wording and baseline data for objective 7.12 (suicide prevention in jails) were established with States as the organizational level for monitoring and implementing suicide prevention protocols in jails. Jails are usually under the jurisdiction of counties or municipalities. State level data on jails are limited; the alternative data track the objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, were only available for 1993 but subsequent updates are expected. Additional data are from the American Correctional Association's (ACA) list of jails that are ACA-accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

### Proxy Data

The baseline and target for objective 7.5 (partner abuse) were established using the National Institute of Mental Health's survey of family violence, which measured incidents of violence among couples. This survey will not be repeated so the objective will be monitored using data from the Bureau of Justice National Crime Victimization Survey that is tracking violence between intimates (for example, spouses, ex-spouses, boyfriends). The data used to track the objective report incidents per 1,000 women, which reflects the intent of the objective.

### Data Availability

Data are not currently available for objectives 7.12 (emergency room protocols), 7.14 (followup on abused children), and 7.17 (comprehensive violence prevention programs). No update is available for 7.15 (battered women).

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**Table 7. Violent and abusive behavior objective status**

|             | <i>Objective</i>  | <i>Baseline</i>     | <i>1992</i>       | <i>1993</i> | <i>1994</i>       | <i>Target<br/>2000</i> |
|-------------|---|---------------------|-------------------|-------------|-------------------|------------------------|
| <b>7.1</b>  | <b>Homicide (age adjusted per 100,000)</b> . . . . .  | <sup>1</sup> 8.5    | 10.3              | 10.6        | ---               | 7.2                    |
|             | a. Children 3 years and under (per 100,000) . . . . .   | <sup>1</sup> 3.9    | 4.5               | 4.9         | ---               | 3.1                    |
|             | b. Spouses 15–34 years (per 100,000) . . . . .  | <sup>1</sup> 1.7    | <sup>2</sup> 1.5  | ---         | ---               | 1.4                    |
|             | c. Black males 15–34 years (per 100,000) . . . . .  | <sup>1</sup> 91.1   | 134.2             | 140.5       | ---               | 72.4                   |
|             | d. Hispanic males 15–34 years (per 100,000) <sup>3</sup> . . . . .  | <sup>1</sup> 41.3   | 56.8              | 52.4        | ---               | 33.0                   |
|             | e. Black females 15–34 years (per 100,000) . . . . .  | <sup>1</sup> 20.2   | 22.7              | 23.7        | ---               | 16.0                   |
|             | f. American Indians/Alaska Natives (age adjusted per 100,000) . . . . .                                   | <sup>1</sup> 11.2   | 10.3              | 10.7        | ---               | 9.0                    |
| <b>7.2*</b> | <b>Suicide (age adjusted per 100,000)</b> . . . . .   | <sup>1</sup> 11.7   | 11.1              | 11.3        | <sup>4</sup> 11.6 | 10.5                   |
|             | a. Adolescents 15–19 years (per 100,000) . . . . .  | <sup>1</sup> 10.2   | 10.8              | 10.9        | ---               | 8.2                    |
|             | b. Males 20–34 years (per 100,000) . . . . .  | <sup>1</sup> 25.2   | 24.5              | 25.5        | ---               | 21.4                   |
|             | c. White males 65 years and over (per 100,000) . . . . .  | <sup>1</sup> 46.7   | 41.0              | 40.9        | ---               | 39.2                   |
|             | d. American Indian/Alaska Native males (age adjusted per 100,000) . . . . .                               | <sup>1</sup> 20.1   | 17.9              | 18.7        | ---               | 17.0                   |
| <b>7.3</b>  | <b>Firearm-related deaths (age adjusted per 100,000)</b> . . . . .  | <sup>5</sup> 14.6   | 14.9              | 15.6        | ---               | 11.6                   |
|             | a. Blacks . . . . .   | <sup>5</sup> 33.4   | 34.4              | 37.6        | ---               | 30.0                   |
| <b>7.4</b>  | <b>Child abuse and neglect (per 1,000)</b> . . . . .  | <sup>6</sup> 22.6   | ---               | ---         | ---               | Less than<br>22.6      |
|             | Incidence of types of maltreatment  |                     |                   |             |                   |                        |
|             | a. Physical abuse . . . . .   | <sup>6</sup> 4.9    | ---               | ---         | ---               | Less than<br>4.9       |
|             | b. Sexual abuse . . . . .   | <sup>6</sup> 2.1    | ---               | ---         | ---               | Less than<br>2.1       |
|             | c. Emotional abuse . . . . .  | <sup>6</sup> 3.0    | ---               | ---         | ---               | Less than<br>3.0       |
|             | d. Neglect . . . . .  | <sup>6</sup> 14.6   | ---               | ---         | ---               | Less than<br>14.6      |
| <b>7.5</b>  | <b>Partner abuse (per 1,000 couples)</b> . . . . .  | <sup>7</sup> 30.0   | ---               | ---         | ---               | 27.0                   |
|             | Assaults by intimates (per 1,000 women) . . . . .   | ...                 | <sup>14</sup> 4.0 | 9.3         | ---               | ...                    |
| <b>7.6</b>  | <b>Assault injuries (per 1,000)</b> . . . . .   | <sup>6</sup> 9.7    | 9.3               | 12.3        | 12.7              | 8.7                    |
| <b>7.7</b>  | <b>Rape and attempted rape (per 100,000)</b>  |                     |                   |             |                   |                        |
|             | Females 12 years and over . . . . .   | <sup>6</sup> 120    | 330               | 270         | 270               | 108                    |
|             | a. Females 12–34 years . . . . .  | <sup>6</sup> 250    | <sup>5</sup> 206  | ---         | ---               | 225                    |
| <b>7.8*</b> | <b>Suicide attempts among adolescents 14–17 years</b> . . . . .   | <sup>5</sup> 2.1%   | ---               | 2.7%        | <sup>9</sup> 2.8% | 1.8%                   |
|             | a. Females 14–17 years . . . . .  | <sup>8</sup> 2.5%   | ---               | 3.8%        | <sup>9</sup> 3.4% | 2.0%                   |
| <b>7.9</b>  | <b>Physical fighting among adolescents 14–17 years (incidents per 100 students per month)</b> . . . . .   | <sup>8</sup> 137    | ---               | 137         | <sup>9</sup> 128  | 110                    |
|             | a. Black males 14–17 years . . . . .  | <sup>8</sup> 207    | ---               | 203         | <sup>9</sup> 181  | 160                    |
| <b>7.10</b> | <b>Weapon-carrying by adolescents 14–17 years (incidents per 100 students per month)</b> . . . . .        | <sup>8</sup> 107    | ---               | 92          | <sup>9</sup> 81   | 86                     |
|             | a. Black adolescents 14–17 years . . . . .  | <sup>8</sup> 134    | ---               | 117         | <sup>9</sup> 85   | 105                    |
| <b>7.11</b> | <b>Proportion of people with firearms in the home that are stored either loaded or unlocked</b> . . . . . | <sup>9,10</sup> 20% | ...               | ...         | ...               | 20%<br>reduction       |
| <b>7.12</b> | <b>Emergency room protocols for victims of violence</b> . . . . .   | ---                 | ---               | ---         | ---               | 90%                    |
| <b>7.13</b> | <b>Number of States with child death review systems</b> . . . . .   | <sup>8</sup> 33     | 32                | ---         | <sup>9</sup> 45   | 45                     |
| <b>7.14</b> | <b>Number of States that followup abused children</b> . . . . .   | ---                 | ---               | ---         | ---               | 30                     |
| <b>7.15</b> | <b>Battered women turned away from shelters</b> . . . . .   | <sup>14</sup> 0%    | ---               | ---         | ---               | 10%                    |
| <b>7.16</b> | <b>Conflict resolution in a required course</b>   |                     |                   |             |                   |                        |
|             | Proportion of middle/junior and senior high schools . . . . .   | <sup>9</sup> 58.3%  | ...               | ...         | ...               | 50%                    |
| <b>7.17</b> | <b>Local comprehensive violence prevention programs</b> . . . . .   | ---                 | ---               | ---         | ---               | 80%                    |

**Table 7. Violent and abusive behavior objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>  | <i>1992</i> | <i>1993</i> | <i>1994</i>     | <i>Target<br/>2000</i> |
|--------------|--|------------------|-------------|-------------|-----------------|------------------------|
| <b>7.18*</b> | <b>Number of States with suicide prevention in jails</b> . . . . . | <sup>11,a2</sup> | ...         | ---         | <sup>9</sup> 2  | 50                     |
|              | Proportion of jails with suicide policies. . . . .                 | ...              | ---         | 79.5%       | ---             | ...                    |
|              | Proportion of jails with ACA accreditation. . . . .                | ...              | 1%          | 2%          | 2%              | ...                    |
| <b>7.19*</b> | <b>Number of States with firearm storage laws</b> . . . . .        | <sup>21</sup>    | ---         | ---         | <sup>9</sup> 14 | 50                     |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1989 data.

<sup>3</sup>Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality.

<sup>4</sup>Provisional data.

<sup>5</sup>1990 data.

<sup>6</sup>1986 data.

<sup>7</sup>1985 data.

<sup>8</sup>1991 data.

<sup>9</sup>1995 data.

<sup>10</sup>Of the total population, 37.4% reported having a firearm in or around the home and 7.2% reported having a firearm that was stored, either loaded or unlocked.

<sup>11</sup>1992 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 7.1, 7.1a–f             | National Vital Statistics System, CDC, NCHS.   |
| 7.2*, 7.2a–d            | National Vital Statistics System, CDC, NCHS.   |
| 7.3                     | National Vital Statistics System, CDC, NCHS.   |
| 7.4, 7.4a–d             | National Incidence of Child Abuse and Neglect Survey, Office of Human Development, NCCAN.  |
| 7.5                     | National Family Violence Survey, NIH, NIMH.  |
| 7.6                     | National Crime Victimization Survey, Department of Justice, Bureau of Justice Statistics.  |
| 7.7, 7.7a               | National Crime Victimization Survey, Department of Justice, Bureau of Justice Statistics.  |
| 7.8*, 7.8a              | Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 7.9                     | Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 7.10                    | Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 7.13                    | Baseline: Annual 50 State Survey, National Committee for Prevention of Child Abuse.<br>Update: National Incidence of Child Abuse and Neglect Survey, Office of Human Development, NCCAN.   |
| 7.15                    | Domestic Violence Statistical Survey, National Coalition Against Domestic Violence.  |
| 7.16                    | School Health Policies and Programs Study, CDC, NCCDPHP.   |
| 7.18*                   | Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives, CDC, NCIPC.<br>Baseline and update (ACA accreditation): American Correctional Association.<br>Baseline (suicide policies): National Census of Jails, DOJ, BJS. |
| 7.19*                   | Center to Prevent Handgun Violence.  |

\*Duplicate objective. See full text of objective following this table.

# Violent and Abusive Behavior Objectives

**7.1:** Reduce homicides to no more than 7.2 per 100,000 people.

**7.1a:** Reduce homicides among children aged 3 and younger to no more than 3.1 per 100,000 children.

**7.1b:** Reduce homicides among spouses aged 15–34 to no more than 1.4 per 100,000.

**7.1c:** Reduce homicides among black men aged 15–34 to no more than 72.4 per 100,000.

**7.1d:** Reduce homicides among Hispanic men aged 15–34 to no more than 33.0 per 100,000.

**7.1e:** Reduce homicides among black women aged 15–34 to no more than 16.0 per 100,000.

**7.1f:** Reduce homicides among American Indians and Alaska Natives to no more than 9.0 per 100,000.

**7.2\*:** Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 6.1

**7.2a\*:** Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 6.1a

**7.2b\*:** Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 6.1b

**7.2c\*:** Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 6.1c

**7.2d\*:** Reduce suicides among American Indian and Alaska Native men to no more than 17.0 per 100,000.

Duplicate objective: 6.1d

**7.3:** Reduce firearm-related deaths to no more than 11.6 per 100,000 people from major causes.

**7.3a:** Reduce firearm-related deaths among blacks to no more than 30.0 per 100,000 people from major causes.

**7.4:** Reverse to less than 22.6 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

**7.4a:** Reverse to less than 4.9 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

**7.4b:** Reverse to less than 2.1 per 1,000 children the rising incidence of sexual abuse of children younger than age 18.

**7.4c:** Reverse to less than 3.0 per 1,000 children the rising incidence of emotional abuse of children younger than age 18.

**7.4d:** Reverse to less than 14.6 per 1,000 children the rising incidence of neglect of children younger than age 18.

**7.5:** Reduce physical abuse directed at women by male partners to no more than 27 per 1,000 couples.

**7.6:** Reduce assault injuries among people aged 12 and older to no more than 8.7 per 1,000.

**7.7:** Reduce rape and attempted rape of women aged 12 and older to no more than 108 per 100,000 women.

**7.7a:** Reduce rape and attempted rape of women aged 12–34 to no more than 225 per 100,000.

**7.8\*:** Reduce to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 6.2

*NOTE: Data are limited to those suicide attempts that result in hospitalization and are based on self-reports.*

**7.8a\*:** Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 6.2a

**7.9:** Reduce to 110 per 1,000 the incidence of physical fighting among adolescents aged 14–17.

**7.9a:** Reduce to 160 per 1,000 the incidence of physical fighting among black males aged 14–17.

**7.10:** Reduce to 86 per 1,000 the incidence of weapon-carrying by adolescents aged 14–17.

**7.10a:** Reduce to 105 per 1,000 the incidence of weapon-carrying by blacks aged 14–17.

**7.11:** Reduce by 20 percent the proportion of people who possess weapons that are inappropriately stored and therefore dangerously available.

**7.12:** Extend protocols for routinely identifying, treating, and properly referring suicide attempters, victims of sexual assault, and victims of spouse, elder, and child abuse to at least 90 percent of hospital emergency departments.

**7.13:** Extend to at least 45 States implementation of unexplained child death review systems.

**7.14:** Increase to at least 30 the number of States in which at least 50 percent of children identified as neglected or physically or sexually abused receive physical and mental evaluation with appropriate followup as a means of breaking the intergenerational cycle of abuse.

**7.15:** Reduce to less than 10 percent the proportion of battered women and their children turned away from emergency housing due to lack of space.

**7.16:** Increase to at least 50 percent the proportion of elementary and secondary schools that teach nonviolent conflict resolution skills, preferably as a part of comprehensive school health education.

**7.17:** Extend coordinated, comprehensive violence prevention programs to at least 80 percent of local jurisdictions with populations over 100,000.

**7.18\*:** Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 6.10

**7.19\*:** Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 9.25

*NOTE: There are some variations across States in the age which defines minors. Additionally, in some States violation of the law is a misdemeanor; in others it is a felony. Penalties for violation also vary.*

\*Duplicate objective.



# Priority Area 8 Educational and Community-Based Programs

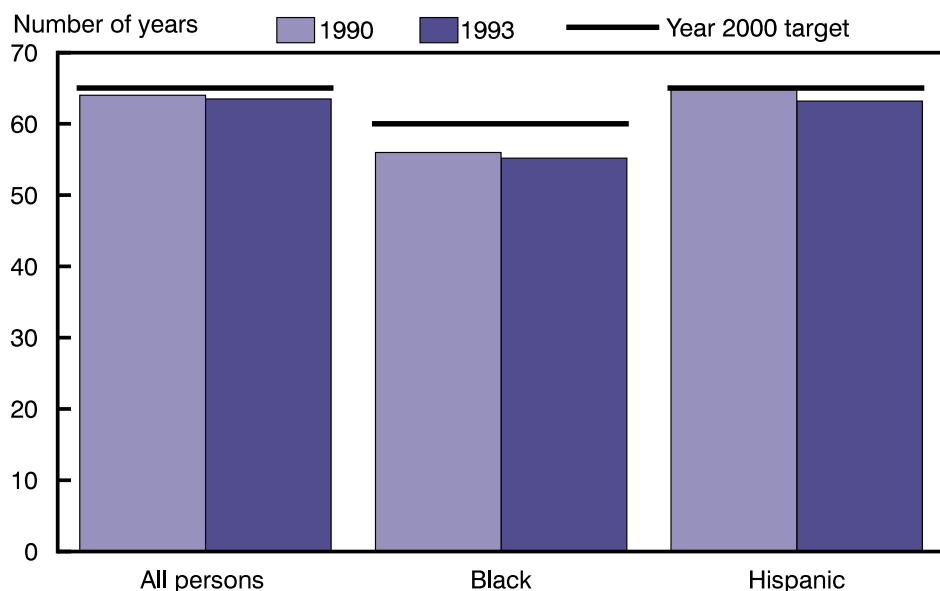
## Background

A supportive social environment may be one of the key factors in successfully changing behaviors that contribute to many of today's leading health threats. Consequently, leadership, collaboration, and initiatives at the community level are fundamental to progress. Educational and community-based interventions are designed to reach groups of people outside of traditional health care settings. Many of these intervention programs are located in specially targeted sites in the community; these programs are designed for people who come together in diverse settings, such as students within a school, employees at a worksite, or members of civic or religious groups that meet regularly. Other programs are best planned as community-wide health promotion initiatives to reach large numbers of people with highly visible and more easily implemented interventions. While some community-based programs may address a single risk factor or prominent health problem, many programs are taking a more comprehensive, holistic approach to health and healthy communities. Community-based programs are increasingly recognizing the importance of addressing the social and physical environment in which behaviors occur and are reinforced.

## Midcourse Modifications

Special population targets for blacks and Hispanics were added to objective 8.2 (completion of high school). In addition, changes in wording were made to two objectives in this priority area. In objective 8.2, the term "high school graduation rate" was replaced by "high school completion rate" to include students who complete high school with alternative credentials. The objective is now aligned with the measures used by the Department of Education to track the national education goals. The term "quality school health education" in objective 8.4 was replaced with

**Figure 9. Years of healthy life: United States, 1990–93, and year 2000 targets for objective 8.1**



|                    | 1990 | 1993 | Year 2000 targets |
|--------------------|------|------|-------------------|
| Total . . . . .    | 64.0 | 63.5 | 65.0              |
| Black . . . . .    | 56.0 | 55.2 | 60.0              |
| Hispanic . . . . . | 64.8 | 63.2 | 65.0              |

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey and National Vital Statistics System.

"comprehensive school health education," a term more widely recognized in the professional literature, and by public health, health education, and school health professionals.

## Data Summary

### Highlights

The average number of years of healthy life (8.1) decreased for the third consecutive year for the total population. Contributing to this decline was the first drop in life expectancy at birth since 1980 (1). Years of healthy life also decreased for the second consecutive year for black persons. For people 65 years and over, the number of years of healthy life in 1992 remained unchanged from the 1990 baseline. In general, years of healthy life have been declining since the 1990 baseline. Except for 1993 when life expectancy declined, these decreases reflect a downturn in self-reported health-related quality of life.

There have been considerable improvements in opportunities offering

access to preschool children (including disabled children) through organizations such as Head Start and Healthy Start (8.3), although the percent of low-income children entering kindergarten or first grade actually receiving Head Start services has declined slightly since 1992. There have also been improvements in the number of worksites offering health promotion activities (8.6) and in the proportion of hospitals offering patient education programs (8.12).

New baseline data for 1994 are now available for hourly workers participating in worksite health promotion activities (8.6) and for family discussions of health issues (8.9) from the 1994 National Health Interview Survey, and for schools with comprehensive health education programs from the School Health Policies and Programs Study. New baseline data from a survey of television network affiliates show that 100 percent of network-affiliated stations in the top 20 media markets have developed partnerships with community groups,

organizations, and/or agencies to promote health and prevent disease (8.13). This exceeds the year 2000 target of 75 percent.

## Summary of Progress

Of the 14 Educational and Community-Based Programs objectives, 2 are progressing toward the year 2000 targets (objectives 8.6 and 8.12), while 2 are moving away from the targets (8.1 and 8.2). Results for one objective (8.3) were mixed. New baseline data are now available for four objectives (8.4, 8.7, 8.9, and 8.13) and proxy data are now available for one objective (8.10). For two of these objectives (8.9 and 8.13) the new baseline data exceed the year 2000 targets. Baseline data for objective 8.8 will be available in 1997. There are no new data to update the baseline for objective 8.5. Baseline data for the remaining objective (8.11) are not yet available.

## Data Issues

### Years of Healthy Life

The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track this objective in three priority areas (8.1, 17.1, and 21.1). See the appendix for a discussion of years of healthy life.

### Definitions

Objective 8.4 does not include a definition of comprehensive school health education. However, the Centers for Disease Control and Prevention uses an operational definition that includes eight elements, five of which are considered essential (2). Data for the variables from the 1994 School Health Policies and Programs Study (SHPPS) used to measure these elements are shown in table 8. Schools must have addressed all elements of the operational definition to meet the criteria for comprehensive school health education. In 1994, 11 percent of schools met the five essential criteria but only 2.3 percent of schools included all eight elements.

Objective 8.7 asks for the proportion of hourly workers who participated regularly in employer-sponsored health promotion activities. The 1994 baseline indicates

the number of people who participated in employer-sponsored health promotion programs in the past year in the following occupational categories:

- Precision production, craft, and repair occupations
- Operators, fabricators, and laborers
- Transportation and material moving occupations
- Handlers, equipment cleaners, helpers, and laborers

Family discussions of health issues (8.9) are defined as discussions in the past month among family members 10 years and over about the following topics: nutrition, exercise, safety, tobacco use, sexual behavior/sexually transmitted diseases, or illegal drugs. In 1994, 83 percent of people had discussed any of these topics with family members in the month prior to interview.

## Data Source Descriptions

Objectives 8.2 (completion of high school) and 8.3 (preschool child development programs) and their targets are consistent with the National Education Goals for these areas. The data used to track these objectives come from the National Center for Education Statistics (NCES). The data for objective 8.2 include those who received high school diplomas as well as those who received alternative credentials, such as a General Education Development (GED) certificate. Data for 1992 and 1993 are for 19–20 year olds. Beginning with data for 1994, figures for high school completion are for people 18–24 years of age.

## Proxy Measures and Data Availability

Proxy data for 1992–93 from the National Association of City and County Health Officials are shown for objective 8.10. These data show the percent of the 43 reporting States in which at least 90 percent of local health departments reported providing services that addressed three or more *Healthy People 2000* priority areas. The data represent the local health departments' report of whether a program or service existed. The survey did not determine whether the program or service was a health promotion effort that involved citizen participation, included community assessment, or had measurable objectives. Information on the

proportion of the State population reached by the services or programs was not available.

The Media Health Partnerships Survey was developed by CDC to measure partnerships between network television affiliates and community health organizations (objective 8.13). The survey, conducted in September 1995–January 1996, determined that all television network affiliates in the top 20 media markets devote a substantial effort to health promotion and disease prevention through partnerships with community groups, organizations, and/or agencies. Based on these findings, objective 8.13 has been achieved and the survey will not be repeated.

Objective 8.14, which focuses on the proportion of people served by local health departments, is being monitored by the proportion of health departments effectively carrying out the core functions of public health—assessment, assurance, and policy development.

## References

1. National Center for Health Statistics. Advance report of final mortality statistics, 1993. Monthly vital statistics report. vol 44 no 7, suppl. Hyattsville, Maryland: Public Health Service. 1996.
2. National Commission on the Role of the School and Community in Improving Adolescent Health. Code blue: Uniting for healthier youth. Alexandria, VA: National Association of State Boards of Education. 1990.

**Table 8. Educational and community-based programs objective status**

|             | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i>       | <i>1993</i>       | <i>1994</i>      | <i>Target 2000</i> |
|-------------|--|--------------------|-------------------|-------------------|------------------|--------------------|
| <b>8.1*</b> | <b>Years of healthy life</b> . . . . .   | <sup>1</sup> 64.0  | 63.7              | 63.5              | ---              | 65                 |
|             | a. Blacks. . . . .   | <sup>1</sup> 56.0  | 55.6              | 55.2              | ---              | 60                 |
|             | b. Hispanics <sup>2</sup> . . . . .  | <sup>1</sup> 64.8  | <sup>3</sup> 64.0 | 63.2              | ---              | 65                 |
|             | c. People 65 years and over <sup>4</sup> . . . . .   | <sup>1</sup> 11.9  | 11.9              | 11.9              | ---              | 14                 |
| <b>8.2</b>  | <b>Completion of high school</b>   |                    |                   |                   |                  |                    |
|             | People 19–20 years <sup>5</sup> . . . . .  | <sup>6</sup> 87%   | ...               | 86%               | 86%              | 90%                |
|             | a. Hispanics <sup>5</sup> . . . . .  | <sup>6</sup> 65%   | ...               | 66%               | 62%              | 90%                |
|             | b. Blacks <sup>5</sup> . . . . .   | <sup>6</sup> 81%   | ...               | 80%               | 83%              | 90%                |
| <b>8.3</b>  | <b>Preschool child development programs</b>  |                    |                   |                   |                  |                    |
|             | Eligible children 4 years old afforded opportunity to enroll in Head Start . . . . .   | <sup>1</sup> 47%   | <sup>7</sup> 55%  | ---               | ---              | 100%               |
|             | Low-income children receiving Head Start services . . . . .  | ...                | 58%               | 57%               | <sup>8</sup> 54% | 100%               |
|             | Disabled children 3–5 years old enrolled in preschool . . . . .  | ...                | <sup>7</sup> 56%  | 56%               | <sup>8</sup> 63% | 100%               |
| <b>8.4</b>  | <b>Schools with comprehensive school health education</b>  |                    |                   |                   |                  |                    |
|             | All five essential criteria met . . . . .  | <sup>9</sup> 11%   | ---               | ---               | ...              | ...                |
|             | All eight criteria met . . . . .   | <sup>9</sup> 2.3%  | ---               | ---               | ...              | 75%                |
|             | A documented, sequential program . . . . .   | <sup>9</sup> 42%   | ---               | ---               | ...              | ...                |
|             | At least one required health education course . . . . .  | <sup>9</sup> 73%   | ---               | ---               | ...              | ...                |
|             | Instruction in six key behavioral areas . . . . .  | <sup>9</sup> 42%   | ---               | ---               | ...              | ...                |
|             | Focus on skill development . . . . .   | <sup>9</sup> 34%   | ---               | ---               | ...              | ...                |
|             | Health education teachers adequately trained . . . . .   | <sup>9</sup> 53%   | ---               | ---               | ...              | ...                |
|             | Other criteria   |                    |                   |                   |                  |                    |
|             | Designated coordinator for health education . . . . .  | <sup>9</sup> 38%   | ---               | ---               | ...              | ...                |
|             | Involvement of parents, health professionals, and other concerned community members . . . . .  | <sup>9</sup> 30%   | ---               | ---               | ...              | ...                |
|             | Evaluation of health education program during the past 2 years. . . . .  | <sup>9</sup> 65%   | ---               | ---               | ...              | ...                |
| <b>8.5</b>  | <b>Health promotion in postsecondary institutions</b>  |                    |                   |                   |                  |                    |
|             | Higher education institutions offering health promotion activities . . . . .   | <sup>10</sup> 20%  | ---               | ---               | ---              | 50%                |
| <b>8.6</b>  | <b>Worksite health promotion activities</b>  |                    |                   |                   |                  |                    |
|             | Worksites with 50 or more employees. . . . .   | <sup>11</sup> 65%  | 81%               | ---               | ---              | 85%                |
|             | Medium and large companies having a wellness program . . . . .   | <sup>12</sup> 63%  | ---               | ---               | ---              | ...                |
| <b>8.7</b>  | <b>Hourly workers in health promotion activities.</b> . . . .  | <sup>9</sup> 21%   | ...               | ...               | ...              | 20%                |
| <b>8.8</b>  | <b>Health promotion programs for older adults.</b> . . . .   | ---                | ---               | ---               | ---              | 90%                |
| <b>8.9</b>  | <b>Family discussion of health issues—ages 10 years and over</b> . . . . .   | <sup>9</sup> 83%   | ---               | ---               | ...              | 75%                |
|             | Nutrition . . . . .  | ...                | ---               | ---               | 67%              | ...                |
|             | Physical activity. . . . .   | ...                | ---               | ---               | 66%              | ...                |
|             | Sexual behavior. . . . .   | ...                | ---               | ---               | 39%              | ...                |
|             | Tobacco . . . . .  | ...                | ---               | ---               | 47%              | ...                |
|             | Alcohol . . . . .  | ...                | ---               | ---               | 38%              | ...                |
|             | Illegal drugs. . . . .   | ...                | ---               | ---               | 33%              | ...                |
|             | Safety . . . . .   | ...                | ---               | ---               | 50%              | ...                |
|             | Among 9th–12th grade students engaging in family discussion of HIV/AIDS . . . . .  | <sup>13</sup> 54%  | <sup>7</sup> 61%  | 66%               | <sup>8</sup> 63% | ...                |
| <b>8.10</b> | <b>Number of States with community health programs for 40 percent of the population.</b> . . . .   | ---                | ---               | ---               | ---              | 50                 |
|             | Proportion of States with 90 percent of local health departments providing services that address three or more <i>Healthy People 2000</i> priority areas . . . . . | ...                | ---               | <sup>16</sup> 81% | ---              | ...                |
| <b>8.11</b> | <b>Counties with programs for racial/ethnic minorities.</b> . . . .  | ---                | ---               | ---               | ---              | 50%                |
| <b>8.12</b> | <b>Hospital-based patient education and community health promotion</b>   |                    |                   |                   |                  |                    |
|             | Patient education programs   |                    |                   |                   |                  |                    |
|             | Registered hospitals . . . . .   | <sup>12</sup> 68%  | <sup>18</sup> 6%  | ---               | ---              | 90%                |
|             | Health maintenance organizations   |                    |                   |                   |                  |                    |
|             | Health education classes . . . . .   | ...                | <sup>14</sup> 75% | <sup>6</sup> 84%  | ---              | 90%                |
|             | Nutrition counseling . . . . .   | ...                | <sup>14</sup> 85% | <sup>6</sup> 87%  | ---              | 90%                |
|             | Smoking cessation classes . . . . .  | ...                | 67%               | ---               | ---              | 90%                |
|             | Community health promotion   |                    |                   |                   |                  |                    |
|             | Community hospitals . . . . .  | <sup>12</sup> 60%  | <sup>17</sup> 7%  | ---               | ---              | 90%                |
| <b>8.13</b> | <b>Television partnerships with community organizations for health promotion</b> . . . . .   | <sup>15</sup> 100% | ...               | ...               | ...              | 75%                |

**Table 8. Educational and community-based programs objective status—Con.**

|             | <i>Objective</i>                                  | <i>Baseline</i>  | <i>1992</i> | <i>1993</i>       | <i>1994</i> | <i>Target<br/>2000</i> |
|-------------|---|------------------|-------------|-------------------|-------------|------------------------|
| <b>8.14</b> | <b>Effective public health systems</b>            |                  |             |                   |             |                        |
|             | Local health departments reporting                |                  |             |                   |             |                        |
|             | Health assessment                                 |                  |             |                   |             |                        |
|             | Behavioral risk assessment . . . . .              | <sup>1</sup> 33% | ---         | ---               | ---         | 90%                    |
|             | Morbidity data . . . . .                          | <sup>1</sup> 49% | ---         | ---               | ---         | 90%                    |
|             | Reportable disease . . . . .                      | <sup>1</sup> 87% | ---         | ---               | ---         | 90%                    |
|             | Vital records and statistics . . . . .            | <sup>1</sup> 64% | ---         | ---               | ---         | 90%                    |
|             | Surveillance chronic disease . . . . .            | <sup>1</sup> 55% | ---         | ---               | ---         | 90%                    |
|             | Surveillance communicable disease . . . . .       | <sup>1</sup> 92% | ---         | ---               | ---         | 90%                    |
|             | Policy development functions and services         |                  |             |                   |             |                        |
|             | Health code development and enforcement . . . . . | <sup>1</sup> 59% | ---         | ---               | ---         | 90%                    |
|             | Health planning . . . . .                         | <sup>1</sup> 57% | ---         | ---               | ---         | 90%                    |
|             | Health assurance                                  |                  |             |                   |             |                        |
|             | Health education . . . . .                        | <sup>1</sup> 74% | ---         | <sup>16</sup> 84% | ---         | 90%                    |
|             | Child health . . . . .                            | <sup>1</sup> 84% | ---         | ---               | ---         | 90%                    |
|             | Immunizations . . . . .                           | <sup>1</sup> 92% | ---         | <sup>16</sup> 96% | ---         | 90%                    |
|             | Prenatal care . . . . .                           | <sup>1</sup> 59% | ---         | <sup>16</sup> 64% | ---         | 90%                    |
|             | Primary care . . . . .                            | <sup>1</sup> 22% | ---         | <sup>16</sup> 30% | ---         | 90%                    |

--- Data not available.

... Category not applicable.

<sup>1</sup>1990 data.

<sup>2</sup>Estimate based on preliminary data. Excludes mortality data from States lacking a Hispanic-origin item on their death certificate or for which Hispanic origin data were not of sufficient quality. See appendix.

<sup>3</sup>Estimate derived from 1991–93 health status data and 1992 mortality data.

<sup>4</sup>Years of healthy life remaining at age 65.

<sup>5</sup>Beginning with 1994, data are for people 18–24 years.

<sup>6</sup>1992 data.

<sup>7</sup>1991 data.

<sup>8</sup>1995 data.

<sup>9</sup>1994 data.

<sup>10</sup>1989–90 data.

<sup>11</sup>1985 data.

<sup>12</sup>1987 data.

<sup>13</sup>1989 data.

<sup>14</sup>1988 data.

<sup>15</sup>1995–96 data.

<sup>16</sup>1992–93 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 8.1*, 8.1a–c            | National Health Interview Survey, CDC, NCHS; National Vital Statistics System, CDC, NCHS.  |
| 8.2, 8.2a–b             | National Center for Education Statistics, National Education Goals Panel.  |
| 8.3                     | Head Start data: Head Start Bureau: Administration on Children, Youth, and Families; Data on disabled children: National Education Statistics, National Education Goals Panel. |
| 8.4                     | School Health Policies and Programs Study, CDC, NCCDPHP.   |
| 8.5                     | Health Promotion on Campus Survey and Directory, American College Health Association.  |
| 8.6                     | Baseline: Health Research Institute Biennial Survey, Health Research Institute.<br>Baseline and Updates: National Survey of Worksite Health Promotion, OASH, ODPHP.            |
| 8.7                     | National Health Interview Survey, CDC, NCHS.   |
| 8.9                     | 1989 Baseline and Update: Youth Risk Behavior Survey, CDC, NCCDPHP.<br>1994 Baseline: National Health Interview Survey, CDC, NCHS.   |
| 8.12                    | Annual Survey of Hospitals, American Hospital Association.<br>HMO Industry Profile, Group Health Association of America, Inc.  |
| 8.13                    | Media Health Partnerships Survey, CDC, NCCDPHP.  |
| 8.14                    | National Profile of Local Health Departments, National Association of City and County Health Officials.  |

\*Duplicate objective. See full text of objective following this table.

# Educational and Community-Based Programs Objectives

**8.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure.*

Duplicate objectives: 17.1 and 21.1

**8.1a\*:** Increase years of healthy life among black persons to at least 60 years.

Duplicate objectives: 17.1a and 21.1a

**8.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 17.1b and 21.1b

**8.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 years remaining at age 65.

Duplicate objectives: 17.1c and 21.1c

**8.2:** Increase the high school graduation rate to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

*NOTE: This objective and its target are consistent with the National Education Goal to increase high school graduation rates.*

**8.2a:** Increase the high school graduation rate among Hispanics to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

**8.2b:** Increase the high school graduation rate among blacks to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

**8.3:** Achieve for all disadvantaged children and children with disabilities access to high quality and developmentally appropriate preschool

programs that help prepare children for school, thereby improving their prospects with regard to school performance, problem behaviors, and mental and physical health.

*NOTE: This objective and its target are consistent with the National Education Goal to increase school readiness and its objective to increase access to preschool programs for disadvantaged and disabled children.*

**8.4:** Increase to at least 75 percent the proportion of the Nation's elementary and secondary schools that provide planned and sequential kindergarten–12th grade comprehensive school health education.

**8.5:** Increase to at least 50 percent the proportion of postsecondary institutions with institution-wide health promotion programs for students, faculty, and staff.

**8.6:** Increase to at least 85 percent the proportion of workplaces with 50 or more employees that offer health promotion activities for their employees, preferably as part of a comprehensive employee health promotion program.

**8.7:** Increase to at least 20 percent the proportion of hourly workers who participate regularly in employer-sponsored health promotion activities.

**8.8:** Increase to at least 90 percent the proportion of people aged 65 and older who had the opportunity to participate during the preceding year in at least one organized health promotion program through a senior center, lifecare facility, or other community-based setting that serves older adults.

**8.9:** Increase to at least 75 percent the proportion of people aged 10 and older who have discussed issues related to nutrition, physical activity, sexual behavior, tobacco, alcohol, other drugs, or safety with family members on at least one occasion during the preceding month.

**8.10:** Establish community health promotion programs that separately or together address at least three of the Healthy People 2000 priorities and reach at least 40 percent of each State's population.

**8.11:** Increase to at least 50 percent the proportion of counties that have established culturally and linguistically appropriate community health promotion

programs for racial and ethnic minority populations.

**8.12:** Increase to at least 90 percent the proportion of hospitals, health maintenance organizations, and large group practices that provide patient education programs, and to at least 90 percent the proportion of community hospitals that offer community health promotion programs addressing the priority health needs of their communities.

**8.13:** Increase to at least 75 percent the proportion of local television network affiliates in the top 20 television markets that have become partners with one or more community organizations around one of the health problems addressed by the Healthy People 2000 objectives.

**8.14:** Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health.

*NOTE: The core functions of public health have been defined as assessment, policy development, and assurance. Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

\*Duplicate objective.

# Priority Area 9 Unintentional Injuries

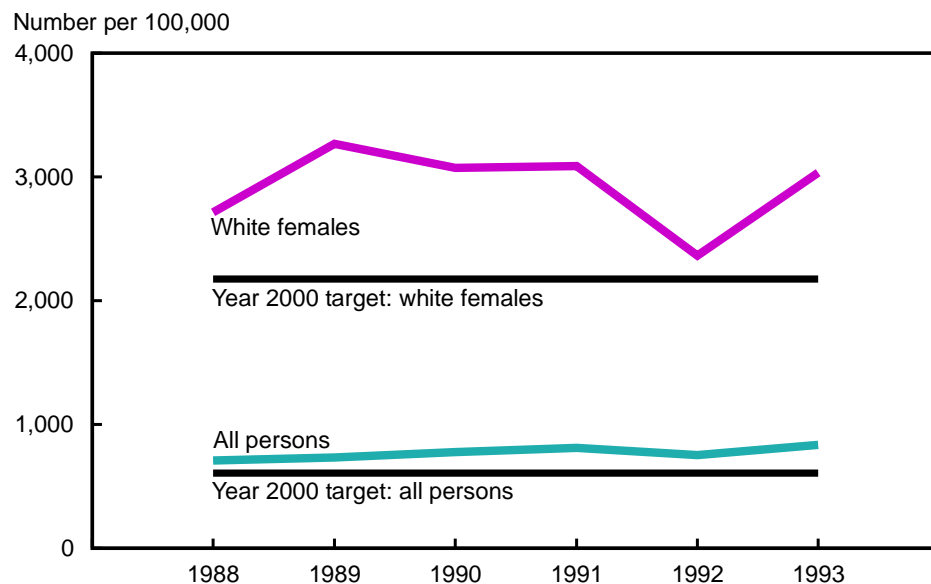
## Background

Unintentional injuries are the fifth leading cause of death in the United States, accounting for more than 90,000 deaths in 1993 (1). They are a major cause of disabilities and hospitalization and have significant impact on health care costs; in 1994 alone, medical expenses attributable to unintentional injuries were estimated at nearly \$80 billion (2). The National Safety Council estimated that 1994 motor vehicle crashes cost the United States \$169 billion in lost wages, medical expenses, and administrative costs (2). However, efforts to reduce injuries show promise; safety belt laws save an estimated 3,600 lives each year (3). Child safety seats saved the lives of 1,300 infants and toddlers between 1982 and 1990 (4) and motorcycle helmets saved 5,000 lives between 1984 and 1990 (5). Motorcycle helmet use is also associated with less severe injuries and lower health care costs (6). An additional 1,100 lives have been saved annually since the passage and enforcement of laws limiting drinking to age 21 and over (7).

While motor vehicle accidents remain the most costly and fatal of unintentional injuries, fires and fire-related injuries are also costly in terms of lives, property, and health care. Fires accounted for an annual average of 4,860 deaths between 1980 and 1992 (about 5 percent of all unintentional injury deaths). More than one quarter of the fire deaths during this time period were attributable to either arson or children playing with fires; these two categories of fires also accounted for nearly 80,000 injuries and almost \$30 billion in property damage. Three quarters of the fires started by children were attributed to children aged 5 and under playing with matches or lighters; nearly one-half of arsons are attributed to youth aged 18 and under (8,9). These data strongly emphasize the need to target fire prevention efforts toward youth.

Although less visible, fall-related injuries and deaths among older Americans are increasing; this is in part attributable to the aging of the

**Figure 10. Death rates for motor vehicle crashes and percent of motor vehicle occupants who use seatbelts: United States, 1987–94, objectives 9.3 and 9.12**



|                            | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------------|------|------|------|------|------|------|------|------|
| Motor vehicle crash deaths | 19.2 | 19.2 | 18.4 | 17.9 | 16.4 | 15.4 | 15.6 | 15.6 |
| Seat belt use              | ---  | 42   | 47   | 49   | 59   | 62   | 66   | 67   |

--- Data not available.

SOURCES: For motor vehicle crash death rates: U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatal Accident Reporting System. For seatbelt use: U.S. Department of Transportation, National Highway Traffic Safety Administration: Baseline: 19 Cities Survey; updates: Population-weighted State surveys.

population. The costs associated with fall-related injuries are extensive, but many of these injuries are preventable through exercise, diet, building redesign, and other interventions (10).

## Midcourse Modifications

Four objectives were added to this priority area during the midcourse review. One of these (9.23, alcohol-related motor vehicle deaths) has been duplicated from Priority Area 4. The others are new objectives that target increasing the number of States with bicycle helmet laws (9.24), handgun storage laws (9.25), and graduated driver licensing programs (9.26). In addition to these new objectives, American Indian/Alaska Native subobjectives were added to objectives 9.4, 9.5, and 9.6 that call for reductions in fall-related, drowning, and fire deaths. A Puerto Rican subobjective

was added to objective 9.6 and a Mexican-American subobjective was added to 9.3.

Wording was changed for objectives 9.11 and 9.20 to facilitate tracking. Targets were revised for American Indian/Alaska Native subobjectives to include the national population instead of being limited to Reservation States. Some targets for 9.3 (motor vehicle deaths) were also revised because the original targets had been achieved.

## Data Summary

### Highlights

Motor vehicle crash deaths (9.3) remained stable in 1994. Forty-eight States have enacted laws requiring seat belt use (9.14) and reported usage (9.12) also increased slightly to 67 percent. The number of States with laws

requiring safe firearm storage (9.25) increased from 1 in 1989 to 14 in 1995.

## Summary of Progress

Eighteen objectives (9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.8, 9.9, 9.10, 9.12, 9.13, 9.14, 9.16, 9.17, 9.18, 9.23, 9.24, and 9.25) showed progress toward the year 2000 targets. Targets were achieved for objectives 9.2, 9.8, 9.10, and 9.18. However, part of the progress for objective 9.8 (nonfatal poisoning) may be an artifact of changes in the methodology (see Data Issues). One objective (9.7) shows movement away from the target. The updates for 9.15 (handgun design) show no change in the objective's status.

No updates were available for four objectives (9.19, 9.21, 9.22, and 9.26). Baselines are not available for objectives 9.11 and 9.20.

## Data Issues

### Data Definitions

Objective 9.2 (nonfatal unintentional injuries) is tracked with data from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS). The ICD-9 codes designated for this objective include both unintentional and intentional injuries. The two types of injuries cannot be distinguished at the national level because, currently, only 15 States mandate the use of E-codes (external causes) on hospital discharge forms. NCHS is working with States to increase the use of E-codes.

The 1990 baseline data for fire-related deaths for Puerto Ricans (9.6g) have been revised. The original baseline published in the Midcourse Review and 1995 Revisions (4) included data for 45 States and the District of Columbia. It did not include data for New York where about 40 percent of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States and the District of Columbia (including New York), is considerably lower than originally published and, in fact, is below the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on their birth and death certificates has varied from year to year; see appendix for more information.

Objective 9.7 (hip fractures among older adults) is also monitored with data

from the NHDS. These rates are based on extremely small numbers and must be interpreted cautiously. Data on race are missing in approximately 17 percent of the cases; this tends to underestimate rates for the special population objective (9.7a white women over 85).

Objectives 9.14 (safety belt and motorcycle helmet laws), 9.15 (handgun design laws), 9.22 (trauma linking systems), 9.24 (bicycle helmet laws), 9.25 (handgun storage laws), and 9.26 (graduated driver licensing) all relate to State laws or programs that vary across States in populations targeted, penalties, and liability.

The baseline and target for objective 9.17 (smoke detectors) are based on estimates of the proportion of homes with smoke detectors; this is somewhat different than the intent of the objective, which focuses on smoke detectors on each habitable floor. Updates on the proportion of homes with smoke detectors are from the National Health Interview Survey (NHIS), a source different than that used for the baseline. However, data from the 1993 NHIS were analyzed to show the proportion of people living in apartments or condominiums who report having one or more smoke detectors and the proportion of people living in townhouses or single family homes who report having two or more smoke detectors; this value was 66 percent. Findings from a survey conducted by the Consumer Product Safety Commission indicated that 52 percent of households had at least one functional smoke detector on each floor (11). The 1994 updates are from the NHIS. The estimate for smoke detectors on each floor was calculated using a question with slightly different wording than the question on the 1993 NHIS. However, the increase in the proportion of people with smoke detectors on each floor is consistent with the increase in the proportion of homes with smoke detectors. Updates from the NHIS will be used to monitor this objective throughout the decade.

### Data Source Description

Data for objective 9.3 (motor vehicle crash deaths) and the subobjectives (except d and g) are crude rates from the Fatal Accident Reporting System (FARS). See the appendix for a discussion of crude and age-adjusted rates and the chapter on Priority Area 4 for a description of FARS. The rates for

9.3d (American Indian and Alaska Natives) and 9.3g (Mexican-Americans) are age-adjusted data from the National Vital Statistics System.

## Data Comparability

Data for 9.8 (nonfatal poisonings) come from the National Electronic Injury Surveillance System (NEISS), which is maintained by the Consumer Product Safety Commission (CPSC). This system does not utilize ICD-9 or other conventional injury coding mechanisms. Injuries reported in the system are limited to those related to products regulated by CPSC in a given year. Therefore, variation in the numbers and types of products affect the number of injuries reported in the system.

In 1991, data collection for objectives 9.12 (motor vehicle occupant protection systems) and 9.13 (helmet use by motorcyclists and bicyclists) was expanded from 19 metropolitan areas to all 50 States. The data collection methods (direct observation) are unchanged; however, data on child use of occupant restraints will no longer be reported.

## Proxy Measures

Tracking data for 9.16 (fire suppression systems) are from the National Fire Incident Reporting System (NFIRS) and indicate the proportion of fires in residential properties that have automatic suppression systems. Data on localities for this objective are not available.

The additional data for objective 9.19 (protective sports equipment) are from the NHIS and represent the proportions of children playing baseball, softball, football, or soccer who use headgear or mouthguards; there will be additional data from the NHIS to track this objective later in the decade.

## References

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**Table 9. Unintentional injuries objective status**

|             | <i>Objective</i>  | <i>Baseline</i>                       | <i>1992</i>        | <i>1993</i> | <i>1994</i>       | <i>Target<br/>2000</i> |
|-------------|---|---------------------------------------|--------------------|-------------|-------------------|------------------------|
| <b>9.1</b>  | <b>Unintentional injury deaths (age adjusted per 100,000)</b> . . . . .                               | <sup>1</sup> 34.7                     | 29.4               | 30.3        | <sup>2</sup> 29.8 | 29.3                   |
|             | a. American Indians/Alaska Natives . . . . .  | <sup>1</sup> 66.0                     | 57.3               | 58.1        | ---               | 53.0                   |
|             | b. Black males . . . . .  | <sup>1,a</sup> 68.0                   | 56.7               | 59.8        | <sup>2</sup> 57.0 | 51.9                   |
|             | c. White males . . . . .  | <sup>1,a</sup> 49.8                   | 41.9               | 42.7        | <sup>2</sup> 41.3 | 42.9                   |
|             | d. Mexican-American males <sup>3</sup> . . . . .  | <sup>4,a</sup> 53.1                   | 46.5               | 48.6        | ---               | 43.0                   |
| <b>9.2</b>  | <b>Unintentional injury hospitalizations (per 100,000)<sup>5</sup></b> . . . . .                      | <sup>6,a</sup> 832                    | 714                | 699         | 654               | 754                    |
|             | a. Black males <sup>5</sup> . . . . .   | <sup>7</sup> 1,007                    | 969                | 893         | 847               | 856                    |
| <b>9.3</b>  | <b>Motor vehicle crash deaths</b>   |                                       |                    |             |                   |                        |
|             | Per 100 million vehicle miles traveled (VMT) . . . . .  | <sup>1</sup> 2.4                      | 1.8                | 1.7         | 1.7               | 1.5                    |
|             | Per 100,000 population . . . . .  | <sup>1</sup> 19.2                     | 15.4               | 15.6        | 15.6              | 14.2                   |
|             | a. Children 14 years and under (per 100,000) . . . . .  | <sup>1</sup> 6.2                      | 4.8                | 4.8         | 5.0               | 4.4                    |
|             | b. People 15–24 years (per 100,000) . . . . .   | <sup>1</sup> 36.9                     | 28.0               | 28.6        | 29.1              | 26.8                   |
|             | c. People 70 years and over (per 100,000) . . . . .   | <sup>1</sup> 22.6                     | 21.9               | 22.9        | 23.3              | 20                     |
|             | d. American Indians/Alaska Natives (age adjusted per 100,000) . . . . .                               | <sup>1</sup> 37.7                     | 32.0               | 32.3        | ---               | 32.0                   |
|             | e. Motorcyclist (per 100 million VMT)<br>(per 100,000) . . . . .                                      | <sup>1</sup> 40.9<br><sup>1</sup> 1.7 | 25.1<br>0.9        | 24.8<br>0.9 | ---               | 25.6<br>0.9            |
|             | f. Pedestrians (per 100,000) . . . . .  | <sup>1</sup> 2.8                      | 2.2                | 2.2         | 2.1               | 2.0                    |
|             | g. Mexican-Americans (age adjusted per 100,000) <sup>3</sup> . . . . .                                | <sup>4,a</sup> 20.9                   | 17.5               | 18.1        | ---               | 18.0                   |
| <b>9.4</b>  | <b>Fall-related deaths (age adjusted per 100,000)</b> . . . . .                                       | <sup>1</sup> 2.7                      | 2.5                | 2.5         | ---               | 2.3                    |
|             | a. People 65–84 years (per 100,000) . . . . .   | <sup>1</sup> 18.1                     | 17.6               | 17.8        | ---               | 14.4                   |
|             | b. People 85 years and over (per 100,000) . . . . .   | <sup>1</sup> 133.0                    | 147.3              | 149.5       | ---               | 105.0                  |
|             | c. Black males 30–69 years (per 100,000) . . . . .  | <sup>1</sup> 8.1                      | 5.3                | 5.5         | ---               | 5.6                    |
|             | d. American Indians/Alaska Natives (age adjusted per 100,000) . . . . .                               | <sup>4</sup> 3.2                      | 3.1                | 4.3         | ---               | 2.8                    |
| <b>9.5</b>  | <b>Drowning deaths (age adjusted per 100,000)</b> . . . . .   | <sup>1</sup> 2.1                      | 1.6                | 1.7         | ---               | 1.3                    |
|             | a. Children 4 years and under (per 100,000) . . . . .   | <sup>1,a</sup> 4.3                    | 3.2                | 3.2         | ---               | 2.3                    |
|             | b. Males 15–34 years (per 100,000) . . . . .  | <sup>1</sup> 4.5                      | 3.4                | 3.6         | ---               | 2.5                    |
|             | c. Black males (age adjusted per 100,000) . . . . .   | <sup>1</sup> 6.6                      | 4.1                | 4.3         | ---               | 3.6                    |
|             | d. American Indians/Alaska Natives (age adjusted per 100,000) . . . . .                               | <sup>4</sup> 4.3                      | 4.0                | 4.3         | ---               | 2.0                    |
| <b>9.6</b>  | <b>Residential fire deaths (age adjusted per 100,000)</b> . . . . .                                   | <sup>1,a</sup> 1.7                    | 1.4                | 1.3         | ---               | 1.2                    |
|             | a. Children 4 years and under (per 100,000) . . . . .   | <sup>1,a</sup> 4.5                    | 3.4                | 3.6         | ---               | 3.3                    |
|             | b. People 65 years and over (per 100,000) . . . . .   | <sup>1,a</sup> 4.9                    | 3.7                | 3.7         | ---               | 3.3                    |
|             | c. Black males (age adjusted per 100,000) . . . . .   | <sup>1,a</sup> 6.4                    | 4.9                | 4.6         | ---               | 4.3                    |
|             | d. Black females (age adjusted per 100,000) . . . . .   | <sup>1,a</sup> 3.3                    | 2.3                | 2.6         | ---               | 2.6                    |
|             | e. Residential fire deaths caused by smoking . . . . .  | <sup>1</sup> 26%                      | <sup>7</sup> 17%   | 16%         | ---               | 8%                     |
|             | f. American Indians/Alaska Natives (age adjusted per 100,000) . . . . .                               | <sup>4</sup> 2.1                      | 2.5                | 2.5         | ---               | 1.4                    |
|             | g. Puerto Ricans (age adjusted per 100,000) <sup>3</sup> . . . . .                                    | <sup>4,a</sup> 1.8                    | 1.4                | 1.0         | ---               | 2.0                    |
| <b>9.7</b>  | <b>Hip fractures among adults 65 years old and over (per 100,000)</b> . . . . .                       | <sup>6</sup> 714                      | 757                | 841         | 815               | 607                    |
|             | a. White females 85 years and over . . . . .  | <sup>6</sup> 2,721                    | 2,368              | 3,035       | 2,815             | 2,177                  |
| <b>9.8</b>  | <b>Nonfatal poisoning (per 100,000)</b> . . . . .   | <sup>8,a</sup> 120                    | 65                 | 61          | 49                | 88                     |
|             | a. Among children 4 years and under . . . . .   | <sup>8,a</sup> 762                    | 635                | 591         | 518               | 520                    |
| <b>9.9</b>  | <b>Nonfatal head injuries (per 100,000)</b> . . . . .   | <sup>6</sup> 118                      | 92                 | 90          | 84                | 106                    |
| <b>9.10</b> | <b>Nonfatal spinal cord injuries (per 100,000)</b> . . . . .  | <sup>6</sup> 5.3                      | 3.6                | 4.7         | 3.9               | 5.0                    |
|             | a. Males . . . . .  | <sup>6</sup> 9.6                      | 4.8                | 6.7         | 7.1               | 7.1                    |
| <b>9.11</b> | <b>Incidence of secondary conditions associated with traumatic spinal<br/>cord injuries</b> . . . . . | ---                                   | ---                | ---         | ---               | 20%<br>reduc-<br>tion  |
| <b>9.12</b> | <b>Motor vehicle occupant protection systems</b> . . . . .  | <sup>6</sup> 42%                      | 62%                | 66%         | 67%               | 85%                    |
|             | a. Children 4 years and under . . . . .   | <sup>6</sup> 48%                      | ---                | 60%         | 60%               | 70%                    |
| <b>9.13</b> | <b>Helmet use by motorcyclists and bicyclists</b>   |                                       |                    |             |                   |                        |
|             | Motorcyclists . . . . .   | <sup>6</sup> 60%                      | <sup>7</sup> 62%   | ---         | ---               | 80%                    |
|             | Bicyclists . . . . .  | <sup>6</sup> 8%                       | <sup>7</sup> 17.6% | ---         | ---               | 50%                    |
| <b>9.14</b> | <b>Safety belt and helmet use laws</b>  |                                       |                    |             |                   |                        |
|             | Number of States with safety belt laws <sup>9</sup> . . . . .   | <sup>10</sup> 33                      | 44                 | 45          | 48                | 50                     |
|             | Number of States with motorcycle helmet use laws <sup>11</sup> . . . . .                              | <sup>10</sup> 22                      | 24                 | 25          | 25                | 50                     |
| <b>9.15</b> | <b>Number of States with handgun design to protect children</b> . . . . .                             | <sup>10</sup> 0                       | 0                  | 0           | 0                 | 50                     |
| <b>9.16</b> | <b>Fire suppression sprinkler installation codes (number of localities)</b> . . . . .                 | <sup>10</sup> 700                     | ---                | ---         | ---               | 2,000                  |
|             | Proportion of residential fires with suppression equipment . . . . .                                  | ...                                   | 2.7%               | 2.6%        | ---               | ...                    |

**Table 9. Unintentional injuries objective status—Con.**

|              | <i>Objective</i>  | <i>Baseline</i>       | <i>1992</i>         | <i>1993</i>        | <i>1994</i> | <i>Target<br/>2000</i> |
|--------------|---|-----------------------|---------------------|--------------------|-------------|------------------------|
| <b>9.17</b>  | <b>Residences with smoke detectors</b>  | <sup>10</sup> 81%     | <sup>4</sup> 82%    | 80%                | ---         | 100%                   |
|              | On each habitable floor   | ...                   | ---                 | 52%                | ---         | 100%                   |
|              | Proportion of people with at least one detector                                   | ...                   | <sup>12</sup> 68.5% | 87.6%              | 92.7%       | 100%                   |
|              | On each floor   | ...                   | ---                 | 66%                | 86.8%       | 100%                   |
| <b>9.18</b>  | <b>Injury prevention instruction in required course</b>                           |                       |                     |                    |             |                        |
|              | Proportion of middle/junior high schools  | <sup>13</sup> 65.8%   | ...                 | ...                | ...         | 50%                    |
|              | Proportion of senior high schools   | <sup>13</sup> 66.5%   | ...                 | ...                | ...         | 50%                    |
| <b>9.19*</b> | <b>Protective equipment in sporting and recreation events</b>                     | ---                   | ---                 | ---                | ---         | 100%                   |
|              | National Collegiate Athletic Association  |                       |                     |                    |             |                        |
|              | Football  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | Hockey  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | Lacrosse  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | High school football  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | Amateur boxing  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | Amateur ice hockey  | <sup>6</sup> Required | ---                 | ---                | ---         | ...                    |
|              | Use of protective headgear and mouth guards among children who play sports        |                       |                     |                    |             |                        |
|              | Baseball/softball   |                       |                     |                    |             |                        |
|              | headgear  | <sup>7</sup> 35%      | ---                 | ---                | ---         | ...                    |
|              | mouth guard   | <sup>7</sup> 7%       | ---                 | ---                | ---         | ...                    |
|              | Football  |                       |                     |                    |             |                        |
|              | headgear  | <sup>7</sup> 72%      | ---                 | ---                | ---         | ...                    |
|              | mouth guard   | <sup>7</sup> 72%      | ---                 | ---                | ---         | ...                    |
|              | Soccer  |                       |                     |                    |             |                        |
|              | headgear  | <sup>7</sup> 4%       | ---                 | ---                | ---         | ...                    |
|              | mouth guard   | <sup>7</sup> 7%       | ---                 | ---                | ---         | ...                    |
| <b>9.20</b>  | <b>Number of States with design standards for roadway safety</b>                  | ---                   | ---                 | ---                | ---         | 50                     |
| <b>9.21</b>  | <b>Injury prevention counseling by primary care providers</b>                     | ---                   | ---                 | ---                | ---         | 50%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients          |                       |                     |                    |             |                        |
|              | Inquiry about seat belt/child seat use  |                       |                     |                    |             |                        |
|              | Pediatricians   | <sup>14</sup> 45%     | ...                 | ---                | ---         | 50%                    |
|              | Nurse practitioners   | <sup>14</sup> 29%     | ...                 | ---                | ---         | 50%                    |
|              | Obstetricians/gynecologists   | <sup>14</sup> 6%      | ...                 | ---                | ---         | 50%                    |
|              | Internists  | <sup>14</sup> 11%     | ...                 | ---                | ---         | 50%                    |
|              | Family physicians   | <sup>14</sup> 16%     | ...                 | ---                | ---         | 50%                    |
|              | Inquiry about hazards for falls in the home (65 years and over)                   |                       |                     |                    |             |                        |
|              | Nurse practitioners   | <sup>14</sup> 15%     | ...                 | ---                | ---         | 50%                    |
|              | Internists  | <sup>14</sup> 10%     | ...                 | ---                | ---         | 50%                    |
|              | Family physicians   | <sup>14</sup> 7%      | ...                 | ---                | ---         | 50%                    |
|              | Advice about seat belt/child care seat use  |                       |                     |                    |             |                        |
|              | Pediatricians   | <sup>14</sup> 58%     | ...                 | ---                | ---         | 50%                    |
|              | Nurse practitioners   | <sup>14</sup> 32%     | ...                 | ---                | ---         | 50%                    |
|              | Obstetricians/gynecologists   | <sup>14</sup> 18%     | ...                 | ---                | ---         | 50%                    |
|              | Internists  | <sup>14</sup> 15%     | ...                 | ---                | ---         | 50%                    |
|              | Family physicians   | <sup>14</sup> 29%     | ...                 | ---                | ---         | 50%                    |
|              | Advice about prevention of fall in the home (65 years and older)                  |                       |                     |                    |             |                        |
|              | Nurse practitioners   | <sup>14</sup> 17%     | ...                 | ---                | ---         | 50%                    |
|              | Internists  | <sup>14</sup> 17%     | ...                 | ---                | ---         | 50%                    |
|              | Family physicians   | <sup>14</sup> 15%     | ...                 | ---                | ---         | 50%                    |
| <b>9.22</b>  | <b>Number of States with linked emergency medical services and trauma systems</b> | <sup>15</sup> 7       | ...                 | ...                | ---         | 20                     |
| <b>9.23*</b> | <b>Alcohol-related motor vehicle deaths (per 100,000)</b>                         | <sup>19</sup> 8       | 6.9                 | 6.8                | 6.4         | 5.5                    |
|              | a. American Indian/Alaska Native men  | <sup>14</sup> 0.4     | <sup>6</sup> 35.6   | <sup>10</sup> 32.9 | ---         | 35.0                   |
|              | b. People aged 15–24  | <sup>12</sup> 1.5     | 14.1                | 13.8               | ---         | 12.5                   |

**Table 9. Unintentional injuries objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i> | <i>1993</i> | <i>1994</i>      | <i>Target<br/>2000</i> |
|--------------|--|-------------------|-------------|-------------|------------------|------------------------|
| <b>9.24</b>  | <b>Number of States with bicycle helmet laws</b> . . . . .         | <sup>16</sup> 9   | ...         | ...         | <sup>13</sup> 13 | 50                     |
| <b>9.25*</b> | <b>Number of States with firearm storage laws</b> . . . . .        | <sup>10,a</sup> 1 | ...         | ...         | <sup>13</sup> 14 | 50                     |
| <b>9.26</b>  | <b>Number of States with graduated licensing systems</b> . . . . . | <sup>15</sup> 16  | ...         | ...         | ---              | 35                     |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>Data are provisional.

<sup>3</sup>Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality.

<sup>4</sup>1990 data.

<sup>5</sup>1988 data.

<sup>6</sup>Data include intentional and unintentional injuries and injuries where the intent was not known.

<sup>7</sup>1991 data.

<sup>8</sup>1986 data.

<sup>9</sup>The District of Columbia also has a safety belt law.

<sup>10</sup>1989 data.

<sup>11</sup>The District of Columbia also has a motorcycle helmet law.

<sup>12</sup>1985 data.

<sup>13</sup>1995 data.

<sup>14</sup>1992 data.

<sup>15</sup>1993 data.

<sup>16</sup>1994 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 9.1, 9.1a–d             | National Vital Statistics System, CDC, NCHS.  |
| 9.2                     | National Hospital Discharge Survey, CDC, NCHS.  |
| 9.3, 9.3a–c,e,f         | Fatal Accident Reporting System, DOT, NHTSA.  |
| 9.3d,g                  | National Vital Statistics System, CDC, NCHS.  |
| 9.4, 9.4a–d             | National Vital Statistics System, CDC, NCHS.  |
| 9.5, 9.5a–d             | National Vital Statistics System, CDC, NCHS.  |
| 9.6, 9.6a–d,f,g         | National Vital Statistics System, CDC, NCHS.  |
| 9.6e                    | National Fire Incident Reporting System, FEMA, U.S. Fire Administration.  |
| 9.7, 9.7a               | National Hospital Discharge Survey, CDC, NCHS.  |
| 9.8, 9.8a               | National Electronic Injury Surveillance System, Consumer Product Safety Commission, Directorate for Epidemiology.   |
| 9.9                     | National Hospital Discharge Survey, CDC, NCHS.  |
| 9.10, 9.10a             | National Hospital Discharge Survey, CDC, NCHS.  |
| 9.12, 9.12a             | Baseline: 19 Cities Survey, U.S. DOT, NHTSA.<br>Updates: Population weighted State surveys, U.S. DOT, NHTSA.  |
| 9.13                    | Baseline: 19 Cities Survey, U.S. DOT, NHTSA.<br>Updates: Population weighted State surveys, U.S. DOT, NHTSA.  |
| 9.14                    | U.S. DOT, NHTSA.  |
| 9.15                    | Telephone Survey on Handgun Laws, CDC, NCIPC.   |
| 9.16                    | Baseline (localities): Fire Suppression Sprinkler Codes, FEMA, U.S. Fire Administration.<br>Updates: National Fire Incident Reporting System, FEMA, U.S. Fire Administration.   |
| 9.17                    | Residences with smoke detectors: 1985 and 1990 data: Prevention Index, Rodale Press.<br>1993 Data Smoke Detector Operability Survey, Consumer Product Safety Commission.<br>Proportion of people with smoke detectors: National Health Interview Survey, CDC, NCHS. |
| 9.18                    | School Health Policies and Programs Study, CDC, NCCDPHP.  |
| 9.19*                   | CDC, NCPS, NIH, NIDR.   |
| 9.21                    | Primary Care Providers Surveys, OASH, ODPHP.  |
| 9.22                    | CDC, NCIPC.   |
| 9.23*, 9.23 a–b         | Fatal Accident Reporting System, U.S. DOT, NHTSA.   |
| 9.24                    | National SAFEKIDS Campaign.   |
| 9.25*                   | Center to Prevent Handgun Violence.   |
| 9.26                    | DOT, NHTSA.   |

\*Duplicate objective. See full text of objective following this table.

# Unintentional Injuries Objectives

**9.1:** Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 people.

**9.1a:** Reduce deaths among American Indians and Alaska Natives caused by unintentional injuries to no more than 53.0 per 100,000 people.

**9.1b:** Reduce deaths among black males caused by unintentional injuries to no more than 51.9 per 100,000 people.

**9.1c:** Reduce deaths among white males caused by unintentional injuries to no more than 42.9 per 100,000.

**9.1d:** Reduce deaths among Mexican–American males caused by unintentional injuries to no more than 43.0 per 100,000.

**9.2:** Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000 people.

**9.2a:** Reduce nonfatal unintentional injuries among black males so that hospitalizations for this condition are no more than 856 per 100,000 people.

**9.3:** Reduce deaths caused by motor vehicle crashes to no more than 1.5 per 100 million vehicle miles traveled and 14.2 per 100,000 people.

**9.3a:** Reduce deaths among children aged 14 and younger caused by motor vehicle crashes to no more than 4.4 per 100,000.

**9.3b:** Reduce deaths among youth aged 15–24 caused by motor vehicle crashes to no more than 26.8 per 100,000.

**9.3c:** Reduce deaths among people aged 70 and older caused by motor vehicle crashes to no more than 20 per 100,000.

**9.3d:** Reduce deaths among American Indians and Alaska Natives caused by motor vehicle crashes to no more than 32 per 100,000.

**9.3e:** Reduce deaths among motorcyclists caused by motor vehicle crashes to no more than 25.6 per 100 million vehicle miles traveled and 0.9 per 100,000.

**9.3f:** Reduce deaths among pedestrians caused by motor vehicle crashes to no more than 2.0 per 100,000.

**9.3g:** Reduce deaths among Mexican-Americans caused by motor vehicle crashes to no more than 18 per 100,000.

**9.4:** Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people.

**9.4a:** Reduce deaths among people aged 65–84 from falls and fall-related injuries to no more than 14.4 per 100,000.

**9.4b:** Reduce deaths among people aged 85 and older from falls and fall-related injuries to no more than 105 per 100,000.

**9.4c:** Reduce deaths among black men aged 30–69 from falls and fall-related injuries to no more than 5.6 per 100,000.

**9.4d:** Reduce deaths among American Indians and Alaska Natives from falls and fall-related injuries to no more than 2.8 per 100,000.

**9.5:** Reduce drowning deaths to no more than 1.3 per 100,000 people.

**9.5a:** Reduce drowning deaths among children aged 4 and younger to no more than 2.3 per 100,000.

**9.5b:** Reduce drowning deaths among men aged 15–34 to no more than 2.5 per 100,000.

**9.5c:** Reduce drowning deaths among black males to no more than 3.6 per 100,000.

**9.5d:** Reduce drowning deaths among American Indians and Alaska Natives to no more than 2.0 per 100,000.

**9.6:** Reduce residential fire deaths to no more than 1.2 per 100,000 people.

**9.6a:** Reduce residential fire deaths among children aged 4 and younger to no more than 3.3 per 100,000.

**9.6b:** Reduce residential fire deaths among people aged 65 and older to no more than 3.3 per 100,000.

**9.6c:** Reduce residential fire deaths among black males to no more than 4.3 per 100,000.

**9.6d:** Reduce residential fire deaths among black females to no more than 2.6 per 100,000.

**9.6e:** Reduce residential fire deaths from residential fires caused by smoking to no more than 8 percent.

**9.6f:** Reduce residential fire deaths among American Indians and Alaska Natives to no more than 1.4 per 100,000.

**9.6g:** Reduce residential fire deaths among Puerto Ricans to no more than 2.0 per 100,000.

**9.7:** Reduce hip fractures among people aged 65 and older so that hospitalizations for this condition are no more than 607 per 100,000 people.

**9.7a:** Reduce hip fractures among white women aged 85 and older so that hospitalizations for this condition are no more than 2,177 per 100,000.

**9.8:** Reduce nonfatal poisoning to no more than 88 emergency department treatments per 100,000 people.

**9.8a:** Reduce nonfatal poisoning among children aged 4 and younger to no more than 520 emergency department treatments per 100,000.

**9.9:** Reduce nonfatal head injuries so that hospitalizations for this condition are no more than 106 per 100,000 people.

**9.10:** Reduce nonfatal spinal cord injuries so that hospitalizations for this condition are no more than 5 per 100,000 people.

**9.10a:** Reduce nonfatal spinal cord injuries among males so that hospitalizations for this condition are no more than 7.1 per 100,000.

**9.11:** Reduce by 20 percent the incidence of secondary conditions (i.e., pressure sores) associated with traumatic spinal cord injuries.

*NOTE: Secondary conditions are defined as conditions causally related to a disabling condition (i.e., occurring as a*

*result of the primary disabling condition) and can be either a pathology, an impairment, a functional limitation, or a disability.*

**9.12:** Increase use of safety belts and child safety seats to at least 85 percent of motor vehicle occupants.

**9.12a:** Increase use of child restraint systems among children aged 4 and younger involved in potentially fatal crashes to 70 percent.

**9.13:** Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists.

**9.14:** Extend to 50 States laws requiring safety belt and motorcycle helmet use for all ages.

**9.15:** Enact in 50 States laws requiring that new handguns be designed to minimize the likelihood of discharge by children.

**9.16:** Extend to 2,000 local jurisdictions the number whose codes address the installation of fire suppression sprinkler systems in those residences at highest risk for fires.

**9.17:** Increase the presence of functional smoke detectors to at least one on each habitable floor of all inhabited residential dwellings.

**9.18:** Provide academic instruction on injury prevention and control, preferably as part of comprehensive school health education, in at least 50 percent of public school systems (grades K–12).

**9.19\*:** Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.

Duplicate objective: 13.16

**9.20:** Increase to at least 50 the number of States that have design standards for markings, signing, and other characteristics of the roadway environment to improve the visual stimuli and protect the safety of older drivers and pedestrians.

**9.21:** Increase to at least 50 percent the proportion of primary care providers who routinely provide age-appropriate counseling on safety precautions to prevent unintentional injury.

**9.22:** Extend to 20 States the capability to link emergency medical services,

trauma systems, and hospital data.

**9.23\*:** Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 4.1

**9.23a\*:** Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 4.1a

**9.23b\*:** Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 4.1b

**9.24:** Extend to 50 States laws requiring helmets for bicycle riders.

**9.25\*:** Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 7.19

*NOTE: There are some variations across States in the age which defines minors. Additionally, in some States violation of the law is a misdemeanor; in others it is a felony. Penalties for violation also vary.*

**9.26:** Increase to 35 the number of States having a graduated driver licensing system for novice drivers and riders under the age of 18.

\*Duplicate objective.

# Priority Area 10 Occupational Safety and Health

## Background

Work-related injuries and illnesses continue to place an enormous burden on U.S. workers and the economy (1). In 1993, work-related injuries alone cost \$121 billion in medical care, lost productivity, and wages (2). While the human and financial costs of occupational injuries are extensive, efforts to reduce these injuries are often successful and cost-effective (3,4). Efforts to prevent workplace injuries and deaths continue to include research and other traditional public health approaches. In response to new concerns, such as workplace violence, workplace injury prevention is expanding to incorporate interventions from criminal justice and other disciplines (5).

## Midcourse Modifications

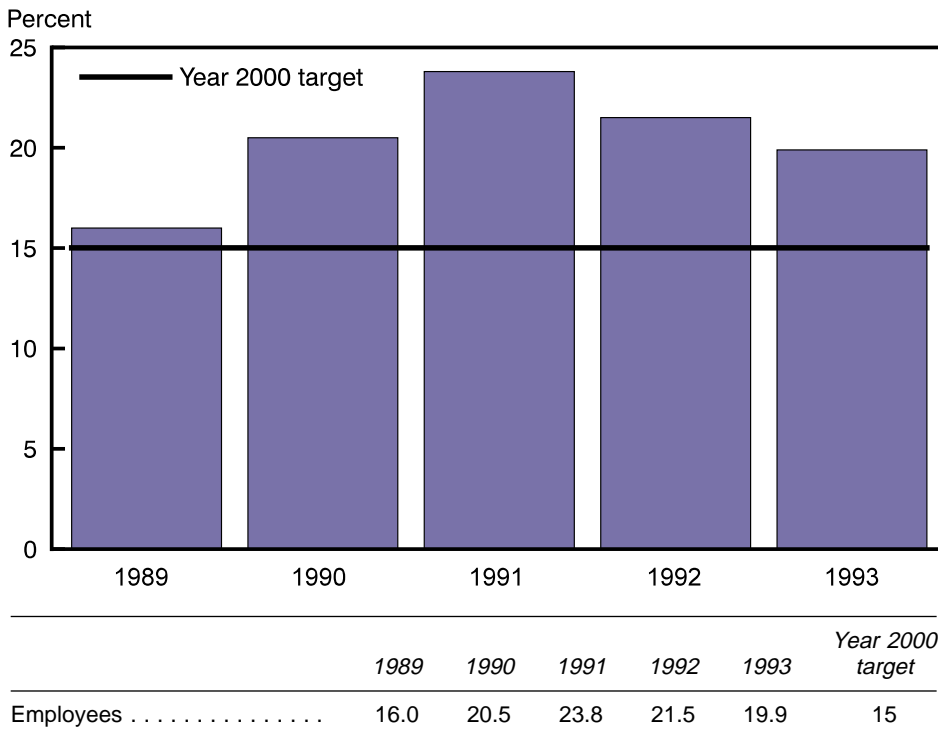
Five objectives were added to this priority area during the midcourse review. The first new objective calls for a reduction in workplace homicides (10.16). The second addition (10.17) calls for reductions in deaths attributable to pneumoconiosis; this objective parallels the existing service and protection objective (10.11) relating to State standards to prevent these diseases. The other three objectives were duplicated from the tobacco area and relate to worksites with smoking policies (10.18), clean indoor air laws (10.19), and reduction of State laws that preempt more restrictive local indoor air laws (10.20). In addition to the five new objectives, one subobjective relating to reduction of adolescent worker injuries was added to objective 10.2. Targets were changed for objectives 10.5 (hepatitis infections) and 10.6 (occupant restraint mandates).

## Data Summary

### Highlights

Although work-related injury deaths have declined slightly from a 1983–87 average of 6 per 100,000 workers to a

**Figure 11. Proportion of U.S. civilian and military employees exposed to average daily noise levels that exceed 85 dBA: United States, 1989–94, and year 2000 target for objective 10.7**



SOURCE: Department of Defense, U.S. Air Force Hearing Conservation Database.

rate of 5 in 1994, work-related injuries increased substantially from the 1983–87 average of 7.7 per 100 to 8.4 in 1994 (6). The leading cause of occupational deaths is motor vehicle accidents, which have shown little decline in recent years (6). Data from both the Bureau of Labor Statistics (BLS) and the National Institute for Occupational Safety and Health (NIOSH) indicate that death rates in the four highest risk industries (mining, construction, transportation, and agriculture) remain consistently higher than other industries.

Homicide was the second leading cause of work-related injury deaths in 1994. Homicides accounted for 1,071 deaths (16 percent of all work-related deaths) in 1994; 75 percent of these occurred in retail or service work settings (6). The revised reporting mechanism for occupation-related deaths is a more comprehensive method of data collection (see Data Issues), hence the decline in the work-related injury death rate is particularly noteworthy.

Many work-related deaths and injuries are among working youth. NIOSH data indicate that 70 youth are

killed each year and that another 64,000 require treatment in hospital emergency rooms because of job-related injuries (7).

The rate of repetitive trauma injuries (10.3) has continued to increase from baseline levels. In 1992, 36 percent of these injuries, which resulted in lost work-days, were attributable to carpal tunnel syndrome. Repetitive motion injuries affect workers in a broad range of occupations (8).

Data from the U.S. Air Force Hearing Conservation database show work-related noise exposure over 85 decibels (10.7) at a prevalence above that targeted for the year 2000. The Air Force has an aggressive program to control noise exposure, and its estimates are probably lower than the national work force exposure, estimated by NIOSH as approximately 25 percent (9). Considerable effort is needed if the objective is to be achieved by the end of the decade.

### Summary of Progress

Data for 10 (10.1, 10.5, 10.6, 10.9, 10.10, 10.11, 10.13, 10.14, 10.17, and 10.18) of the 20 objectives in this

priority area indicate progress toward the year 2000 targets. Three of these (10.5, 10.11, and 10.14) have met their year 2000 targets. Additional NIOSH data indicate that a smaller proportion of workers have been exposed at higher levels. The update for objective 10.19 indicates no change. The data for seven objectives (10.2, 10.3, 10.4, 10.7, 10.8, 10.16, and 10.20) indicate movement away from the targets. It should be noted, however, that additional NIOSH data related to objective 10.8 indicate that the number of workers with blood lead levels higher than that specified in the objective (but at the level specified in Occupational Safety and Health Administration regulations) has been declining. Also, the increase in the rate of workplace homicides may, in part, be attributable to the fact that updates are from a different source than the baseline (see Data Issues). No updates were available for two objectives (10.12 and 10.15).

## Data Issues

### Data Source Description

Since 1992, the data for objective 10.1 (work-related injury deaths) have come from the Census for Fatal Occupational Injuries (CFOI), BLS. Prior to 1992, the data came from the Annual Survey on Occupational Injuries and Illnesses (ASOII). The latter relied on a single data source to capture occupational fatalities: a survey of employer logs of occupational deaths in approximately 50,000 workplaces. The survey undercounted occupational fatalities by as much as 60 percent (10). The CFOI uses a minimum of two data sources to identify occupational deaths. The primary sources are death certificates; State workers' compensation reports; coroner, medical examiner, or autopsy reports; and OSHA reports. The rates for 1993 were rounded to whole numbers by BLS. National Traumatic Occupational Fatalities (NTOF) data (reported by NIOSH) can also be used to monitor this objective, but NTOF uses only death certificates and may underestimate some categories of work-related injury deaths. Both CFOI and NTOF will also be used to track the new objective on workplace homicides (10.16).

The new subobjective on adolescent work injuries (10.2f) will be tracked with data from the National Electronic

Injury Surveillance System (NEISS) under an interagency agreement between NIOSH and the Consumer Product Safety Commission (CPSC) and does not utilize ICD-9 codes or other conventional injury reporting mechanisms. The data are collected in hospital emergency rooms and are limited to injuries attributable to a specific list of regulated products and devices. Hence, the data collected are subject to annual variations in what is specified in product safety or regulatory codes. The main objective and the other subobjectives for 10.2 are tracked using data from ASOII.

The data used to report on the status of objective 10.7 (occupational noise exposure) come from the U.S. Air Force Hearing Conservation database. The data report exposures for civilian and military employees in a wide range of industrial and service occupations. NIOSH is currently developing the Sentinel Event Notification System for Occupational Risk (SENSOR) and the Occupational Hearing and Conservation database that will provide additional data to track this objective. While monitoring systems to track the objective are still under development, NIOSH has issued guidelines and sponsored workshops designed to address this important occupational health issue.

The data for objective 10.8 (occupational lead exposure) are from State registries that report adult blood lead levels. The number of States reporting has increased since the baseline was established; this has affected the number of cases reported.

Objective 10.11 (State exposure standards for occupational lung disease) was achieved because Federal standards applicable in all 50 States were established for airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. The new parallel objective 10.17 (pneumoconiosis deaths) will be tracked with the number of deaths as reported in the National Vital Statistics System (NVSS).

Data for objective 10.15 (screening for occupational health exposure) are from the Primary Care Provider Surveys (PCPS). NIOSH, the Indian Health Service (IHS), and the Health Resources and Services Administration (HRSA) are working together to develop an additional tracking mechanism for this objective. The data on inquiry (from PCPS) about work-related risks

represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services.

## Comparability of Data Sources

The baseline for objective 10.9 (hepatitis immunizations) came from OSHA's Regulatory Impact Analysis; the updates are from CDC's National Center for Infectious Diseases. The baseline for objective 10.10 (State occupational health and safety plans) came from the Public Health Foundation's unintentional injuries survey; the update is from NIOSH. For both objectives, the data may not be comparable and statements about trends must be made with caution.

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**Table 10. Occupational safety and health objective status**

|               | <i>Objective</i>   | <i>Baseline</i>     | <i>1992</i>         | <i>1993</i>         | <i>1994</i>            | <i>Target<br/>2000</i> |
|---------------|--|---------------------|---------------------|---------------------|------------------------|------------------------|
| <b>10.1</b>   | <b>Work-related injury deaths (per 100,000 full-time workers)</b> . . . . .                        | <sup>1</sup> 6      | 5                   | 5                   | 5                      | 4                      |
|               | a. Mine workers . . . . .  | <sup>1</sup> 30.3   | 27                  | 26                  | 27                     | 21                     |
|               | b. Construction workers . . . . .  | <sup>1</sup> 25.0   | 14                  | 14                  | 15                     | 17                     |
|               | c. Transportation workers . . . . .  | <sup>1</sup> 15.2   | 13                  | 13                  | 13                     | 10                     |
|               | d. Farm workers . . . . .  | <sup>1</sup> 14.0   | 24                  | 26                  | 27                     | 9.5                    |
| <b>10.2</b>   | <b>Nonfatal work-related injuries (per 100 full-time workers)</b> . . . . .                        | <sup>1</sup> 7.7    | 8.3                 | 7.9                 | 8.4                    | 6                      |
|               | a. Construction workers . . . . .  | <sup>1</sup> 14.9   | 12.9                | 12.0                | 11.8                   | 10                     |
|               | b. Nursing and personal care workers . . . . .   | <sup>1</sup> 12.7   | 18.2                | 16.9                | ---                    | 9                      |
|               | c. Farm workers . . . . .  | <sup>1</sup> 12.4   | 11.0                | 10.9                | ---                    | 8                      |
|               | d. Transportation workers . . . . .  | <sup>1</sup> 8.3    | 8.8                 | 9.1                 | 9.3                    | 6                      |
|               | e. Mine workers . . . . .  | <sup>1</sup> 8.3    | 7.0                 | 6.5                 | 6.3                    | 6                      |
|               | f. Adolescent workers . . . . .  | <sup>2</sup> 5.8    | ...                 | ---                 | ---                    | 3.8                    |
| <b>10.3</b>   | <b>Cumulative trauma disorders (per 100,000 full-time workers)</b> . . . . .                       | <sup>3</sup> 100    | 368                 | 383                 | ---                    | 60                     |
|               | a. Manufacturing industry workers . . . . .  | <sup>3</sup> 355    | 1,241               | 1,267               | ---                    | 150                    |
|               | b. Meat product workers . . . . .  | <sup>3</sup> 3,920  | 8,475               | 8,532               | ---                    | 2,000                  |
| <b>10.4</b>   | <b>Occupational skin disorders (per 100,000 full-time workers)</b> . . . . .                       | <sup>1</sup> 64     | 82                  | 76                  | ---                    | 55                     |
| <b>10.5*</b>  | <b>Hepatitis B infections among occupationally exposed workers<br/>(number of cases)</b> . . . . . | <sup>3</sup> 3,090  | 1,923               | 727                 | 506                    | 623                    |
| <b>10.6</b>   | <b>Worksite occupant protection system mandates</b> . . . . .                                      | <sup>2</sup> 82.4%  | ...                 | ---                 | <sup>4</sup> 85%       | 95%                    |
| <b>10.7</b>   | <b>Occupational noise exposure (average noise levels exceeding 85 dB)</b> . . . . .                | <sup>5,6</sup> 16%  | <sup>6</sup> 21.5%  | <sup>6</sup> 19.9%  | ---                    | 15%                    |
| <b>10.8</b>   | <b>Occupational lead exposure (blood concentration greater than<br/>25 mg/dL)</b> . . . . .        | <sup>7</sup> 4,804  | <sup>8</sup> 8,886  | <sup>9</sup> 11,240 | <sup>4,10</sup> 10,923 | 0                      |
| <b>10.9*</b>  | <b>Hepatitis B immunizations among occupationally exposed workers</b> . . . . .                    | <sup>5</sup> 37%    | 50%                 | ---                 | 67%                    | 90%                    |
| <b>10.10</b>  | <b>Number of States with occupational health and safety plans</b> . . . . .                        | <sup>5</sup> 10     | 23                  | ---                 | ---                    | 50                     |
| <b>10.11</b>  | <b>Number of States with occupational lung disease exposure<br/>standards</b> . . . . .            | <sup>1</sup> 50     | ...                 | ...                 | ...                    | 50                     |
| <b>10.12</b>  | <b>Worksite health and safety programs</b> . . . . .   | <sup>2</sup> 63.8%  | ...                 | ---                 | ---                    | 70%                    |
| <b>10.13</b>  | <b>Worksite back injury prevention and rehabilitation programs</b> . . . . .                       | <sup>12</sup> 28.6% | 32.5%               | ---                 | ---                    | 50%                    |
|               | Back injury classes, workshops, or lectures . . . . .  | ...                 | 24%                 | ---                 | <sup>4</sup> 26%       | ...                    |
| <b>10.14</b>  | <b>Number of States with programs for small business safety and health</b> . . . . .               | <sup>13</sup> 26    | ---                 | <sup>14</sup> 50    | ...                    | 50                     |
| <b>10.15</b>  | <b>Clinician assessment of occupational health exposures</b> . . . . .                             | ---                 | ---                 | ---                 | ---                    | 75%                    |
|               | Percent of clinicians routinely providing service to 81–100% of patients                           |                     |                     |                     |                        |                        |
|               | Inquiry about work-related health risks (16 years and over)  |                     |                     |                     |                        |                        |
|               | Pediatricians . . . . .  | <sup>2</sup> 7%     | ...                 | ---                 | ---                    | 75%                    |
|               | Nurse practitioners . . . . .  | <sup>2</sup> 14%    | ...                 | ---                 | ---                    | 75%                    |
|               | Obstetricians/gynecologists . . . . .  | <sup>2</sup> 6%     | ...                 | ---                 | ---                    | 75%                    |
|               | Internists . . . . .   | <sup>2</sup> 14%    | ...                 | ---                 | ---                    | 75%                    |
|               | Family physicians . . . . .  | <sup>2</sup> 7%     | ...                 | ---                 | ---                    | 75%                    |
|               | Counseling about work-related health risks   |                     |                     |                     |                        |                        |
|               | Pediatricians . . . . .  | <sup>2</sup> 8%     | ...                 | ---                 | ---                    | 75%                    |
|               | Nurse practitioners . . . . .  | <sup>2</sup> 10%    | ...                 | ---                 | ---                    | 75%                    |
|               | Obstetricians/gynecologists . . . . .  | <sup>2</sup> 10%    | ...                 | ---                 | ---                    | 75%                    |
|               | Internists . . . . .   | <sup>2</sup> 9%     | ...                 | ---                 | ---                    | 75%                    |
|               | Family physicians . . . . .  | <sup>2</sup> 8%     | ...                 | ---                 | ---                    | 75%                    |
| <b>10.16</b>  | <b>Work-related homicides</b>  |                     |                     |                     |                        |                        |
|               | Full-time workers (per 100,000) . . . . .  | <sup>15</sup> 0.7   | <sup>16</sup> 0.9   | <sup>16</sup> 0.8   | <sup>16</sup> 0.9      | 0.5                    |
| <b>10.17</b>  | <b>Occupational lung disease deaths</b>  |                     |                     |                     |                        |                        |
|               | Population (age-adjusted per 1,000,000) <sup>17</sup> . . . . .                                    | <sup>18</sup> 9.6   | ---                 | ---                 | ---                    | 7.7                    |
|               | Number of pneumoconiosos deaths among people 15 years and over <sup>19</sup> . . . . .             | ...                 | <sup>18</sup> 3,644 | 3,237               | ---                    | ...                    |
| <b>10.18*</b> | <b>Worksites with smoking policies</b>   |                     |                     |                     |                        |                        |
|               | 50 or more employees   |                     |                     |                     |                        |                        |
|               | Any smoking policy . . . . .   | ...                 | 86%                 | ---                 | <sup>4</sup> 87%       | 100%                   |
|               | Policy that bans smoking or limits it to separately ventilated areas . . . . .                     | <sup>12</sup> 27%   | 59%                 | ---                 | ---                    | 100%                   |
|               | Medium and large companies   |                     |                     |                     |                        |                        |
|               | Any smoking policy . . . . .   | <sup>3</sup> 54%    | <sup>13</sup> 85%   | ---                 | ---                    | 100%                   |



**Table 10. Occupational safety and health objective status—Con.**

|               | <i>Objective</i>   | <i>Baseline</i> | <i>1992</i> | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|--|-----------------|-------------|-------------|-------------|------------------------|
| <b>10.19*</b> | <b>Number of States with comprehensive laws for clean indoor air in:</b> |                 |             |             |             |                        |
|               | Private workplaces . . . . .   | 4,a1            | ...         | ...         | 201         | 2151                   |
|               | Public workplaces . . . . .  | 4,ag            | ...         | ...         | 209         | 2151                   |
|               | Restaurants . . . . .  | 42              | ...         | ...         | 203         | 2151                   |
|               | Public transportation . . . . .  | 4,21,a17        | ...         | ...         | 2017        | 2151                   |
|               | Hospitals . . . . .  | 4,a8            | ...         | ...         | 208         | 2151                   |
|               | Day care centers . . . . .   | 421             | ...         | ...         | 2021        | 2151                   |
|               | Grocery stores . . . . .   | 4,a4            | ...         | ...         | 204         | 2151                   |
| <b>10.20*</b> | <b>Preemptive clean indoor air laws</b>                                  |                 |             |             |             |                        |
|               | States with laws . . . . .   | 417             | ...         | ...         | 2018        | 0                      |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1983–1987 average.

<sup>2</sup>1992 data.

<sup>3</sup>1987 data.

<sup>4</sup>1995 data.

<sup>5</sup>1989 data.

<sup>6</sup>Data represent a cross-section of civilian and military employees.

<sup>7</sup>1988 data from seven States.

<sup>8</sup>Data from 16 States.

<sup>9</sup>Data are from 20 States.

<sup>10</sup>Data from 23 States.

<sup>11</sup>Pursuant to the enactment of the Federal Coal Mine Health and Safety Act of 1969 (PL91–173, amended by PL95–164) and the Occupational Safety and Health Act of 1970 (PL91–596), Federal Standards have been established for occupational exposure to airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. These exposure limits apply in all 50 States and U.S. Territories.

<sup>12</sup>1985 data.

<sup>13</sup>1991 data.

<sup>14</sup>All States now have OSHA or State-funded small business programs.

<sup>15</sup>1980–89 average.

<sup>16</sup>Data are from the Census of Fatal Occupational Injuries, BLS.

<sup>17</sup>ICD–9 codes: 500–502, 504.

<sup>18</sup>1990 data.

<sup>19</sup>ICD–9 codes: 500–505.

<sup>20</sup>1996 data.

<sup>21</sup>Includes District of Columbia.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 10.1, 10.1a–d           | Baseline: Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.<br>Updates: Census of Fatal Occupational Injuries, DOL, BLS.  |
| 10.2, 10.2a–e           | Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.   |
| 10.2f                   | National Electronic Injury Surveillance System, CPSC.   |
| 10.3, 10.3a–b           | Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.   |
| 10.4                    | Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.   |
| 10.5*                   | Viral Hepatitis Surveillance System, CDC, NCID.   |
| 10.6                    | Baseline: National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>Updates: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.                                |
| 10.7                    | U.S. Airforce Hearing Conservation Database, DOD.   |
| 10.8                    | Adult Elevated Blood Lead Level Registries, CDC, NIOSH.   |
| 10.9*                   | Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA.<br>Updates: National Center for Infectious Diseases, CDC. |
| 10.10                   | Baseline: Association of State and Territorial Health Officials Reporting System: Unintentional Injuries Survey, PHF.<br>Updates: DOL, OSHA.  |
| 10.11                   | CDC, NIOSH.   |
| 10.12                   | National Survey of Worksite Health Promotion Activities, OASH, ODPHP.   |
| 10.13                   | National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>Updates: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.  |
| 10.14                   | CDC, NIOSH.   |

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 10.15                   | Primary Care Provider Surveys, OASH, ODPHP.  |
| 10.16                   | Baseline: National Traumatic Occupational Fatalities (NTOF) CDC, NIOSH.<br>Updates: Census of Fatal Occupational Injuries (CFOI), DOL, BLS.  |
| 10.17                   | National Vital Statistics Surveillance System, CDC, NCHS.  |
| 10.18*                  | For worksites with 50 or more employees, National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>For medium and large companies, Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.<br>Updates: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. |
| 10.19*                  | Office of Smoking and Health Legislative Tracking, CDC, NCCDPHP.   |
| 10.20*                  | Legislative Tracking System, CDC; State Cancer Legislative Database, NCI.  |

\*Duplicate objective. See full text of objective following this table.

# Occupational Safety and Health Objectives

**10.1:** Reduce deaths from work-related injuries to no more than 4 per 100,000 full-time workers.

**10.1a:** Reduce deaths among mine workers from work-related injuries to no more than 21 per 100,000 full-time workers.

**10.1b:** Reduce deaths among construction workers from work-related injuries to no more than 17 per 100,000 full-time workers.

**10.1c:** Reduce deaths among transportation workers from work-related injuries to no more than 10 per 100,000 full-time workers.

**10.1d:** Reduce deaths among farm workers from work-related injuries to no more than 9.5 per 100,000 full-time workers.

**10.2:** Reduce work-related injuries resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.2a:** Reduce work-related injuries among construction workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 10 cases per 100 full-time workers.

**10.2b:** Reduce work-related injuries among nursing and personal care workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 9 cases per 100 full-time workers.

**10.2c:** Reduce work-related injuries among farm workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 8 cases per 100 full-time workers.

**10.2d:** Reduce work-related injuries among transportation workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.2e:** Reduce work-related injuries among mine workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.2f:** Reduce work-related injuries among adolescent workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 3.8 cases per 100 full-time workers.

**10.3:** Reduce cumulative trauma disorders to an incidence of no more than 60 cases per 100,000 full-time workers.

**10.3a:** Reduce cumulative trauma disorders among manufacturing industry workers to an incidence of no more than 150 cases per 100,000 full-time workers.

**10.3b:** Reduce cumulative trauma disorders among meat product workers to an incidence of no more than 2,000 cases per 100,000 full-time workers.

**10.4:** Reduce occupational skin disorders or diseases to an incidence of no more than 55 per 100,000 full-time workers.

**10.5\*:** Reduce hepatitis B infections among occupationally exposed workers to an incidence of no more than 623 cases.

Duplicate objective: 20.3e

**10.6:** Increase to at least 95 percent the proportion of worksites with 50 or more employees that mandate employee use of occupant protection systems, such as seat belts, during all work-related motor vehicle travel.

**10.7:** Reduce to no more than 15 percent the proportion of workers exposed to average daily noise levels that exceed 85 dBA.

**10.8:** Eliminate exposures which result in workers having blood lead concentrations greater than 25 ug/dL of whole blood.

**10.9\*:** Increase hepatitis B immunization levels to 90 percent among occupationally exposed workers.

Duplicate objective: 20.11

**10.10:** Implement occupational safety and health plans in 50 States for the identification, management, and prevention of leading work-related

diseases and injuries within the State.

**10.11:** Establish in 50 States exposure standards adequate to prevent the major occupational lung diseases to which their worker populations are exposed (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis).

**10.12:** Increase to at least 70 percent the proportion of worksites with 50 or more employees that have implemented programs on worker health and safety.

**10.13:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer back injury prevention and rehabilitation programs.

**10.14:** Establish in 50 States either public health or labor department programs that provide consultation and assistance to small businesses to implement safety and health programs for their employees.

**10.15:** Increase to at least 75 percent the proportion of primary care providers who routinely elicit occupational health exposures as a part of patient history and provide relevant counseling.

**10.16:** Reduce deaths from work-related homicides to no more than 0.5 per 100,000 full-time workers.

**10.17:** Reduce the overall age-adjusted mortality rate for four major preventable occupational lung diseases (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis) to 7.7 per 100,000.

**10.18\*:** Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

Duplicate objective: 3.11

**10.19\*:** Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.

Duplicate objective: 3.12

**10.20\*:** Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.

Duplicate objective: 3.25

\*Duplicate objective.

# Priority Area 11 Environmental Health

## Background

Environmental factors play a fundamental role in health and disease. One of the first public health interventions to control disease (cholera) succeeded through control of a contaminated public water supply (1). Despite a history of successes in environmental health, continued emphasis on sanitation, vector control, and pollution prevention is needed. Also needed is a greater understanding of the effects of toxic exposure on human health (2). The monitoring of public exposure to toxins and research into the relationship of toxic exposure to health and disease are important due to the increasing public and commercial use of potentially hazardous substances (3).

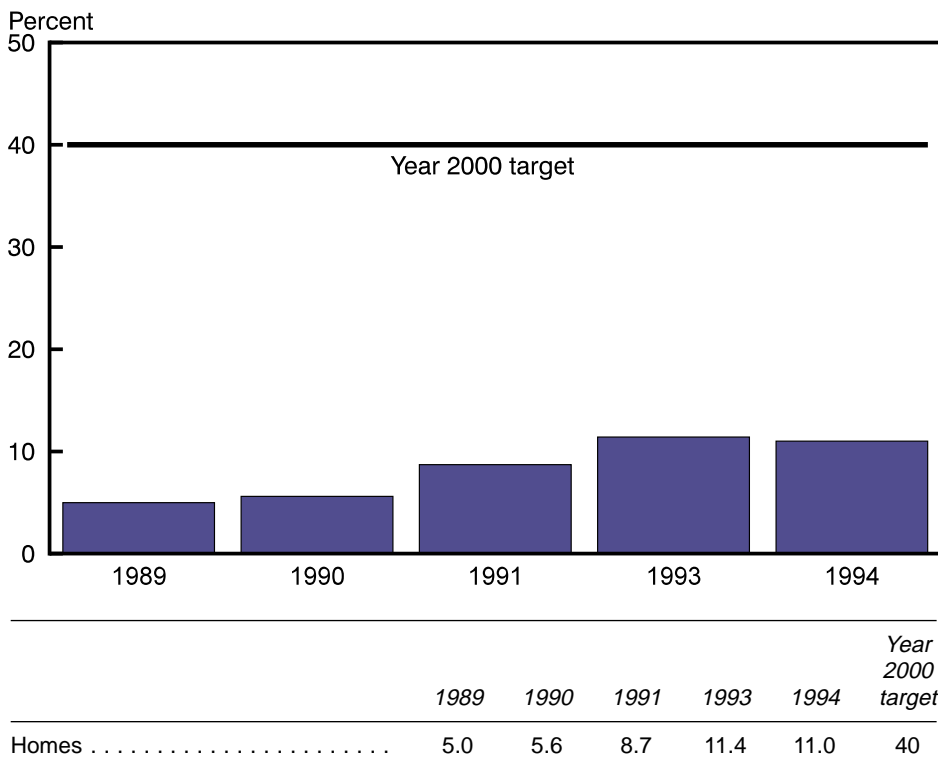
Research may clarify current ambiguity about exposure thresholds. Dioxin continues to be the focus of research (4), and lead has been shown to have toxic effects at even lower exposure levels than originally believed (5,6). Research will aid priority setting among environmental and public health interventions. In addition to assessing and redressing the effects of pollution, research-based initiatives in manufacturing and marketing should reduce the introduction of waste into the environment (7).

The 17 objectives in this priority area cover a broad range of exposure media, including air, water, and soil. They also address a variety of pollutants, such as radon, toxic chemicals, and lead.

## Midcourse Modifications

One new objective was added to this priority area; it was duplicated from the tobacco area and calls for reductions in childhood exposure to tobacco smoke. A subobjective seeking a reduction in asthma hospitalizations for women was added to objective 11.1. Targets were revised for objectives 11.4 (child blood lead levels) due to the dramatic progress made in this area; targets were also revised for 11.7 (toxic emissions) to reflect revisions in baseline data.

**Figure 12. Proportion of homes that have been tested for radon: United States, 1989–94, and year 2000 target for objective 11.6**



SOURCES: Baseline: Environmental Protection Agency, OAR, Office of Radiation Programs. Updates: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Objective 11.8 (reduction of solid waste) was reworded to include recovery through recycling. Objective 11.10 (surface water quality) was reworded to reflect increases in the proportion of surface waters serving beneficial uses such as recreation and fishing; the baselines and targets were also revised to reflect improvement in the measurement methodology. Objective 11.15 was reworded to utilize available data sources (no source was available to measure the objective in its original form); it now tracks both hazardous household waste recycling and curbside recycling.

## Data Summary

### Highlights

The prevalence of blood lead levels exceeding 15 and 25 micrograms per deciliter (objective 11.4) has dropped dramatically since the baselines were established for this objective. The data indicate that 53 percent of children 6 months–5 years had blood lead levels

exceeding 15 micrograms per deciliter in 1984; this compares with less than 3 percent of children 1–5 years of age during 1988–91. While there are slight differences in the methods used in the two surveys (see Data Issues), the data strongly support progress in reducing this environmental threat to children. Unfortunately, research has also identified that the health threat from lead may occur at even lower levels than those monitored by the year 2000 objectives (10 micrograms/deciliter) (6). Some of the decline in blood lead levels may be associated with declines in airborne lead (which is monitored in objective 11.5). Additional reductions may be associated with efforts to educate the public about the risks from lead and to reduce lead levels in the home (6). Data on lead paint testing (11.11) suggest increased awareness of this threat.

The proportion of people who know what radon is and who reported testing their homes for radon (11.6) dropped slightly between 1992 and 1993, but remains nearly double that reported in

1990. While only a fraction of these homes exceed the level identified as dangerous by the Environmental Protection Agency (EPA) (four picocuries), a large proportion of these homeowners have taken measures to mitigate the effects. Both the greater awareness of radon and the higher level of testing may in part be consequences of Government-sponsored education and testing programs (8). Data for objective 11.13 (radon disclosure) show that the number of States requiring disclosure of radon test results at the time of home sales has doubled between 1993 and 1995.

The proportions of rivers, lakes, and estuaries supporting the beneficial uses for fishing and recreation have increased between 1992 and 1994 (11.10).

## Summary of Progress

Of the 17 environmental health objectives, 13 showed some progress toward the year 2000 targets (11.1, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.11, 11.12, 11.13, 11.15, 11.16, and 11.17). The data for two objectives (11.2 and 11.9) indicate movement away from the targets. The trends for 11.10 were mixed. No update was available for objective 11.14 (see Data Issues).

## Data Issues

### Definitions

Data for objective 11.1 (asthma hospitalizations) come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS). Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race (required for objective 11.1a asthma hospitalizations for blacks and nonwhites) are missing from roughly 17 percent of the discharge records in the survey; this omission may yield rates that underestimate hospitalizations for this special population objective.

The baseline data for 11.2 (mental retardation) were revised to be comparable with data from the Metropolitan Atlanta Developmental Disabilities Surveillance Program, which uses school counts of children classified as mentally retarded. This system will be used to track the objective.

Data for 11.3 are from CDC's Waterborne Surveillance System, which

compiles data from the States; reporting is voluntary. An outbreak may affect as few as two people and includes both disease and poisoning. Epidemiological evidence is used to link the outbreak to water as a cause.

The updates for 11.4 are from the National Health and Nutrition Examination Survey III (NHANES III), phase I (1988–91). The children tested in NHANES III were 1–5 years of age compared with 6 months–5 years of age from the 1984 baseline projected from NHANES II (1976–80) data. Additionally, the special population was identified using the Bureau of Census Poverty Income Ratio rather than a discrete family income level.

Data for 11.5 (air quality) are affected by a range of meteorological factors (for example, temperature and wind) and may vary considerably on an annual basis. The data are also limited by the fact that not all counties have monitoring stations. Individual exposure within counties varies greatly and health effects from poor air quality are mitigated by a wide range of individual factors (for example, personal sensitivity to pollutants, other health conditions, and use of health services). Additionally, health effects from some pollutants may occur at levels lower than those specified in the National Ambient Air Quality Standards (NAAQS).

Data for 11.7 (toxic agent release) are from the Toxic Release Inventory maintained by EPA. The inventory estimates of prior year releases are provided to EPA by industry that periodically revises these estimates. These revisions are permitted under the Community Right to Know Act of 1986, however, they complicate monitoring of this objective.

Although drinking water quality has improved, data for 11.9 (safe drinking water) have remained relatively unchanged for the past 5 years because of an increase in the number of maximum contaminant level (MCL) standards used to define safe drinking water. In the past 2 years, compliance has also been based on reporting and treatment standards, as well as contaminants. Additionally, the proportions reported for this objective reflect the proportion of community water systems, rather than the proportion of the population (which is stated in the objective). Community water systems serve nearly 95 percent of the population; hence the proportion of the

population served by the 68 percent of compliant systems reported in 1994 actually represents about 65 percent of the population.

Data for the revised version of objective 11.15 (hazardous waste recycling) include both permanent (year round) and temporary (1 day) recycling programs, so trend data must be interpreted carefully.

Data for 11.17 (the new objective) come from the National Health Interview Survey (NHIS); the definition of regular exposure to tobacco smoke is defined as the occurrence of tobacco smoking anywhere in the home for 3 or more days a week.

## Proxy Data

Updates for 11.6 (radon testing) come from the NHIS and represent the proportion of survey respondents who reported that they knew what radon was and had tested their home for radon; the objective calls for the proportion of homes that had been tested. The data for children in 1991, 1993, and 1994 represent the proportion of children 6 years of age and under in homes where the respondent reported testing for radon. The data on smokers for 1991, 1993, and 1994 were limited to those who reported smoking at home 3 or more days a week.

Data for 11.11 (lead paint testing) are also provided by the NHIS and represent the proportion of people who reported testing their homes for lead paint.

## Data Availability

There will be no further updates for tracking disclosure of lead paint (objective 11.13) beyond 1991. Pending Federal regulations will require disclosure in all pre-1978 houses during sales or leasing.

The mechanism for tracking for objective 11.14 (health risks from hazardous waste sites) will be based on data from the Hazardous Substance Release/Health Effects Database (HAZDAT) system that is being developed by ATSDR. This system, when implemented, will show the proportion of sites with public health concerns or hazards where ATSDR recommendations have been implemented. The year 2000 target has been set at 100 percent.

The data for objective 11.16 (sentinel environmental diseases) are limited to plans related to childhood

lead poisoning. Other sentinel diseases will be tracked as data become available. Additionally, CDC is working with other Government and nongovernment organizations to develop guidelines to improve State capacity to conduct environmental surveillance.

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**Table 11. Environmental health objective status**

|              | <i>Objective</i>  | <i>Baseline</i>               | <i>1992</i>            | <i>1993</i>         | <i>1994</i>         | <i>Target 2000</i> |
|--------------|---|-------------------------------|------------------------|---------------------|---------------------|--------------------|
| <b>11.1</b>  | <b>Asthma hospitalizations (per 100,000)</b>  | <sup>1</sup> 188              | 183                    | 183                 | 174                 | 160                |
|              | a. Blacks and other nonwhites   | <sup>1</sup> 334              | 380                    | 290                 | 353                 | 265                |
|              | b. Children 14 years and under  | <sup>1</sup> 284              | 344                    | 280                 | 295                 | 225                |
|              | c. Women 25 years and over  | <sup>2</sup> 229              | 216                    | 198                 | 202                 | 183                |
| <b>11.2*</b> | <b>Mental retardation (per 1,000)</b>   |                               |                        |                     |                     |                    |
|              | Children 10 years old   | <sup>3,a</sup> 3.1            | 4.0                    | ---                 | ---                 | 2                  |
| <b>11.3</b>  | <b>Waterborne diseases (number of outbreaks)</b>  | <sup>2</sup> 16               | 19                     | 17                  | 11                  | 11                 |
|              | a. People served by community water systems   | <sup>2</sup> 4                | 5                      | 9                   | 5                   | 2                  |
| <b>11.4</b>  | <b>Blood lead levels among children</b>   |                               |                        |                     |                     |                    |
|              | Levels exceeding 15 ug/dL   | <sup>5</sup> 3 million        | <sup>6</sup> 503,000   | ---                 | ---                 | 300,000            |
|              | Levels exceeding 25 ug/dL   | <sup>5</sup> 234,000          | <sup>6</sup> 93,000    | ---                 | ---                 | 0                  |
|              | a. Inner-city low-income black children   |                               |                        |                     |                     |                    |
|              | Levels exceeding 15 ug/dL   | <sup>5</sup> 234,900          | <sup>6,7</sup> 160,000 | ---                 | ---                 | 75,000             |
|              | Levels exceeding 25 ug/dL   | <sup>5</sup> 36,700           | <sup>6,7</sup> 15,000  | ---                 | ---                 | 0                  |
| <b>11.5</b>  | <b>Proportion of people in counties that have not exceeded standards for air pollutants</b> |                               |                        |                     |                     |                    |
|              | Ozone   | <sup>2</sup> 49.7%            | 78.4%                  | 76.5%               | 75.1%               | 85%                |
|              | Carbon monoxide   | <sup>2</sup> 53.6%            | 82.1%                  | 79.5%               | 79.9%               | ---                |
|              | Nitrogen dioxide  | <sup>2</sup> 87.8%            | 94.3%                  | 95.4%               | 93.9%               | ---                |
|              | Sulfur dioxide  | <sup>2</sup> 96.6%            | 100%                   | 100%                | 100%                | ---                |
|              | Particulates  | <sup>2</sup> 99.3%            | 100%                   | 99.4%               | 100%                | ---                |
|              | Lead  | <sup>2</sup> 89.4%            | 89.6%                  | 97.5%               | 94.8%               | ---                |
| <b>11.6</b>  | <b>Proportion of homes with radon testing</b>   | <sup>8</sup> Less than 5%     | ---                    | <sup>9</sup> 11.4%  | <sup>9</sup> 11.0%  | 40%                |
|              | a. Homes with smokers and former smokers  | ...                           | ---                    | <sup>10</sup> 10.3% | <sup>10</sup> 8.8%  | 50%                |
|              | b. Homes with children  | ...                           | ---                    | <sup>11</sup> 13.8% | <sup>11</sup> 13.1% | 50%                |
| <b>11.7</b>  | <b>Toxic agent releases</b>   |                               |                        |                     |                     |                    |
|              | DHHS list of carcinogens (billion pounds)   | <sup>2</sup> 0.36             | 0.21                   | 0.19                | ---                 | 0.13               |
|              | ATSDR list of the most toxic chemicals (billion pounds)                                     |                               |                        |                     |                     |                    |
|              | 200 substances  | <sup>2</sup> 1.93             | 1.47                   | 1.23                | ---                 | 0.97               |
|              | 250 substances  | <sup>2</sup> 4.48             | <sup>12</sup> 2.70     | ---                 | ---                 | ...                |
| <b>11.8</b>  | <b>Solid waste (average pounds per person per day)</b>                                      | <sup>2</sup> 4.0              | <sup>13</sup> 4.3      | 4.4                 | ---                 | 4.3                |
|              | After recovery (recycling and composites)   | <sup>2</sup> 3.5              | <sup>13</sup> 3.6      | 3.4                 | ---                 | 3.2                |
| <b>11.9</b>  | <b>People receiving safe drinking water<sup>14</sup></b>                                    | <sup>2,a</sup> 73%            | 72%                    | 68%                 | 66%                 | 85%                |
|              | Number of Maximum Contaminant Level Standards in force                                      | <sup>2</sup> 31               | 98                     | 81                  | 81                  | ...                |
| <b>11.10</b> | <b>Waters supporting beneficial uses</b>  |                               |                        |                     |                     |                    |
|              | Rivers  |                               |                        |                     |                     |                    |
|              | Consumable fish   | <sup>15</sup> 89%             | ...                    | ---                 | 95%                 | 94%                |
|              | Recreational activities   | <sup>15</sup> 71%             | ...                    | ---                 | 82%                 | 85%                |
|              | Lakes   |                               |                        |                     |                     |                    |
|              | Consumable fish   | <sup>15</sup> 64%             | ...                    | ---                 | 82%                 | 82%                |
|              | Recreational activities   | <sup>15</sup> 77%             | ...                    | ---                 | 84%                 | 88%                |
|              | Estuaries   |                               |                        |                     |                     |                    |
|              | Consumable fish   | <sup>15</sup> 94%             | ...                    | ---                 | 92%                 | 97%                |
|              | Recreational activities   | <sup>15</sup> 83%             | ...                    | ---                 | 84%                 | 91%                |
| <b>11.11</b> | <b>Homes tested for lead-based paint</b>  | <sup>13,16</sup> Less than 5% | ---                    | <sup>16</sup> 9%    | ---                 | 50%                |
| <b>11.12</b> | <b>Number of States with construction standards to minimize radon concentrations</b>        | 81                            | ---                    | 173                 | ---                 | 35                 |
| <b>11.13</b> | <b>Disclosure of lead and radon concentrations (number of States)</b>                       |                               |                        |                     |                     |                    |
|              | Disclosure of lead  | <sup>8</sup> 2                | <sup>18</sup> ---      | ...                 | ...                 | 30                 |
|              | Disclosure of radon   | <sup>8</sup> 1                | ---                    | 13                  | <sup>19</sup> 26    | 30                 |
| <b>11.14</b> | <b>Significant health risks from hazardous waste sites (Indicators)</b>                     |                               |                        |                     |                     |                    |
|              | Sites on National Priority List   | <sup>13,a</sup> 1,079         | 1,199                  | ---                 | <sup>19</sup> 1,232 | ...                |
|              | Health assessments conducted  | <sup>13,a</sup> 1,379         | 1,452                  | ---                 | ---                 | ...                |
|              | Sites with public health concerns/hazards   | <sup>13</sup> 250             | 283                    | ---                 | ---                 | ...                |
|              | Sites where ATSDR recommendation followed   | ---                           | ---                    | ---                 | ---                 | 100%               |

**Table 11. Environmental health objective status—Con.**

| <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i>       | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|--|-------------------|-------------------|-------------|-------------|------------------------|
| <b>11.15 Curbside and household recycling</b>                            |                   |                   |             |             |                        |
| Population served by curbside recycling . . . . .                        | <sup>10</sup> 26% | ---               | ---         | ---         | 50%                    |
| Permanent hazardous waste recycling events . . . . .                     | <sup>2</sup> 96   | ---               | ---         | ---         | 215                    |
| Temporary hazardous waste recycling events . . . . .                     | <sup>10</sup> 706 | ---               | ---         | ---         | 1,314                  |
| Total . . . . .  | <sup>10</sup> 802 | 867               | 1,223       | ---         | 1,529                  |
| <b>11.16 Number of States that track sentinel environmental diseases</b> |                   |                   |             |             |                        |
| Plans established and monitored. . . . .                                 | <sup>13</sup> 0   | ---               | ---         | ---         | 35                     |
| Federal law and funds <sup>20</sup> . . . . .                            | ...               | 8                 | 10          | 19          | ...                    |
| State law and funds <sup>21</sup> . . . . .                              | ...               | 31                | 35          | ---         | ...                    |
| <b>11.17* Children's exposure to smoke at home</b> . . . . .             | <sup>22</sup> 39% | <sup>12</sup> 32% | 27%         | 27%         | 20%                    |

--- Data not available.

... Category not applicable.

<sup>8</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1988 data.

<sup>3</sup>1985–87 data.

<sup>4</sup>1991–92 data.

<sup>5</sup>1984 data.

<sup>6</sup>1988–91 NHANES III phase I data for children 6 months–5 years.

<sup>7</sup>Includes non-Hispanic black children 6 months–5 years from families with poverty income ratio of less than 1.3 residing in central cities of standard metropolitan statistical areas.

<sup>8</sup>1989 data.

<sup>9</sup>Data represent the proportion of people who reported that they knew what radon was and had tested their homes for radon.

<sup>10</sup>Data represent the proportion of people who reported that they smoked in their homes 4 or more days a week, knew what radon was, and had tested their homes for radon.

<sup>11</sup>Data represent the proportion of people who reported that they had children age 6 years or under, knew what radon was, and had tested their homes for radon.

<sup>12</sup>1991 data.

<sup>13</sup>1990 data.

<sup>14</sup>Data represent proportion of community water systems that meet standards; these systems served 95% of the U.S. population in 1993.

<sup>15</sup>1992 data.

<sup>16</sup>Data represent the proportion of people with homes built before 1950 who report that their paint had been analyzed for lead content.

<sup>17</sup>EPA developed model standards for control of radon in buildings in 1993. Publication of these standards should enhance progress for this objective.

<sup>18</sup>By 1995, Federal regulation will require disclosure of lead-based paint in all pre-1978 housing during sales or leasing. Because of this pending legislation, there are no current tracking activities.

<sup>19</sup>1995 data.

<sup>20</sup>Includes the District of Columbia.

<sup>21</sup>A 1993 survey by the Public Health Foundation (PHF) reported that 35 States track lead poisoning, 12 track pesticide poisoning, 9 track mercury poisoning, 8 track arsenic poisoning, 7 track cadmium poisoning, 7 track asbestosis, 6 track acute chemical poisoning, and 4 track carbon monoxide poisoning.

<sup>22</sup>1986 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.



| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 11.1, 11.1a–c           | National Hospital Discharge Survey, CDC, NCHS.  |
| 11.2*                   | Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH.<br>Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH. |
| 11.3, 11.3a             | Waterborne Surveillance System, CDC, NCEH.  |
| 11.4, 11.4a             | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 11.5                    | National Air Quality and Emissions Trends Report, AIRS, OAR, EPA.   |
| 11.6                    | Baseline: EPA, OAR, Office of Radiation Programs.   |
| 11.6a,b                 | National Health Interview Survey, CDC, NCHS.  |
| 11.7                    | Toxic Chemical Release Inventory, EPA, OPPTS.   |
| 11.8                    | Characterization of Municipal Solid Waste in the United States, EPA, OSWER.   |
| 11.9                    | EPA Federal Reporting Data Base; Office of Ground Water and Drinking Water, EPA.  |
| 11.10                   | National Water Quality Inventory, EPA, Office of Water.   |
| 11.11                   | National Health Interview Survey, CDC, NCHS.  |
| 11.12                   | Environmental Law Institute.  |
| 11.13                   | Alliance to End Childhood Lead Poisoning, Environmental Law Institute.  |
| 11.14                   | National Priorities List, EPA, OSWER; HAZDAT, CDC, ATSDR.   |
| 11.15                   | Biocycle Journal of Waste Recycling; Wastewatch Center.   |
| 11.16                   | CDC, NCEH.  |
| 11.17*                  | Baseline: Adult Use of Tobacco Survey, CDC, NCCDHP. Update: National Health Interview Survey, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.

# Environmental Health Objectives

**11.1:** Reduce asthma morbidity, as measured by a reduction in asthma hospitalizations to no more than 160 per 100,000 people.

**11.1a:** Reduce asthma morbidity among blacks and other nonwhites, as measured by a reduction in asthma hospitalizations to no more than 265 per 100,000 people.

**11.1b:** Reduce asthma morbidity among children, as measured by a reduction in asthma hospitalizations to no more than 225 per 100,000 people.

**11.1c:** Reduce asthma morbidity among women, as measured by a reduction in asthma hospitalizations to no more than 183 per 100,000 people.

**11.2\*:** Reduce the prevalence of serious mental retardation among school-aged children to no more than 2 per 1,000 children.

Duplicate objective: 17.8

**11.3:** Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning to no more than 11 per year.

*NOTE: Includes only outbreaks from water intended for drinking. Community water systems are public or investor-owned water systems that serve large or small communities, subdivisions, or trailer parks with at least 15 service connections or 25 year-round residents.*

**11.3a:** Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning among people served by community water systems to no more than 2 per year.

**11.4:** Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among children aged 6 months–5 years to no more than 300,000 and zero, respectively.

**11.4a:** Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among inner-city low-income black children (annual family income less

than \$6,000 in 1984 dollars) to no more than 75,000 and zero, respectively.

**11.5:** Reduce human exposure to criteria air pollutants, as measured by an increase to at least 85 percent in the proportion of people who live in counties that have not exceeded any Environmental Protection Agency standard for air quality in the previous 12 months.

**11.6:** Increase to at least 40 percent the proportion of homes in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.6a:** Increase to at least 50 percent the proportion of homes with smokers and former smokers in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.6b:** Increase to at least 50 percent the proportion of homes with children in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.7:** Reduce human exposure to toxic agents by decreasing the release of hazardous substances from industrial facilities:

65 percent decrease in the substances on the Department of Health and Human Services list of carcinogens.

50 percent reduction in the substances on the Agency for Toxic Substances and Disease Registry (ATSDR) priority list of the most toxic chemicals.

**11.8:** Reduce human exposure to solid waste-related water, air, and soil contamination, as measured by a reduction in average pounds of municipal solid waste produced per person each day to no more than 4.3 pounds before recovery and 3.2 pounds after recovery.

**11.9:** Increase to at least 85 percent the proportion of people who receive a supply of drinking water that meets the

safe drinking water standards established by the Environmental Protection Agency.

*NOTE: Compliance with the Safe Drinking Water Act includes monitoring and reporting as well as providing water that meets the Maximum Contaminant Level (MCL) standards set by the Environmental Protection Agency which define acceptable levels of contaminants. See objective 11.3 for definition of community water systems.*

**11.10:** Reduce potential risks to human health from surface water, as measured by an increase in the proportion of assessed rivers, lakes, and estuaries that support beneficial uses, such as consumable fishing and recreational activities.

| Waters supporting beneficial use | 2000 target (percent) |
|----------------------------------|-----------------------|
| Rivers supporting:               |                       |
| Consumable fish                  | 94                    |
| Recreational activities          | 85                    |
| Lakes supporting:                |                       |
| Consumable fish                  | 82                    |
| Recreational activities          | 88                    |
| Estuaries supporting:            |                       |
| Consumable fish                  | 97                    |
| Recreational activities          | 91                    |

*NOTE: Designated beneficial uses, such as aquatic life support, contact recreation (swimming), and water supply, are designated by each State and approved by the Environmental Protection Agency. Support of beneficial use is a proxy measure of risk to human health, as many pollutants causing impaired water uses do not have human health effects (for example, siltation and impaired fish habitat).*

**11.11:** Perform testing for lead-based paint in at least 50 percent of homes built before 1950.

**11.12:** Expand to at least 35 the number of States in which at least 75 percent of local jurisdictions have adopted construction standards and techniques that minimize elevated indoor radon levels in those new building areas locally determined to have elevated radon levels.

*NOTE: Since construction codes are frequently adopted by local jurisdictions rather than States, progress toward this objective also may be tracked using the proportion of cities and counties that*

have adopted such construction standards.

**11.13:** Increase to at least 30 the number of States requiring that prospective buyers be informed of the presence of lead-based paint and radon concentrations in all buildings offered for sale.

**11.14:** Eliminate significant health risks from National Priority List hazardous waste sites, as measured by performance of clean-up at these sites sufficient to eliminate immediate and significant health threats as specified in health assessments completed at all sites.

*NOTE: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 required the Environmental Protection Agency to develop criteria for determining priorities among hazardous waste sites and to develop and maintain a list of these priority sites. The resulting list is called the National Priorities List (NPL).*

**11.15:** Establish curbside recycling programs that serve at least 50 percent of the U.S. population and continue to increase household hazardous waste collection programs.

|   |                                |
|---|--------------------------------|
| Recyclable materials and household hazardous waste programs         | 2000 target (percent)          |
| Percentage of population served by curbside recycling programs      | 50                             |
| Permanent and temporary household hazardous waste collection events | 2000 target (number of events) |
| Permanent   | 215                            |
| Temporary   | 1,314                          |
| Total   | 1,529                          |

**11.16:** Establish and monitor in at least 35 States plans to define and track sentinel environmental diseases.

*NOTE: Sentinel environmental diseases include lead poisoning, other heavy metal poisoning (e.g., cadmium, arsenic, and mercury), pesticide poisoning, carbon monoxide poisoning, heatstroke, hypothermia, acute chemical poisoning, methemoglobinemia, and respiratory diseases triggered by environmental factors (e.g., asthma).*

**11.17\*:** Reduce to no more than

20 percent the proportion of children aged 6 and younger who are regularly exposed to tobacco smoke at home.

*NOTE: Regular exposure to tobacco smoke at home is defined as the occurrence of tobacco smoking anywhere in the home on more than three days each week.*

Duplicate objective: 3.8

\*Duplicate objective.

# Priority Area 12 Food and Drug Safety

## Background

The development of systems to protect consumers from dangers posed by unapproved food additives, pesticides, food contaminants, and drugs has been a major public health accomplishment. Despite many effective food and drug safety procedures, this country still experiences outbreaks of foodborne diseases and incidents of therapeutic drug-related illness and death. Foodborne disease outbreaks sometimes result from failures in protective systems, but are more often the result of improper food handling. *Salmonella enteritidis*, *Campylobacter jejuni*, *Escherichia coli* O157:H7, and *Listeria monocytogenes* are four of the most common foodborne pathogens in the United States, based on numbers of reported cases and the severity of illness. Children, the very old, and people with immunological deficiencies are at increased risk of infection and death resulting from infection.

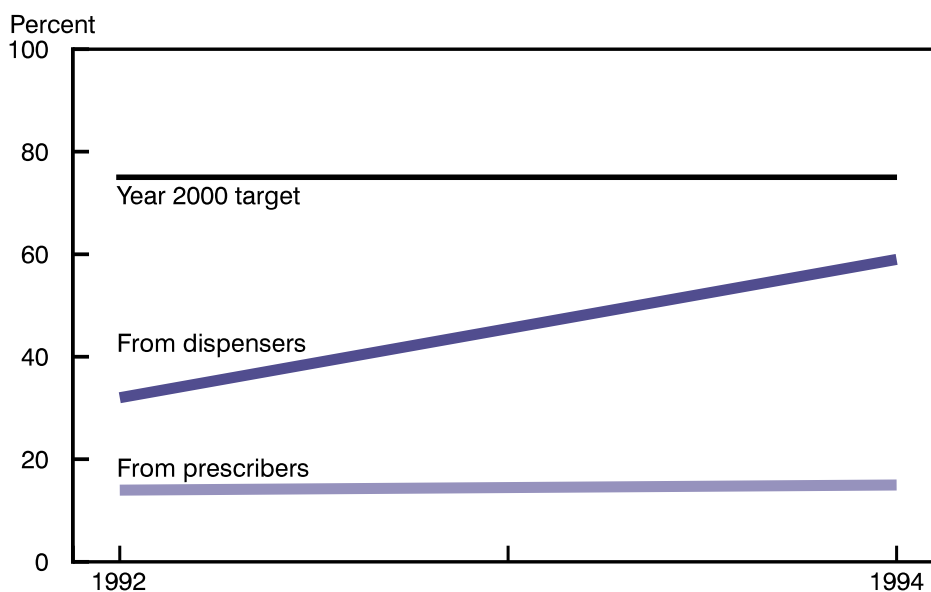
Older adults, who use more prescription and nonprescription medicines than younger people, are at increased risk of suffering adverse drug reactions. The physiological changes associated with increasing age and particular diseases and conditions may alter the effects of drugs. In addition, use of multiple medications increases the risk of an adverse outcome.

## Midcourse Modifications

Two new objectives were added to Priority Area 12. Objective 12.7 tracks the proportion of serious adverse events that are voluntarily reported to the Food and Drug Administration (FDA). Objective 12.8 seeks to increase the proportion of people who receive useful information about prescriptions from their prescribers or dispensers of medication.

Two objectives were modified in Priority Area 12. In objective 12.4, the model food codes were specified as *the Food Code 1993*, which is revised every 2 years and is to be adopted by the States. The goal is to have 70 percent of

**Figure 13. Proportion of people who received useful written information for new prescriptions from prescribers or dispensers: United States, 1992–94, and year 2000 target for objective 12.8**



|                            | 1992 | 1994 | Year 2000 target |
|----------------------------|------|------|------------------|
| From prescribers . . . . . | 14   | 15   | 75               |
| From dispensers . . . . .  | 32   | 59   | 75               |

SOURCE: Food and Drug Administration, National Random Telephone Survey of Adults.

States adopt this uniform code for food storage, preparation, and sanitation by restaurants, food vendors, and institutional food service providers. Objective 12.6 added “other dispensers of medicine” in addition to primary care providers to track the extent to which older adults are being counseled about their medication.

## Data Summary

### Highlights

Reported outbreaks of infections due to *Salmonella enteritidis* fell from 77 outbreaks in 1989 to 44 outbreaks in 1994 (objective 12.2). The incidence of infection caused by *Salmonella* species was 15 per 100,000 in 1994 and infections caused by *Listeria monocytogenes* was 0.42 per 100,000 in 1994, indicating that the targets have been surpassed for these components of objective 12.1. The refrigeration of perishable items has increased slightly, whereas washing cutting boards with soap has stayed about the same (12.3). The reporting of adverse events that are

serious (12.7) and the dispensing of useful information for new prescriptions (12.8) have increased. For dispensers giving useful information, the increase was large.

## Summary of Progress

Two of the eight food and drug safety objectives have met their targets: 12.1 (for *Salmonella* species and *Listeria monocytogenes*) and 12.5. Three objectives (12.2, 12.7, and 12.8) show progress toward their respective targets, one objective shows mixed results (12.3), and two have no update with which to determine progress (12.4 and 12.6).

## Data Issues

## Definitions

The definition of a serious adverse event (objective 12.7) includes events that are life threatening and require intervention to prevent permanent damage as well as death, hospitalization, disability, and congenital anomaly (1).

For objective 12.8, receipt of useful information for new prescriptions, a prescriber is anyone who is authorized to prescribe, including physicians, nurse practitioners, and physician assistants depending on the State law. Dispensers are persons authorized to dispense prescription medications and include physicians and pharmacists (1).

### Data Source Descriptions

Various surveillance systems of the Centers for Disease Control and Prevention (CDC), including the *Salmonella* Surveillance System, the *Campylobacter* Surveillance System, and the Bacterial Meningitis Surveillance System, are used to monitor progress for objectives 12.1 and 12.2. The *Salmonella* Surveillance System is a passive laboratory-based system that uses reports from 49 States, the FDA, and the U.S. Department of Agriculture (USDA). This system measures the incidence of infection from *Salmonella* species (12.1) and the number of outbreaks caused by *Salmonella enteritidis* (12.2). Many factors, including the intensity of surveillance, the severity of the illness, access to medical care, and association with a recognized outbreak, affect whether the infection will be reported. Reporting is incomplete; the incidence of salmonellosis is substantially underreported.

The incidence of foodborne *Listeria monocytogenes*-induced infections is measured using the Bacterial Meningitis Surveillance System. This is an active, laboratory-based surveillance system conducted in six States; it counts all cases of bacterial meningitis and other invasive bacterial diseases caused by the five most common pathogens causing bacterial meningitis, including *Listeria monocytogenes*. The participating surveillance areas represent several regions throughout the country and a population of 33.5 million, 14 percent of the U.S. population.

The *Campylobacter* Surveillance System is a passive system that receives weekly reports of laboratory isolates of *Campylobacter*. The number of participating States has increased each year. Surveillance mechanisms, including laboratory isolation procedures, vary from State to State.

MedWatch, which is used to track objective 12.7, is FDA's Medical Products Reporting Program. It is an outreach program for health

professionals to educate them on the importance of reporting adverse events, which will allow the FDA to discover more quickly adverse reactions and interactions by increasing reporting (1).

### Comparability of Data Sources

Baseline data for refrigeration and cutting board practices (12.3) were obtained from the 1988 Diet-Health Knowledge Survey, USDA. Updates use the Food Safety Survey, FDA.

### References

1. Healthy People 2000 Midcourse Review and 1995 Revisions. Department of Health and Human Services. 1995.

**Table 12. Food and drug safety objective status**

|             | Objective  | Baseline          | 1992 | 1993             | 1994             | Target<br>2000 |
|-------------|--|-------------------|------|------------------|------------------|----------------|
| <b>12.1</b> | <b>Foodborne infections (cases per 100,000)</b>                          |                   |      |                  |                  |                |
|             | <i>Salmonella</i> species . . . . .                                      | <sup>1</sup> 118  | 14   | 15               | 15               | 16             |
|             | <i>Campylobacter jejuni</i> . . . . .                                    | <sup>1</sup> 150  | ---  | ---              | ---              | 25             |
|             | <i>Escherichia coli</i> 0157:H7 . . . . .                                | <sup>1</sup> 8    | ---  | ---              | ---              | 4              |
|             | <i>Listeria monocytogenes</i> . . . . .                                  | <sup>1</sup> 0.7  | 0.45 | 0.44             | 0.42             | 0.5            |
| <b>12.2</b> | <b><i>Salmonella enteritidis</i> outbreaks</b> . . . . .                 | <sup>2</sup> 77   | 59   | 63               | 44               | 25             |
| <b>12.3</b> | <b>Refrigeration and cutting board practices</b>                         |                   |      |                  |                  |                |
|             | For refrigeration of perishable foods . . . . .                          | <sup>3</sup> 70%  | ---  | <sup>4</sup> 72% | ---              | 75%            |
|             | For washing cutting boards with soap . . . . .                           | <sup>3</sup> 66%  | ---  | <sup>4</sup> 65% | ---              | 75%            |
|             | For washing utensils with soap . . . . .                                 | <sup>3</sup> 55%  | ---  | ---              | ---              | 75%            |
| <b>12.4</b> | <b>Model food codes (proportion of States and territories)</b>           |                   |      |                  |                  |                |
|             | Institutional food operations currently using the Food Code . . . . .    | ---               | ...  | ...              | ...              | 70%            |
|             | Food protection standards  |                   |      |                  |                  |                |
|             | States reviewing standards . . . . .                                     | ...               | ---  | ---              | 80%              | ...            |
|             | States adopting standards . . . . .                                      | <sup>5,a</sup> 2% | ...  | ...              | ...              | 70%            |
| <b>12.5</b> | <b>Linked pharmacy systems<sup>6</sup></b>                               |                   |      |                  |                  |                |
|             | Computer utilization by pharmacies . . . . .                             | <sup>7</sup> 95%  | ...  | ...              | <sup>8</sup> 98% | 75%            |
| <b>12.6</b> | <b>Providers reviewing medication for older patients</b> . . . . .       | ---               | ...  | ---              | ---              | 75%            |
|             | Percent of clinicians routinely providing service to 81–100% of patients |                   |      |                  |                  |                |
|             | Maintenance of current medication list (65 years and over)               |                   |      |                  |                  |                |
|             | Nurse practitioners . . . . .  | <sup>9</sup> 63%  | ...  | ---              | ---              | 75%            |
|             | Obstetricians/gynecologists . . . . .                                    | <sup>9</sup> 64%  | ...  | ---              | ---              | 75%            |
|             | Internists . . . . .   | <sup>9</sup> 84%  | ...  | ---              | ---              | 75%            |
|             | Family physicians . . . . .  | <sup>9</sup> 70%  | ...  | ---              | ---              | 75%            |
|             | Review of medications when prescribing (65 years and over)               |                   |      |                  |                  |                |
|             | Nurse practitioners . . . . .  | <sup>9</sup> 55%  | ...  | ---              | ---              | 75%            |
|             | Obstetricians/gynecologists . . . . .                                    | <sup>9</sup> 60%  | ...  | ---              | ---              | 75%            |
|             | Internists . . . . .   | <sup>9</sup> 77%  | ...  | ---              | ---              | 75%            |
|             | Family physicians . . . . .  | <sup>9</sup> 63%  | ...  | ---              | ---              | 75%            |
| <b>12.7</b> | <b>Adverse event reports</b>   |                   |      |                  |                  |                |
|             | Proportion voluntarily sent to FDA regarded as serious . . . . .         | <sup>7</sup> 69%  | ...  | ---              | 72%              | 75%            |
| <b>12.8</b> | <b>Useful information for new prescriptions</b>                          |                   |      |                  |                  |                |
|             | Verbally and in writing from prescribers or dispensers . . . . .         | ---               | ---  | ---              | ---              | 75%            |
|             | Written information  |                   |      |                  |                  |                |
|             | From prescribers . . . . .   | <sup>9</sup> 14%  | ...  | ---              | 15%              | 75%            |
|             | From dispensers . . . . .  | <sup>9</sup> 32%  | ...  | ---              | 59%              | 75%            |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>1989 data.

<sup>3</sup>1988 data.

<sup>4</sup>1992–93 data.

<sup>5</sup>1994 data.

<sup>6</sup>A linked system is one with individual computer capability or one that is part of a larger more integrated system such as a chain store computer system.

<sup>7</sup>1993 data.

<sup>8</sup>1995 data.

<sup>9</sup>1992 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 12.1                    | Salmonella Surveillance System, CDC, NCID.<br>Campylobacter Surveillance System, CDC, NCID.<br>Bacterial Meningitis Surveillance System, CDC, NCID. |
| 12.2                    | Salmonella Surveillance System, CDC, NCID.  |
| 12.3                    | Baseline: Diet-Health Knowledge Survey, USDA, ASFCS.<br>Updates: Food Safety Survey, FDA.   |
| 12.4                    | Listing of Confirmed Code Adoptions by Local, State, and National Jurisdictions, CFSAN, FDA.  |
| 12.5                    | 1993 data: National Association of Retail Druggists.<br>1995 data: American Society for Automated Pharmacies.                                       |
| 12.6                    | Primary Care Provider Surveys, OASH, ODPHP.   |
| 12.7                    | FDA, MedWatch.  |
| 12.8                    | FDA.  |

# Food and Drug Safety Objectives

**12.1:** Reduce infections caused by key foodborne pathogens to incidences of no more than:

| Disease                         | 2000 target<br>(per 100,000) |
|---------------------------------|------------------------------|
| <i>Salmonella</i> species       | 16                           |
| <i>Campylobacter</i>            | 25                           |
| <i>Escherichia coli</i> O157:H7 | 4                            |
| <i>Listeria monocytogenes</i>   | 0.5                          |

**12.2:** Reduce outbreaks of infections due to *Salmonella enteritidis* to fewer than 25 outbreaks yearly.

**12.3:** Increase to at least 75 percent the proportion of households in which principal food preparers routinely refrain from leaving perishable food out of the refrigerator for over 2 hours and wash cutting boards and utensils with soap after contact with raw meat and poultry.

**12.4:** Extend to at least 70 percent the proportion of States and territories that have implemented *Food Code 1993* for institutional food operations and to at least 70 percent the proportion that have adopted the new uniform food protection code that sets recommended standards for regulation of all food operations.

**12.5:** Increase to at least 75 percent the proportion of pharmacies and other dispensers of prescription medications that use linked systems to provide alerts to potential adverse drug reactions among medications dispensed by different sources to individual patients.

**12.6:** Increase to at least 75 percent the proportion of primary care providers who routinely review with their patients aged 65 and older all prescribed and over-the-counter medicines taken by their patients each time a new medication is prescribed.

**12.7:** Increase to at least 75 percent the proportion of the total number of adverse event reports voluntarily sent directly to FDA that are regarded as serious.

**12.8:** Increase to at least 75 percent the proportion of people who receive useful information verbally and in writing for new prescriptions from prescribers or dispensers.



# Priority Area 13 Oral Health

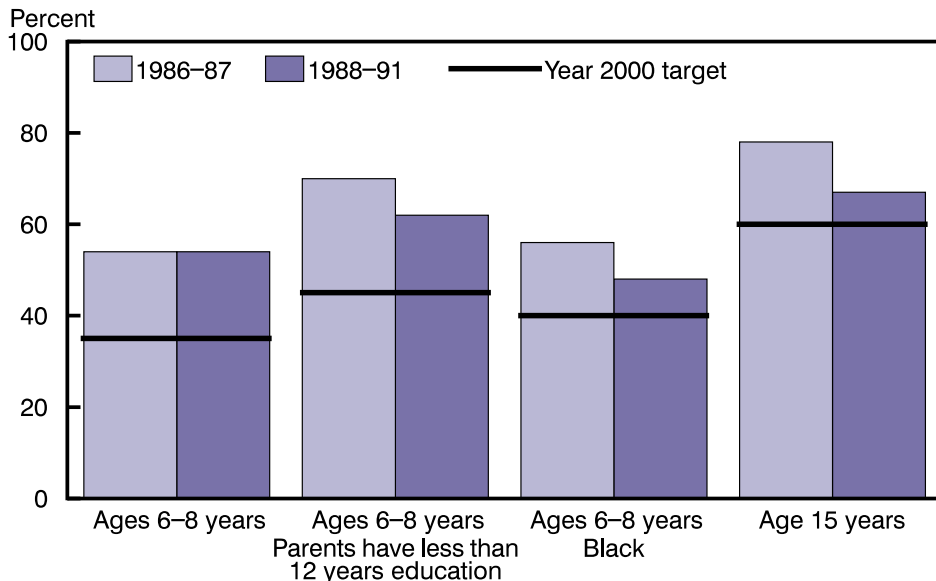
## Background

Oral diseases are among the most common health problems in the United States. Among school-aged children, 45 percent have caries in their permanent teeth (1). Among adults, 94 percent show evidence of past or current tooth decay (2). An average of 21.5 tooth surfaces have been affected by decay among all dentate adults (2). Periodontal diseases are also a chronic problem. Over 90 percent of people 13 years and over show some evidence of periodontal problems (loss of attachment) (3). Moderate periodontal disease was evident in approximately 25 percent of people (3). Expenditures for dental care were \$39 billion in 1992 (4). In 1989 dental visits or problems resulted in 148 hours missed from work per 100 employed people, 117 hours missed from school per 100 school-aged children, and 17 days with restricted activity per 100 people among the total U.S. population (5).

## Midcourse Modifications

The Oral Health Priority Area has a new objective (13.17) that addresses the prevalence of smokeless tobacco use. This is a duplicate of objective 3.9. Several new subobjectives targeting racial and ethnic minority populations were added in this priority area. Edentulism among American Indians/Alaska Natives is now addressed by subobjective 13.4b. Subobjectives 13.7a and b have been added to address the disparity between oral cancer deaths among black men and black women as compared with deaths among the total population. Special population targets have also been added to objective 13.8 to target the receipt of dental sealants among black and Hispanic children, 8 years old and 14 years old, respectively. Baby bottle tooth decay is now addressed among blacks and Hispanics by the addition of subobjectives 13.11c and d. Oral health screening, referral, and followup among black and Hispanic children are addressed by new subobjectives 13.12a and b, respectively. Regular dental visits among black, Mexican-American, and Puerto Rican adults are now targeted in subobjectives 13.14c–e.

**Figure 14. Prevalence of dental caries among children: United States, 1986–87, 1988–91, and year 2000 targets for objective 13.1**



|  | 1986-87 | 1988-91 | Year 2000 targets |
|--|---------|---------|-------------------|
| Ages 6-8 years . . . . .   | 54      | 54      | 35                |
| Ages 6-8 years, parents have less than 12 years of education . . . . . | 70      | 62      | 45                |
| Ages 6-8 years, black . . . . .  | 56      | 48      | 40                |
| Age 15 years . . . . .   | 78      | 67      | 60                |

SOURCES: Baselines: National Institutes of Health, National Institute for Dental Research, National Survey of Dental Caries in U.S. School Children, 1986–87. University of North Carolina School of Public Health, North Carolina Division of Dental Health, North Carolina Health School Survey. Updates: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey III, 1988–1991.

## Data Summary

### Highlights

Oral cancer mortality rates (13.7) have continued to decrease among the total population of men and women 45–74 years of age and among black men and women of the same age group. The prevalence of smokeless tobacco use in the past month (13.17) among males 12–17 years, after decreasing between 1988 and 1993, increased from 3.9 percent to 5.1 percent. This increase is in part explained by changes to the questionnaire and editing procedures that were introduced in the 1994 National Household Survey on Drug Abuse, which provides data for this population group for this objective (see Data Issues). Smokeless tobacco use among males 18–24 years decreased from 7.8 percent in 1993 to 6.9 percent in 1994.

## Summary of Progress

Data to assess trends toward the year 2000 targets are available for 13 of the 17 objectives in the oral health priority area. Progress toward targets is shown for 10 objectives (13.1, 13.3, 13.4, 13.6, 13.7, 13.8, 13.9, 13.14, 13.15, and 13.17). Data show trends that are moving away from the target for two objectives (13.5 and 13.12). Trends are mixed for objective 13.2. Data beyond baseline are not available for four objectives in this priority area (13.10, 13.11, 13.13, and 13.16).

## Data Issues

### Definition

Objective 13.11 (duplicate 2.12) addresses feeding practices that prevent baby bottle tooth decay. The measure

used to establish a baseline for this objective for the total population and for caregivers with less than a high school education (13.11a) is assessed for children 6–23 months old. The preventive feeding practices are either that the child no longer uses a bottle, never used a bottle, or if the child still uses a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

### Comparability of Data Sources

Changes in the National Health Interview Survey (NHIS) questions on oral health between 1989 and 1991 affect comparability of information on the proportion of 5-year-old children and adults 35 years of age and over who visited a dentist in the past 12 months (13.12 and 13.14, respectively). In 1986 and 1989, the question on dental visits in the past 12 months followed an introductory statement and questions about dental visits and problems in the past 2 weeks (6,7). The introduction and question on visits in the past 2 weeks were not included in the 1991 and 1993 surveys. These may have differentially affected recall about visits in the past 12 months. A second difference is that the proportion of people who had visited a dentist in the past 12 months was based on a question about the interval since the last dental visit in the 1986 and 1989 surveys. In 1991 and 1993, this measure was obtained from a question about the number of visits to a dentist in the past year. Finally, in 1986 and 1989 oral health data for adults were obtained from a knowledgeable respondent who provided information for all people in the household. In 1991 and 1993, an adult sampled from each family provided information only for himself or herself and not others in the household. A knowledgeable adult provided information for children in all survey years.

The National Household Survey on Drug Abuse is used to measure objective 13.17 regarding smokeless tobacco use among adolescents. An improved questionnaire and editing procedures were introduced with the 1994 survey and affects comparability with previous years, especially for tobacco use among adolescents.

### Proxy Measures

Nationally representative data on topical or systemic fluoride use among people not receiving optimally

fluoridated public water are not readily obtainable (13.10). It is difficult to identify a national sample of people who are not served by a fluoridated water system. Survey interview methods are limited because many people cannot accurately state the fluoridation status of their water supply. For this reason, a proxy measure—the proportion of all U.S. residents who use fluoride—is used as the revised baseline and will be used to monitor progress toward achieving this objective. The original baseline showing use of fluoride products among people without fluoridated water was approximated from the 1989 NHIS data and information on water fluoridation patterns in the United States.

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7. Bloom B, Gift HC, Jack SS. Dental services and oral health; United States, 1989. National Center for Health Statistics. *Vital Health Stat* 10(183). 1992.

**Table 13. Oral health objective status**

|              | <i>Objective</i>   | <i>Baseline</i>      | <i>1992</i>        | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|--------------|--|----------------------|--------------------|-------------|-------------|------------------------|
| <b>13.1</b>  | <b>Dental caries</b>   |                      |                    |             |             |                        |
|              | Children 6–8 years . . . . .   | <sup>1</sup> 54%     | <sup>2</sup> 54%   | ---         | ---         | 35%                    |
|              | Adolescents 15 years . . . . .   | <sup>1</sup> 78%     | <sup>2</sup> 67%   | ---         | ---         | 60%                    |
|              | a. Children 6–8 years whose parents have less than high school education . . . . . | <sup>1</sup> 70%     | <sup>2</sup> 62%   | ---         | ---         | 45%                    |
|              | b. American Indian/Alaska Native children 6–8 years                                |                      |                    |             |             |                        |
|              | Primary or permanent teeth . . . . .   | <sup>3</sup> 88%     | ---                | ---         | ---         | 45%                    |
|              | Primary teeth . . . . .  | <sup>4</sup> 92%     | ---                | ---         | ---         | ...                    |
|              | Permanent teeth . . . . .  | <sup>4</sup> 52%     | ---                | ---         | ---         | ...                    |
|              | c. Black children 6–8 years . . . . .  | <sup>1</sup> 56%     | <sup>2</sup> 48%   | ---         | ---         | 40%                    |
|              | d. American Indian/Alaska Native adolescents 15 years . . . . .                    | <sup>4</sup> 93%     | <sup>3</sup> 90%   | ---         | ---         | 70%                    |
| <b>13.2</b>  | <b>Untreated dental caries</b>   |                      |                    |             |             |                        |
|              | Children 6–8 years . . . . .   | <sup>1</sup> 28%     | <sup>2</sup> 31%   | ---         | ---         | 20%                    |
|              | a. Children whose parents have less than a high school education . . . . .         | <sup>1</sup> 43%     | <sup>2</sup> 46%   | ---         | ---         | 30%                    |
|              | b. American Indian/Alaska Native children . . . . .                                | <sup>4</sup> 64%     | <sup>3</sup> 72%   | ---         | ---         | 35%                    |
|              | c. Black children . . . . .  | <sup>1</sup> 36%     | <sup>2</sup> 34%   | ---         | ---         | 25%                    |
|              | d. Hispanic children . . . . .   | <sup>5</sup> 36%     | <sup>2,6</sup> 50% | ---         | ---         | 25%                    |
|              | Adolescents 15 years . . . . .   | <sup>1</sup> 24%     | <sup>2</sup> 22%   | ---         | ---         | 15%                    |
|              | a. Adolescents whose parents have less than a high school education . . . . .      | <sup>1</sup> 41%     | <sup>2</sup> 28%   | ---         | ---         | 25%                    |
|              | b. American Indian/Alaska Native adolescents . . . . .                             | <sup>4</sup> 84%     | <sup>3</sup> 61%   | ---         | ---         | 40%                    |
|              | c. Black adolescents . . . . .   | <sup>1</sup> 38%     | <sup>2</sup> 28%   | ---         | ---         | 20%                    |
|              | d. Hispanic adolescents . . . . .  | <sup>5,3,1</sup> 47% | <sup>2,6</sup> 35% | ---         | ---         | 25%                    |
| <b>13.3</b>  | <b>No tooth loss</b>   |                      |                    |             |             |                        |
|              | People 35–44 years . . . . .   | <sup>7</sup> 31%     | <sup>2</sup> 34%   | ---         | ---         | 45%                    |
| <b>13.4</b>  | <b>Complete tooth loss</b>   |                      |                    |             |             |                        |
|              | People 65 years and over . . . . .   | <sup>8</sup> 36%     | ---                | 30%         | ---         | 20%                    |
|              | a. Low-income people   |                      |                    |             |             |                        |
|              | Annual family income less than \$15,000 . . . . .                                  | <sup>8</sup> 46%     | ---                | 42%         | ---         | 25%                    |
|              | Annual family income below poverty level . . . . .                                 | ---                  | ---                | 48%         | ---         | 25%                    |
|              | b. American Indians/Alaska Natives . . . . .                                       | <sup>3</sup> 42%     | ---                | 22%         | ---         | 20%                    |
| <b>13.5</b>  | <b>Gingivitis</b>  |                      |                    |             |             |                        |
|              | People 35–44 years . . . . .   | <sup>7</sup> 41%     | <sup>2</sup> 59%   | ---         | ---         | 30%                    |
|              | a. Low-income people (annual family income less than \$12,000) . . . . .           | <sup>7</sup> 50%     | <sup>2</sup> 60%   | ---         | ---         | 35%                    |
|              | b. American Indians/Alaska Natives . . . . .                                       | <sup>4</sup> 95%     | <sup>3</sup> 96%   | ---         | ---         | 50%                    |
|              | c. Hispanics . . . . .   | ---                  | ---                | ---         | ---         | 50%                    |
|              | Mexican-Americans . . . . .  | <sup>5</sup> 74%     | <sup>2</sup> 69%   | ---         | ---         | ...                    |
|              | Cubans . . . . .   | <sup>5</sup> 79%     | ---                | ---         | ---         | ...                    |
|              | Puerto Ricans . . . . .  | <sup>5</sup> 82%     | ---                | ---         | ---         | ...                    |
| <b>13.6</b>  | <b>Periodontal diseases</b>  |                      |                    |             |             |                        |
|              | People 35–44 years . . . . .   | <sup>7</sup> 25%     | <sup>2</sup> 21%   | ---         | ---         | 15%                    |
| <b>13.7*</b> | <b>Oral cancer deaths (per 100,000)</b>  |                      |                    |             |             |                        |
|              | Males 45–74 years . . . . .  | <sup>9</sup> 13.6    | 12.2               | 12.1        | ---         | 10.5                   |
|              | Females 45–74 years . . . . .  | <sup>9</sup> 4.8     | 4.3                | 4.2         | ---         | 4.1                    |
|              | a. Black males 45–74 years . . . . .   | <sup>10</sup> 29.4   | 27.3               | 26.2        | ---         | 26.0                   |
|              | b. Black females 45–74 years . . . . .   | <sup>10</sup> 6.9    | 6.0                | 5.8         | ---         | 6.9                    |
| <b>13.8</b>  | <b>Protective sealants</b>   |                      |                    |             |             |                        |
|              | Children 8 years . . . . .   | <sup>1</sup> 11%     | <sup>2</sup> 21%   | ---         | ---         | 50%                    |
|              | Adolescents 14 years . . . . .   | <sup>1</sup> 8%      | <sup>2</sup> 27%   | ---         | ---         | 50%                    |
|              | a. Blacks 8 years . . . . .  | <sup>2,a</sup> 9%    | ---                | ---         | ---         | 50%                    |
|              | b. Blacks 14 years . . . . .   | <sup>2,a</sup> 5%    | ---                | ---         | ---         | 50%                    |
|              | c. Hispanics 8 years . . . . .   | <sup>2,6,a</sup> 10% | ---                | ---         | ---         | 50%                    |
|              | d. Hispanics 14 years . . . . .  | <sup>2,6,a</sup> 9%  | ---                | ---         | ---         | 50%                    |
| <b>13.9</b>  | <b>Water fluoridation</b>  |                      |                    |             |             |                        |
|              | People served by optimally fluoridated water . . . . .                             | <sup>11</sup> 61%    | 62%                | ---         | ---         | 75%                    |

**Table 13. Oral health objective status—Con.**

|               | <i>Objective</i>  | <i>Baseline</i>        | <i>1992</i>         | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|---|------------------------|---------------------|-------------|-------------|------------------------|
| <b>13.10</b>  | <b>Topical and systemic fluorides</b>   |                        |                     |             |             |                        |
|               | People in nonfluoridated areas who use fluoride . . . . .                                       | <sup>11</sup> 50%      | ---                 | ---         | ---         | 85%                    |
|               | Proportion of people (national) using:  |                        |                     |             |             |                        |
|               | Toothpaste containing fluoride . . . . .  | ...                    | <sup>8</sup> 94%    | ---         | ---         | ...                    |
|               | Fluoride mouthrinse   |                        |                     |             |             |                        |
|               | Children and adolescents 6–17 years . . . . .   | ...                    | <sup>11</sup> 22.0% | ---         | ---         | ...                    |
|               | People 18 years and over . . . . .  | ...                    | <sup>11</sup> 7.7%  | ---         | ---         | ...                    |
|               | Fluoride supplements  |                        |                     |             |             |                        |
|               | Children and adolescents 2–16 years . . . . .   | ...                    | <sup>11</sup> 10.3% | ---         | ---         | ...                    |
| <b>13.11*</b> | <b>Baby bottle tooth decay</b>  |                        |                     |             |             |                        |
|               | Parents and caregivers who use preventive feeding practices . . . . .                           | <sup>3</sup> 55%       | ---                 | ---         | ---         | 75%                    |
|               | a. Parents and caregivers with less than high school education . . . . .                        | <sup>3</sup> 36%       | ---                 | ---         | ---         | 65%                    |
|               | b. American Indian/Alaska Native parents and caregivers . . . . .                               | <sup>12</sup> 74%      | ---                 | ---         | ---         | 65%                    |
|               | c. Black parents and caregivers . . . . .   | <sup>3</sup> 48%       | ---                 | ---         | ---         | 65%                    |
|               | d. Hispanic parents and caregivers . . . . .  | <sup>3</sup> 39%       | ---                 | ---         | ---         | 65%                    |
| <b>13.12</b>  | <b>Oral health screening, referral, and followup</b>  |                        |                     |             |             |                        |
|               | Children 5 years who visited the dentist in the past year . . . . .                             | <sup>8</sup> 66%       | <sup>3</sup> 63%    | ---         | ---         | 90%                    |
|               | a. Blacks 5 years . . . . .   | <sup>3</sup> 51%       | ---                 | ---         | ---         | 90%                    |
|               | b. Hispanics 5 years . . . . .  | <sup>3</sup> 51%       | ---                 | ---         | ---         | 90%                    |
| <b>13.13</b>  | <b>Oral health care at institutional facilities</b>   |                        |                     |             |             |                        |
|               | Nursing facilities . . . . .  | <sup>10</sup> Required | ---                 | ---         | ---         | 100%                   |
|               | Federal prisons . . . . .   | ---                    | ---                 | ---         | ---         | 100%                   |
|               | Non-Federal prisons . . . . .   | ---                    | ---                 | ---         | ---         | 100%                   |
|               | Juvenile homes . . . . .  | ---                    | ---                 | ---         | ---         | 100%                   |
|               | Detention facilities . . . . .  | ---                    | ---                 | ---         | ---         | 100%                   |
| <b>13.14</b>  | <b>Regular dental visits</b>  |                        |                     |             |             |                        |
|               | People 35 years and over . . . . .  | <sup>8</sup> 54%       | ---                 | 61%         | ---         | 70%                    |
|               | a. Edentulous people . . . . .  | <sup>8</sup> 11%       | ---                 | 16%         | ---         | 50%                    |
|               | b. People 65 years and over . . . . .   | <sup>8</sup> 42%       | ---                 | 51%         | ---         | 60%                    |
|               | c. Blacks 35 years and over . . . . .   | <sup>3</sup> 43%       | ---                 | 46%         | ---         | 60%                    |
|               | d. Mexican-Americans 35 years and over . . . . .  | <sup>3</sup> 38%       | ---                 | 45%         | ---         | 60%                    |
|               | e. Puerto Ricans 35 years and over . . . . .  | <sup>3</sup> 51%       | ---                 | 37%         | ---         | 60%                    |
| <b>13.15</b>  | <b>Oral health care for infants with cleft lip and/or palate</b>                                |                        |                     |             |             |                        |
|               | Number of States with systems for recording and referring infants with cleft lip and/or palates |                        |                     |             |             |                        |
|               | Systems to identify and refer . . . . .   | <sup>11</sup> 11       | ---                 | 23          | ---         | 40                     |
|               | Systems to identify infants . . . . .   | <sup>11</sup> 25       | ---                 | 34          | ---         | 40                     |
|               | Systems to refer for care . . . . .   | <sup>11</sup> 20       | ---                 | 31          | ---         | 40                     |
|               | Systems to identify, refer, and followup for care . . . . .                                     | <sup>13,a</sup> 16     | ...                 | ...         | ---         | 40                     |
| <b>13.16*</b> | <b>Protective equipment in sporting and recreation events</b>                                   |                        |                     |             |             |                        |
|               | National Collegiate Athletic Association  |                        |                     |             |             |                        |
|               | Football . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | Hockey . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | Lacrosse . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | High school football . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | Amateur boxing . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | Amateur ice hockey . . . . .  | <sup>14</sup> Required | ---                 | ---         | ---         | ...                    |
|               | Use of protective headgear and mouth guards among children who play sports                      |                        |                     |             |             |                        |
|               | Baseball/softball   |                        |                     |             |             |                        |
|               | headgear . . . . .  | ...                    | <sup>3</sup> 35%    | ---         | ---         | ...                    |
|               | mouth guard . . . . .   | ...                    | <sup>3</sup> 7%     | ---         | ---         | ...                    |
|               | Football  |                        |                     |             |             |                        |
|               | headgear . . . . .  | ...                    | <sup>3</sup> 72%    | ---         | ---         | ...                    |
|               | mouth guard . . . . .   | ...                    | <sup>3</sup> 72%    | ---         | ---         | ...                    |
|               | Soccer  |                        |                     |             |             |                        |
|               | headgear . . . . .  | ...                    | <sup>3</sup> 4%     | ---         | ---         | ...                    |
|               | mouth guard . . . . .   | ...                    | <sup>3</sup> 7%     | ---         | ---         | ...                    |

**Table 13. Oral health objective status—Con.**

| <i>Objective</i> |   | <i>Baseline</i>    | <i>1992</i>        | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|------------------|---|--------------------|--------------------|-------------|-------------|------------------------|
| <b>13.17*</b>    | <b>Smokeless tobacco use</b>                            |                    |                    |             |             |                        |
|                  | Males 12–17 years . . . . .                             | <sup>1</sup> 6.6%  | 4.8%               | 3.9%        | 5.1%        | 4%                     |
|                  | Males 18–24 years . . . . .                             | <sup>9</sup> 8.9%  | 8.2%               | 7.8%        | 6.9%        | 4%                     |
|                  | a. American Indian/Alaska Natives 18–24 years . . . . . | <sup>1</sup> 8–64% | <sup>15</sup> 7.3% | 15_ _       | 15_ _       | 10%                    |

--- Data not available.  
 ... Category not applicable.  
<sup>9</sup>Baseline has been revised.

- <sup>1</sup>1986–87 data.
- <sup>2</sup>1988–91 data.
- <sup>3</sup>1991 data.
- <sup>4</sup>1983–84 data.
- <sup>5</sup>1982–84 data.
- <sup>6</sup>Mexican-Americans.
- <sup>7</sup>1985–86 data.
- <sup>8</sup>1986 data.
- <sup>9</sup>1987 data.
- <sup>10</sup>1990 data.
- <sup>11</sup>1989 data.
- <sup>12</sup>1985–89 data.
- <sup>13</sup>1993 data.
- <sup>14</sup>1988 data.

<sup>15</sup>Relative standard error greater than 30%, which results in unreliable estimates.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 13.1, 13.1c             | Baseline: National Survey of Dental Caries in U.S. School Children, 1986–1987.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.  |
| 13.1a                   | Baseline: North Carolina Oral Health School Survey, North Carolina Division of University of North Carolina School of Public Health.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.                  |
| 13.1b,d                 | Baseline: Survey of Oral Health, 1983–1984, Indian Health Service, Dental Services Branch.<br>Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch. |
| 13.2, 13.2c             | Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.   |
| 13.2a                   | Baseline: North Carolina Oral Health School Survey, North Carolina Division of University of North Carolina School of Public Health.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.                  |
| 13.2b                   | Baseline: Survey of Oral Health, 1983–1984, Indian Health Service, Dental Services Branch.<br>Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch. |
| 13.2d                   | Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.  |
| 13.3                    | Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR.   |
| 13.4, 13.4a             | National Health Interview Survey, CDC, NCHS.  |
| 13.4b                   | Baseline: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service.<br>Update: National Health Interview Survey, CDC, NCHS.  |
| 13.5, 13.5a             | Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.   |
| 13.5b                   | Baseline: Survey of Oral Health, 1983–84, Indian Health Service, Dental Services Branch.<br>Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch.   |
| 13.5c                   | Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.<br>Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.  |
| 13.6                    | Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR.   |

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 13.7*, 13.7a,b          | Update: National Health and Nutrition Examination Survey, III, 1988–91, CDC, NCHS.  |
| 13.8                    | National Vital Statistics System, CDC, NCHS.<br>Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR.<br>Update: National Health and Nutrition Examination Survey, CDC, NCHS. |
| 13.8a–d                 | National Health and Nutrition Examination Survey. CDC. NCHS.  |
| 13.9                    | Annual Fluoridation Census, CDC, NCPS.  |
| 13.10                   | National Health Interview Survey, CDC, NCHS.  |
| 13.11*, 13.11a,c,d      | National Health Interview Survey, CDC, NCHS.  |
| 13.11b                  | 1990 Baby Bottle Tooth Decay 5-Year Evaluation Report, Indian Health Service, Dental Services Branch.   |
| 13.12                   | National Health Interview Survey, CDC, NCHS.  |
| 13.13                   | Baseline: Health Care Financing Administration.   |
| 13.14                   | National Health Interview Survey, CDC, NCHS.  |
| 13.15                   | State Public Health Dentists' Survey, Illinois State Health Department.   |
| 13.16*                  | CDC, NCPS; NIH, NIDR.   |
| 13.17*                  | For males 18–24 years of age, National Health Interview Survey, CDC, NCHS.<br>For males 12–17 years of age, National Household Survey on Drug Abuse, SAMHSA, OAS.   |
| 13.17a                  | Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHSR.<br>Updates: National Health Interview Survey, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.

# Oral Health Objectives

**13.1:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 35 percent among children aged 6–8 and no more than 60 percent among adolescents aged 15.

**13.1a:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among children aged 6–8 whose parents have less than a high school education.

**13.1b:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among American Indian and Alaska Native children aged 6–8.

**13.1c:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 40 percent among black children aged 6–8.

**13.1d:** Reduce dental caries (cavities) so that the proportion of adolescents with one or more caries (in permanent teeth) is no more than 70 percent among American Indian and Alaska Native adolescents aged 15.

**13.2:** Reduce untreated dental caries so that the proportion of children with untreated caries (in permanent or primary teeth) is no more than 20 percent among children aged 6–8 and no more than 15 percent among adolescents aged 15.

**13.2a:** Reduce untreated dental caries so that the proportion of lower socioeconomic status children aged 6–8 (those whose parents have less than a high school education) with untreated dental caries (in permanent or primary teeth) is no more than 30 percent.

**13.2b:** Reduce untreated dental caries so that the proportion of American Indian and Alaska Native children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 35 percent.

**13.2c:** Reduce untreated dental caries so that the proportion of black children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 25 percent.

**13.2d:** Reduce untreated dental caries so that the proportion of Hispanic children aged 6–8 with untreated caries (in permanent or primary teeth) is no more than 25 percent.

**13.2e:** Reduce untreated dental caries so that the proportion of lower socioeconomic status adolescents aged 15 (those whose parents have less than a high school education) with untreated dental caries (in permanent or primary teeth) is no more than 25 percent.

**13.2f:** Reduce untreated dental caries so that the proportion of American Indian and Alaska Native adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 40 percent.

**13.2g:** Reduce untreated dental caries so that the proportion of black adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 20 percent.

**13.2h:** Reduce untreated dental caries so that the proportion of Hispanic adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 25 percent.

**13.3:** Increase to at least 45 percent the proportion of people aged 35–44 who have never lost a permanent tooth due to dental caries or periodontal diseases.

*NOTE: Never lost a permanent tooth is having 28 natural teeth exclusive of third molars.*

**13.4:** Reduce to no more than 20 percent the proportion of people aged 65 and older who have lost all of their natural teeth.

**13.4a:** Reduce to no more than 25 percent the proportion of low-income people (annual family income less than \$15,000) aged 65 and older who have lost all of their natural teeth.

**13.4b:** Reduce to no more than 20 percent the proportion of American Indians and Alaska

Natives aged 65 and older who have lost all of their natural teeth.

**13.5:** Reduce the prevalence of gingivitis among people aged 35–44 to no more than 30 percent.

**13.5a:** Reduce the prevalence of gingivitis among low-income people (annual family income less than \$12,500) aged 35–44 to no more than 35 percent.

**13.5b:** Reduce the prevalence of gingivitis among American Indians and Alaska Natives aged 35–44 to no more than 50 percent.

**13.5c:** Reduce the prevalence of gingivitis among Hispanics aged 35–44 to no more than 50 percent.

**13.6:** Reduce destructive periodontal diseases to a prevalence of no more than 15 percent among people aged 35–44.

*NOTE: Destructive periodontal disease is one or more sites with 4 millimeters or greater loss of tooth attachment.*

**13.7\*:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

Duplicate objectives: 3.17 and 16.17

**13.7a\*:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.

Duplicate objectives: 3.17a and 16.17a

**13.7b\*:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 6.9 per 100,000 among black females aged 45–74.

Duplicate objectives: 3.17b and 16.17b

**13.8:** Increase to at least 50 percent the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

*NOTE: Progress toward this objective will be monitored based on prevalence of sealants in children at ages 8 and 14, when the majority of first and second molars, respectively, are erupted.*

**13.8a:** Increase to at least 50 percent the proportion of black

children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

**13.8b:** Increase to at least 50 percent the proportion of black children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

**13.8c:** Increase to at least 50 percent the proportion of Hispanic children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

**13.8d:** Increase to at least 50 percent the proportion of Hispanic children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

**13.9:** Increase to at least 75 percent the proportion of people served by community water systems providing optimal levels of fluoride.

*NOTE: Optimal levels of fluoride are determined by the mean maximum daily air temperature over a 5-year period and range between 0.7 and 1.2 parts of fluoride per 1 million parts of water (ppm).*

**13.10:** Increase use of professionally or self-administered topical or systemic (dietary) fluorides to at least 85 percent of people not receiving optimally fluoridated public water.

**13.11\*:** Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12

**13.11a\*:** Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12a

**13.11b\*:** Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12b

**13.11c\*:** Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12c

**13.11d\*:** Increase to at least 65 percent the proportion of Hispanic parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12d

**13.12:** Increase to at least 90 percent the proportion of all children entering school programs for the first time who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

*NOTE: School programs include Head Start, prekindergarten, kindergarten, and first grade.*

**13.12a:** Increase to at least 90 percent the proportion of all black children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

**13.12b:** Increase to at least 90 percent the proportion of Hispanic children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

**13.13:** Extend to all long-term institutional facilities the requirement that oral examinations and services be provided no later than 90 days after entry into these facilities.

*NOTE: Long-term institutional facilities include nursing homes, prisons, juvenile homes, and detention facilities.*

**13.14:** Increase to at least 70 percent the proportion of people aged 35 and older using the oral health care system during each year.

**13.14a:** Increase to at least 50 percent the proportion of edentulous people using the oral health care system during each year.

**13.14b:** Increase to at least 60 percent the proportion of people aged 65 and older using the oral health care system during each year.

**13.14c:** Increase to at least 60 percent the proportion of blacks aged 35 and older using the oral health care system during each year.

**13.14d:** Increase to at least 60 percent the proportion of Mexican-Americans aged 35 and older using the oral health care system during each year.

**13.14e:** Increase to at least 60 percent the proportion of Puerto Ricans aged 35 and older using the oral health care system during each year.

**13.15:** Increase to at least 40 the number of States that have an effective system for recording and referring infants with cleft lips and/or palates to craniofacial anomaly teams.

Identification and referral of infants with clefts 2000 target (number of States)

|  |    |
|--|----|
| States with system to identify clefts    | 40 |
| States with system to refer for care     | 40 |
| States with system to follow-up          | 40 |
| States with system to identify and refer | 40 |

**13.16\*:** Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risk of injury.

Duplicate objective: 9.19

**13.17\*:** Reduce smokeless tobacco use by males aged 12–24 to a prevalence of no more than 4 percent.

*NOTE: For males aged 12–17, a smokeless tobacco user is someone who has used snuff or chewing tobacco in the preceding month. For males aged 18–24, a smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco.*

Duplicate objective: 3.9

**13.17a\*:** Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.

Duplicate objective: 3.9a

\*Duplicate objective.



# Priority Area 14 Maternal and Infant Health

## Background

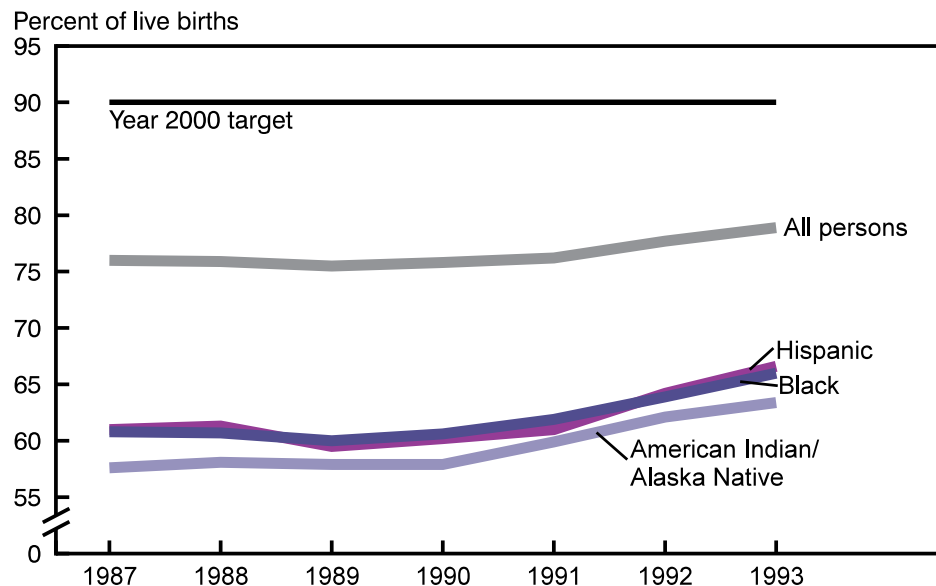
Improving the health of mothers and infants is a national priority. More than 31,000 infants died before their first birthday in 1994 (1). Although the infant mortality rate in the United States continues to decline and has reached an all-time low, the decline has been more rapid for the white population than for the black population. The mortality rate for black infants is more than twice the rate for white infants, and there is evidence that this difference is increasing (2). In the past decade important measures of increased risk of infant death, such as incidence of low/very low birthweight, have shown little or no improvement. An expectant mother with no prenatal care is three times as likely to have a low-birthweight baby. Despite the importance of early prenatal care in protecting against low birthweight and infant mortality, nearly one of every four pregnant women receives no care in the first trimester of pregnancy (3). Further reductions in infant mortality and morbidity will require a focus on strategies to modify the behaviors and lifestyles that affect birth outcomes.

## Midcourse Modifications

A new objective (14.17) was added to track the incidence of spina bifida and other neural tube defects (NTD's). The potential to reduce spina bifida and other NTD's has been proven in randomized clinical trials showing the association of risk reduction with consumption of 400 micrograms of folic acid prior to and during pregnancy (4). The targets for objective 14.10 for abstinence from marijuana and cocaine during pregnancy have been revised to 100 percent. The original targets (selected before baseline data were available) sought to increase abstinence by 20 percent over the baseline.

Several special population targets have been added: reductions in low birthweight and very low birthweight for Puerto Ricans (14.5c-d); and decreased pregnancy complications for blacks

**Figure 15. Percent of women with prenatal care in the first trimester: United States, 1987-93, objective 14.11**



|   | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | Year 2000 target |
|---|------|------|------|------|------|------|------|------------------|
| Total population . . . . .              | 76.0 | 75.9 | 75.5 | 75.8 | 76.2 | 77.7 | 78.9 | 90.0             |
| Black . . . . .                         | 60.8 | 60.7 | 60.0 | 60.6 | 61.9 | 63.9 | 66.0 | 90.0             |
| American Indian/Alaska Native . . . . . | 57.6 | 58.1 | 57.9 | 57.9 | 59.9 | 62.1 | 63.4 | 90.0             |
| Hispanic . . . . .                      | 61.0 | 61.3 | 59.5 | 60.2 | 61.0 | 64.2 | 66.6 | 90.0             |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

(14.7a). Very low birthweight among black infants was broken out as a separate subobjective (14.5b). Prior to the midcourse review, this was included in a single subobjective that targeted both low and very low birthweight for black infants.

## Data Summary

### Highlights

Infant mortality (objective 14.1) declined slightly in 1993; provisional data indicate a more substantial decline in 1994. The decline in infant mortality was due to a small decrease in neonatal mortality (14.1d); postneonatal mortality (14.1g) was unchanged. In the past several years there have been improvements in some of the important infant health risk factors such as breastfeeding (14.9), receipt of early prenatal care (14.11), smoking during pregnancy (14.10), and screening for fetal abnormalities (14.13). The 1995

figure for breastfeeding in the early postpartum period (14.9) equalled the record rate reported in 1984. Fetal mortality (14.2) and maternal mortality (14.3) also decreased in 1993, although the maternal mortality rate remains substantially above the 1987 baseline level. The rate of hospitalizations for severe complications of pregnancy (14.7) has dropped dramatically and in 1993-94 equaled the year 2000 target. However, the decline for black women (14.7a) has been more modest. Although the rate of all cesarean section (C-section) (14.8) and primary C-section (14.8a) births continues to decline (with substantial declines in 1994), at the present rate, they are unlikely to reach the year 2000 targets. In contrast, the repeat C-section rate (14.8b) is dropping at a pace that would surpass the year 2000 target. The national year 2000 target for C-sections has already been reached in a number of States (5).

Less encouraging has been the steep rise in the rate of fetal alcohol syndrome

(14.4), especially among the black population (14.4a), the increase in spina bifida and other neural tube diseases (14.17), and the gradual rise in the percent low birthweight (14.5).

## Summary of Progress

Of the 16 Maternal and Infant Health objectives for the total population, 8 are moving toward the year 2000 targets (objectives 14.1, 14.2, 14.6, 14.8, 14.9, 14.11, 14.13, and 14.15); four are moving away from the targets (14.3, 14.4, 14.5, and 14.17). The year 2000 target for severe complications of pregnancy (14.7) has been met, while results for some newborn screening tests (14.15) have exceeded the target. Progress for objective 14.10 showed mixed results. Two objectives (14.14 and 14.16) have no baseline data. Data beyond baseline to update progress for the remaining objective (14.12) are not yet available.

## Data Issues

### Definitions

In 1989 the National Center for Health Statistics (NCHS) changed the method for tabulating race for live births, assigning to the infant the race of mother rather than using the previous, more complicated algorithm for race of child. This change affects the natality data by race in this chapter. In addition, because live births comprise the denominator of infant mortality (including neonatal and postneonatal), maternal mortality, and fetal death rates, these rates are also affected. These changes are described in greater detail in other NCHS publications (6.7). Quantitatively, the change in the basis for tabulating live births by race results in more births to the white population and fewer births to the black population and other races. Because of changes in the denominators, infant mortality rates (14.1), fetal death rates (14.2), and maternal mortality rates (14.3) under the new classification tend to be lower for white infants and higher for infants of other races than they would be when computed by the previous method. For characteristics of birth such as percent low birthweight (14.5) and percent receiving early care (14.11), the racial disparities tend to be larger when data are tabulated by race of mother rather than race of child.

The special target populations for racial subgroups in this priority area are being monitored with the “new” data by race of mother. Data prior to 1989 were recomputed by race of mother to allow comparable trend comparisons.

Studies indicate that infant mortality for minorities other than blacks from the mortality files have been seriously underestimated (7). Therefore, infant mortality (objective 14.1) for American Indians and Alaska Natives (AI/AN) and for Puerto Ricans is being monitored through data from the Linked Infant Birth and Infant Death Files, which categorizes deaths by the race of mother as reported on the birth certificate. The data from the linked files lag somewhat behind the regular vital statistics files. The most recent year of linked file data is 1991.

Data for objective 14.7 (severe complications of pregnancy) come from the National Hospital Discharge Survey (NHDS) maintained by NCHS. Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are missing from roughly 17 percent of the discharge records in the survey. This omission may yield rates that underestimate hospitalizations for the black population subobjective (14.7a).

The data on inquiry for objective 14.12 refer to the proportion of providers who routinely provided service to 81–100 percent of their clients. Counseling data represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention.

### Data Source Description

Breast-feeding among AI/AN mothers (14.9d) is tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in coverage could affect the comparability of these data.

### Comparability of Data Sources

Data on fetal alcohol syndrome (FAS—objective 14.4) and spina bifida and other NTD’s (14.17) are by year of birth. Cases received after the end of data year are assigned to year of the birth. Therefore, data for previous years include revisions and may differ from those previously published.

The increasing trends for FAS and spina bifida should be interpreted with caution. These data are obtained from the Birth Defects Monitoring Program (BDMP) from hospitals participating in the Commission on Professional and Hospital Activities (CPHA). The number of participating hospitals has declined substantially in recent years, resulting in a decrease in the proportion of U.S. births covered by the BDMP. In 1981, 24 percent of all births (19 percent of black births) were covered compared with only 5 percent (and only 2 percent of black births) in 1993. As a result, the relatively small number of births in the BDMP may not be representative of all U.S. births. The increasing trend in FAS may also be a function of improved identification and reporting, rather than an actual increase in incidence of the condition. There was not a sufficient number of CPHA hospitals in 1994 to compute a reliable rate for either objective 14.4 or 14.17.

The decreasing number of births in the BDMP has also made tracking FAS for AI/AN problematic (14.4a). In 1993 the BDMP contained only about 500 births (or 1 percent of AI/AN births) to AI/AN mothers compared with 13 percent in 1981. As a result, FAS data beyond 1990 for AI/AN are considered unreliable and are not shown in the table.

The data on substance use during pregnancy (14.10) come from multiple sources. The 1985 baseline data on smoking are from the National Health Interview Survey and the 1988 baseline data on alcohol, cocaine, and marijuana come from the National Maternal and Infant Health Survey. The 1992 update on tobacco comes from the information listed on the certificate of live birth and the 1993 updates on all substances are from the National Pregnancy and Health Survey. Although the estimates from these sources are relatively consistent, differences in methodology between the data systems suggest that changes over time be interpreted with caution.

### Proxy Data

Objective 14.13 calls for the percent of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities. The data used to track the objective are the number of pregnant women (per 100 live births) who were screened for

$\alpha$ -fetoprotein levels for the purpose of detecting babies with fetal Down syndrome (8).

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**Table 14. Maternal and infant health objective status**

|              | <i>Objective</i>  | <i>Baseline</i>    | <i>1992</i>       | <i>1993</i>       | <i>1994</i>       | <i>Target<br/>2000</i> |
|--------------|---|--------------------|-------------------|-------------------|-------------------|------------------------|
| <b>14.1</b>  | <b>Infant mortality (per 1,000 live births)</b>                             | <sup>1</sup> 10.1  | 8.5               | 8.4               | <sup>2</sup> 7.9  | 7                      |
|              | a. Blacks   | <sup>1</sup> 18.8  | 16.8              | 16.5              | ---               | 11                     |
|              | b. American Indians/Alaska Natives  | <sup>3</sup> 13.4  | <sup>4</sup> 11.3 | ---               | ---               | 8.5                    |
|              | c. Puerto Ricans <sup>5</sup>   | <sup>3</sup> 12.9  | 49.7              | ---               | ---               | 8                      |
|              | d. Neonatal mortality   | <sup>1</sup> 6.5   | 5.4               | 5.3               | <sup>2</sup> 5.0  | 4.5                    |
|              | e. Neonatal mortality among blacks  | <sup>1</sup> 12.3  | 10.8              | 10.7              | ---               | 7                      |
|              | f. Neonatal mortality among Puerto Ricans <sup>5</sup>                      | <sup>3</sup> 8.6   | 46.1              | ---               | ---               | 5.2                    |
|              | g. Postneonatal mortality   | <sup>1</sup> 3.6   | 3.1               | 3.1               | <sup>2</sup> 3.0  | 2.5                    |
|              | h. Postneonatal mortality among blacks                                      | <sup>1</sup> 6.4   | 6                 | 5.8               | ---               | 4                      |
|              | i. Postneonatal mortality among American Indians/Alaska Natives             | <sup>3</sup> 7.0   | 45.8              | ---               | ---               | 4                      |
|              | j. Postneonatal mortality among Puerto Ricans <sup>5</sup>                  | <sup>3</sup> 4.3   | 43.5              | ---               | ---               | 2.8                    |
| <b>14.2</b>  | <b>Fetal deaths (per 1,000 live births plus fetal deaths)</b>               | <sup>1</sup> 7.6   | 7.4               | 7.1               | ---               | 5                      |
|              | a. Blacks   | <sup>1</sup> 13.1  | 13.3              | 12.8              | ---               | 7.5                    |
| <b>14.3</b>  | <b>Maternal mortality (per 100,000 live births)</b>                         | <sup>1</sup> 6.6   | 7.8               | 7.5               | ---               | 3.3                    |
|              | a. Blacks   | <sup>1</sup> 14.9  | 20.8              | 20.5              | ---               | 5                      |
| <b>14.4</b>  | <b>Fetal alcohol syndrome (per 1,000 live births)</b>                       | <sup>1</sup> 0.22  | 0.52              | 0.67              | ---               | 0.12                   |
|              | a. American Indians/Alaska Natives  | <sup>1</sup> 4.0   | <sup>6</sup> 5.2  | ---               | ---               | 2.0                    |
|              | b. Blacks   | <sup>1</sup> 0.8   | 2.3               | 5.4               | ---               | 0.4                    |
| <b>14.5</b>  | <b>Low birthweight</b>  | <sup>1</sup> 6.9%  | 7.10%             | 7.2%              | 7.3%              | 5%                     |
|              | Very low birthweight  | <sup>1</sup> 1.2%  | 1.30%             | 1.3%              | 1.3%              | 1%                     |
|              | a. Low-birthweight blacks   | <sup>1</sup> 13.0% | 13.3%             | 13.3%             | 13.2%             | 9%                     |
|              | b. Very low-birthweight blacks  | <sup>1</sup> 2.8%  | 3.0%              | 3.0%              | 3.0%              | 2%                     |
|              | c. Low-birthweight Puerto Ricans  | <sup>6</sup> 9.0%  | 9.2%              | 9.2%              | 9.1%              | 6%                     |
|              | d. Very low-birthweight Puerto Ricans                                       | <sup>6</sup> 1.6%  | 1.7%              | 1.7%              | 1.6%              | 1%                     |
| <b>14.6</b>  | <b>Recommended weight gain during pregnancy</b>                             | <sup>7,a</sup> 68% | <sup>8</sup> 75%  | ---               | ---               | 85%                    |
| <b>14.7</b>  | <b>Severe complications of pregnancy (per 100 deliveries)</b>               | <sup>1</sup> 22    | 17                | 15                | 15                | 15                     |
|              | a. Blacks   | <sup>4</sup> 28    | 26                | 24                | 25                | 16                     |
| <b>14.8</b>  | <b>Cesarean delivery (per 100 deliveries)</b>                               | <sup>1</sup> 24.4  | 23.6              | 22.8              | 22.0              | 15                     |
|              | a. Primary (first-time) cesarean delivery                                   | <sup>1</sup> 17.4  | 16.8              | 16.3              | 15.8              | 12                     |
|              | b. Repeat cesarean deliveries (among women with previous cesarean delivery) | <sup>1</sup> 91.2  | 74.9              | 74.6              | 70.3              | 65                     |
| <b>14.9*</b> | <b>Breastfeeding</b>  |                    |                   |                   |                   |                        |
|              | During early postpartum period <sup>9</sup>                                 | <sup>8</sup> 54%   | <sup>10</sup> 56% | <sup>11</sup> 57% | <sup>12</sup> 60% | 75%                    |
|              | a. Low-income mothers   | <sup>8</sup> 32%   | <sup>10</sup> 38% | <sup>11</sup> 40% | <sup>12</sup> 42% | 75%                    |
|              | b. Black mothers  | <sup>8</sup> 25%   | <sup>10</sup> 31% | <sup>11</sup> 33% | <sup>12</sup> 37% | 75%                    |
|              | c. Hispanic mothers   | <sup>8</sup> 51%   | <sup>10</sup> 56% | <sup>11</sup> 58% | <sup>12</sup> 61% | 75%                    |
|              | d. American Indian/Alaska Native mothers                                    | <sup>8</sup> 47%   | 53%               | 51%               | 44%               | 75%                    |
|              | At age 5–6 months   | <sup>8</sup> 21%   | <sup>10</sup> 21% | <sup>11</sup> 21% | <sup>12</sup> 23% | 50%                    |
|              | a. Low-income mothers   | <sup>8</sup> 9%    | <sup>10</sup> 10% | <sup>11</sup> 11% | <sup>12</sup> 12% | 50%                    |
|              | b. Black mothers  | <sup>8</sup> 8%    | <sup>10</sup> 9%  | <sup>11</sup> 10% | <sup>12</sup> 12% | 50%                    |
|              | c. Hispanic mothers   | <sup>8</sup> 16%   | <sup>10</sup> 18% | <sup>11</sup> 19% | <sup>12</sup> 21% | 50%                    |
|              | d. American Indian/Alaska Native mothers                                    | <sup>8</sup> 28%   | 24%               | 28%               | 24%               | 50%                    |
| <b>14.10</b> | <b>Abstinence from alcohol, tobacco, and drug use during pregnancy</b>      |                    |                   |                   |                   |                        |
|              | Tobacco   | <sup>13</sup> 75%  | 83%               | 80%               | 85%               | 90%                    |
|              | Alcohol   | <sup>8</sup> 79%   | ---               | 81%               | ---               | 95%                    |
|              | Cocaine   | <sup>8</sup> 99%   | ---               | 99%               | ---               | 100%                   |
|              | Marijuana   | <sup>8</sup> 98%   | ---               | 97%               | ---               | 100%                   |
| <b>14.11</b> | <b>Prenatal care in the first trimester (percent of live births)</b>        | <sup>1</sup> 76.0% | 77.7%             | 78.9%             | 80.2%             | 90%                    |
|              | a. Blacks   | <sup>1</sup> 60.8% | 63.9%             | 66.0%             | 68.3%             | 90%                    |
|              | b. American Indians/Alaska Natives  | <sup>1</sup> 57.6% | 62.1%             | 63.4%             | 65.2%             | 90%                    |
|              | c. Hispanics <sup>5</sup>   | <sup>1</sup> 61.0% | 64.2%             | 66.6%             | 68.9%             | 90%                    |

**Table 14. Maternal and infant health objective status—Con.**

|               | <i>Objective</i>  | <i>Baseline</i>     | <i>1992</i>       | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|---|---------------------|-------------------|-------------|-------------|------------------------|
| <b>14.12*</b> | <b>Age-appropriate preconception counseling by clinicians</b> . . . . .   | ---                 | ---               | ---         | ---         | 60%                    |
|               | Percent of clinicians routinely providing service to 81–100% of patients<br>Inquiry about family planning (females, childbearing age) |                     |                   |             |             |                        |
|               | Pediatricians . . . . .   | <sup>14</sup> 18%   | ...               | ---         | ---         | 60%                    |
|               | Nurse practitioners . . . . .   | <sup>14</sup> 53%   | ...               | ---         | ---         | 60%                    |
|               | Obstetricians/gynecologists . . . . .   | <sup>14</sup> 48%   | ...               | ---         | ---         | 60%                    |
|               | Internists . . . . .  | <sup>14</sup> 24%   | ...               | ---         | ---         | 60%                    |
|               | Family physicians . . . . .   | <sup>14</sup> 28%   | ...               | ---         | ---         | 60%                    |
|               | Counseling about family planning  |                     |                   |             |             |                        |
|               | Pediatricians . . . . .   | <sup>14</sup> 36%   | ...               | ---         | ---         | 60%                    |
|               | Nurse practitioners . . . . .   | <sup>14</sup> 53%   | ...               | ---         | ---         | 60%                    |
|               | Obstetricians/gynecologists . . . . .   | <sup>14</sup> 65%   | ...               | ---         | ---         | 60%                    |
|               | Internists . . . . .  | <sup>14</sup> 26%   | ...               | ---         | ---         | 60%                    |
|               | Family physicians . . . . .   | <sup>14</sup> 36%   | ...               | ---         | ---         | 60%                    |
| <b>14.13</b>  | <b>Screening for fetal abnormalities (percent of live births)</b> . . . . .   | <sup>8</sup> 29%    | 51%               | ---         | ---         | 90%                    |
| <b>14.14</b>  | <b>Pregnant women and infants receiving risk-appropriate care</b> . . . . .   | ---                 | ---               | ---         | ---         | 90%                    |
| <b>14.15</b>  | <b>Newborn screening and treatment</b>  |                     |                   |             |             |                        |
|               | Screened by State-sponsored programs for genetic disorders and other<br>conditions . . . . .  | ---                 | ---               | ---         | ---         | 95%                    |
|               | Testing positive for disease and receiving appropriate treatment . . . . .  | ---                 | ---               | ---         | ---         | 90%                    |
|               | Sickle-cell screening . . . . .   | <sup>1,15</sup> 33% | <sup>16</sup> 89% | ---         | ---         | 90%                    |
|               | Black infants . . . . .   | <sup>1,15</sup> 57% | <sup>17</sup> 77% | ---         | ---         | 90%                    |
|               | Galactosemia screening (38 States) . . . . .  | <sup>17</sup> 0%    | <sup>6</sup> 97%  | ---         | ---         | 90%                    |
|               | Newborns diagnosed positive for sickle-cell anemia receiving treatment . . . . .  | ...                 | <sup>6</sup> 95%  | ---         | ---         | 90%                    |
|               | Newborns diagnosed positive for galactosemia receiving treatment . . . . .  | ...                 | <sup>6</sup> 100% | ---         | ---         | 90%                    |
| <b>14.16</b>  | <b>Babies receiving primary care</b> . . . . .  | ---                 | ---               | ---         | ---         | 90%                    |
| <b>14.17</b>  | <b>Spina bifida and other neural tube defects (per 10,000 live births)</b> . . . . .  | <sup>6</sup>        | 6                 | 7           | ---         | 3                      |

--- Data not available.

... Category not applicable.

<sup>8</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>Provisional data.

<sup>3</sup>1984 data.

<sup>4</sup>1991 data.

<sup>5</sup>Excludes data from States lacking an Hispanic-origin item on their birth certificate. See appendix.

<sup>6</sup>1990 data.

<sup>7</sup>1980 data for married females who had a full-term live birth and prenatal care.

<sup>8</sup>1988 data.

<sup>9</sup>Breastfed in hospital.

<sup>10</sup>1993 data.

<sup>11</sup>1994 data.

<sup>12</sup>1995 data.

<sup>13</sup>1985 data.

<sup>14</sup>1992 data.

<sup>15</sup>Based on 20 States reporting.

<sup>16</sup>Based on 43 States reporting.

<sup>17</sup>Based on 9 States reporting.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 14.1, 14.1a-j           | National Vital Statistics System, CDC, NCHS.  |
| 14.2, 14.2a             | National Vital Statistics System, CDC, NCHS.  |
| 14.3, 14.3a             | National Vital Statistics System, CDC, NCHS.  |
| 14.4, 14.4a,b           | Birth Defects Monitoring Program, CDC, NCEH.  |
| 14.5, 14.5a-d           | National Vital Statistics System, CDC, NCHS.  |
| 14.6                    | Baseline: National Natality Survey, CDC, NCHS.<br>Updates: National Maternal and Infant Health Survey, CDC, NCHS.   |
| 14.7                    | National Hospital Discharge Survey, CDC, NCHS.  |
| 14.8, 14.8a,b           | National Hospital Discharge Survey, CDC, NCHS.  |
| 14.9*, 14.9a-c          | Ross Laboratories Mother Survey.  |
| 14.9d                   | Pediatric Nutrition Surveillance System, CDC, NCCDPHP.  |
| 14.10                   | Baseline: National Maternal and Infant Health Survey, CDC, NCHS.<br>1992 and 1994 Updates: National Vital Statistics System, CDC, NCHS.<br>1993 Updates: National Pregnancy and Health Survey, NIH, NIDA. |
| 14.11, 14.11a-c         | National Vital Statistics System, CDC, NCHS.  |
| 14.12*                  | Primary Care Provider Surveys, OASH, ODPHP.   |
| 14.13                   | College of American Pathologists, Foundation for Blood Research.  |
| 14.15                   | Council of Regional Networks for Genetic Services.  |
| 14.17                   | Birth Defects Monitoring Program, CDC, NCEH.  |

\*Duplicate objective. See full text of objective following this table.

# Maternal and Infant Health Objectives

**14.1:** Reduce the infant mortality rate to no more than 7 per 1,000 live births.

*NOTE: Infant mortality is deaths of infants under 1 year; neonatal mortality is deaths of infants under 28 days; and postneonatal mortality is deaths of infants aged 28 days up to 1 year.*

**14.1a:** Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.

**14.1b:** Reduce the infant mortality rate among American Indians and Alaska Natives to no more than 8.5 per 1,000 live births.

**14.1c:** Reduce the infant mortality rate among Puerto Ricans to no more than 8 per 1,000 live births.

**14.1d:** Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.

**14.1e:** Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births.

**14.1f:** Reduce the neonatal mortality rate among Puerto Ricans to no more than 5.2 per 1,000 live births.

**14.1g:** Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.

**14.1h:** Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births.

**14.1i:** Reduce the postneonatal mortality rate among American Indians and Alaska Natives to no more than 4 per 1,000 live births.

**14.1j:** Reduce the postneonatal mortality rate among Puerto Ricans to no more than 2.8 per 1,000 live births.

**14.2:** Reduce the fetal death rate (20 or more weeks of gestation) to no more than 5 per 1,000 live births plus fetal deaths.

**14.2a:** Reduce the fetal death rate (20 or more weeks of gestation) among blacks to no more than 7.5 per 1,000 live births plus fetal deaths.

**14.3:** Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births.

**14.3a:** Reduce the maternal mortality rate among black women to no more than 5 per 100,000 live births.

**14.4:** Reduce the incidence of fetal alcohol syndrome to no more than 0.12 per 1,000 live births.

**14.4a:** Reduce the incidence of fetal alcohol syndrome among American Indians and Alaska Natives to no more than 2 per 1,000 live births.

**14.4b:** Reduce the incidence of fetal alcohol syndrome among blacks to no more than 0.4 per 1,000 live births.

**14.5:** Reduce low birthweight to an incidence of no more than 5 percent of live births and very low birthweight to no more than 1 percent of live births.

*NOTE: Low birthweight is weight at birth of less than 2,500 grams; very low birthweight is weight at birth of less than 1,500 grams.*

**14.5a:** Reduce low birthweight among blacks to an incidence of no more than 9 percent of live births.

**14.5b:** Reduce very low birthweight among blacks to no more than 2 percent of live births.

**14.5c:** Reduce low birthweight among Puerto Ricans to an incidence of no more than 6 percent of live births.

**14.5d:** Reduce very low birthweight among Puerto Ricans to no more than 1 percent of live births.

**14.6:** Increase to at least 85 percent the proportion of mothers who achieve the minimum recommended weight gain during their pregnancies.

*NOTE: Recommended weight gain is pregnancy weight gain recommended in the 1990 National Academy of Science's report, Nutrition During Pregnancy.*

**14.7:** Reduce severe complications of pregnancy to no more than 15 per 100 deliveries.

*NOTE: Severe complications of pregnancy is measured using hospitalizations due to pregnancy-related complications.*

**14.7a:** Reduce severe complications of pregnancy among blacks to no more than 16 per 100 deliveries.

**14.8:** Reduce the cesarean delivery rate to no more than 15 per 100 deliveries.

**14.8a:** Reduce the primary (first time) cesarean delivery rate to no more than 12 per 100 deliveries.

**14.8b:** Reduce the repeat cesarean delivery rate to no more than 65 per 100 deliveries among women who had a previous cesarean delivery.

**14.9\*:** Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11

**14.9a\*:** Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11a

**14.9b\*:** Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11b

**14.9c\*:** Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11c

**14.9d\*:** Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11d

**14.10:** Increase abstinence from tobacco use by pregnant women to at least 90 percent, increase abstinence from alcohol by pregnant women to at least 90 percent and increase abstinence from cocaine and marijuana to 100 percent.

**14.11:** Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

**14.11a:** Increase to at least 90 percent the proportion of pregnant black women who receive prenatal care in the first trimester of pregnancy.

**14.11b:** Increase to at least 90 percent the proportion of pregnant American Indian and Alaska Native women who receive prenatal care in the first trimester of pregnancy.

**14.11c:** Increase to at least 90 percent the proportion of pregnant Hispanic women who receive prenatal care in the first trimester of pregnancy.

**14.12\*:** Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 5.10

**14.13:** Increase to at least 90 percent the proportion of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities.

**14.14:** Increase to at least 90 percent the proportion of pregnant women and infants who receive risk-appropriate care.

**14.15:** Increase to at least 95 percent the proportion of newborns screened by State-sponsored programs for genetic disorders and other disabling conditions and to 90 percent the proportion of newborns testing positive for disease who receive appropriate treatment.

**14.16:** Increase to at least 90 percent the proportion of babies aged 18 months and younger who receive recommended primary care services at the appropriate intervals.

**14.17:** Reduce the incidence of spina bifida and other neural tube defects to 3 per 10,000 live births.

\*Duplicate objective.



# Priority Area 15 Heart Disease and Stroke

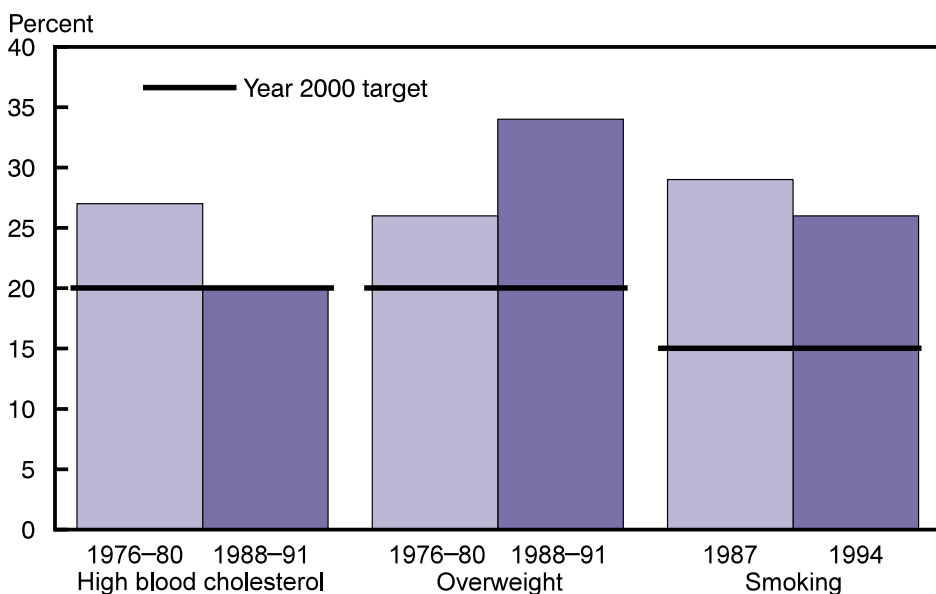
## Background

Over the past 20 years, the death rate for cardiovascular disease has declined dramatically: 46 percent for all cardiovascular disease, 51 percent for coronary heart disease, and 60 percent for stroke. Even so, cardiovascular diseases, primarily coronary heart disease and stroke, kill nearly as many Americans as all other diseases combined (1). Cardiovascular disease is also among the leading causes of disability (2). The major modifiable risk factors for cardiovascular disease are high blood pressure, high blood cholesterol, cigarette smoking, obesity, and physical inactivity. According to the National Health and Nutrition Examination Survey (NHANES), the average blood pressure levels have dropped and the prevalence of high blood pressure has declined from 30 percent of adults (1976–80) to 24 percent (1988–91) over the past decade (3). In addition, the mean serum cholesterol level fell from 213 mg/dL to 205 mg/dL and the percentage of the population with high blood cholesterol fell from 26 percent to the year 2000 target of 20 percent (4).

## Midcourse Modifications

Objective 15.9, (fat and saturated fat intake as a percentage of calories) will now be supplemented to include measurement of the proportion of people who meet the average daily goals of the *Dietary Guidelines* for fat and saturated fat intake as a percentage of calories. Five objectives in Priority Area 15 added new subobjectives: Mexican-Americans and women 70 years and over for controlled high blood pressure (15.4), Mexican-American men for overweight prevalence (15.10) and blood pressure checked (15.13), Hispanics for moderate physical activity (5.11), and blacks, Mexican-Americans, American Indians/Alaska Natives, and Asian/Pacific Islanders for blood cholesterol checked (15.14).

**Figure 16. Prevalence of modifiable risk factors for heart disease and stroke: United States, selected years, and year 2000 targets for objectives 15.7, 15.10, and 15.12**



|                                  | 1976–80 | 1988–91 | 1987 | 1994 | Year 2000 targets |
|----------------------------------|---------|---------|------|------|-------------------|
| High blood cholesterol . . . . . | 27      | 20      | ---  | ---  | 20                |
| Overweight . . . . .             | 26      | 34      | ---  | ---  | 20                |
| Smoking . . . . .                | ---     | ---     | 29   | 26   | 15                |

--- Data not available.

SOURCES: For cholesterol and overweight data, Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey; for smoking data, Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

## Data Summary

### Highlights

A number of objectives in the heart disease and stroke priority area have shown progress. Mortality due to coronary heart disease (15.1) and stroke (15.2) declined from the 1987 baseline through 1993 in the population as a whole. However, mortality for both causes of death among black people is higher and the decline in mortality over this period was not as substantial as that of the total population (actually increasing between 1992 and 1993 for heart disease). The proportion of people who know their blood pressure values (15.13) has increased. The mean serum cholesterol level has decreased (15.6) and there has been an increase in the proportion of the population who have their cholesterol measured (15.14). The objectives for high blood cholesterol

prevalence (15.7) and awareness of a high blood cholesterol condition (15.8) have met the year 2000 targets. Two objectives not showing progress are the rate of end-stage renal disease (15.3) and the proportion of overweight people (15.10), both of which are increasing.

### Summary of Progress

Of the 17 objectives in the heart disease and stroke priority area, 2 objectives (15.7 and 15.8) have met the targets, and data for 13 objectives show improvements toward meeting the year 2000 targets (15.1, 15.2, 15.4, 15.5, 15.6, 15.9, 15.11, 15.12, 15.13, 15.14, 15.15, 15.16, and 15.17). Two objectives are moving away from the year 2000 targets (15.3 and 15.10).

## Data Issues

### Definitions

Objective 15.4 addresses the proportion of people with hypertension whose blood pressure is under control. High blood pressure is defined as blood pressure greater than or equal to 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as using antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

Overweight (15.10) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 NHANES II reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective 15.10).

The intent of objective 15.11 (light-to-moderate physical activity) is to generate calorie-burning activity from a health standpoint by emphasizing the importance of regular physical activity that can be sustained throughout the lifespan. The sum of all physical activities performed at least 30 minutes per occasion 5 or more or 7 or more times a week regardless of the intensity has been defined as measuring this objective.

Beginning in 1992 the definition of current smoker (15.12) was modified to specifically include persons who smoked only “some days.” Prior to 1992, a current smoker was defined by the questions “Have you ever smoked 100 cigarettes in your lifetime?” and “Do you smoke now?” In 1992, data were collected and analyzed for one-half the respondents using these smoking questions and for the other one-half of respondents using a revised smoking question: “Do you smoke everyday, some days, or not at all?” The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

Objective 15.15 seeks to increase the proportion of primary care providers who provide appropriate therapy for high blood cholesterol. This objective is

being tracked by the median blood cholesterol level at initiation of diet and drug therapy. In 1990, 54 percent of physicians reported that they initiate diet therapy and 60 percent initiate drug therapy at these median levels.

### Comparability of Data Sources

Objective 15.5, to increase the proportion of people with hypertension who are taking action to control their blood pressure, is measured by self-reported data from the National Health Interview Survey (NHIS). In this survey, people with high blood pressure are defined as those who report that they have been told they have high blood pressure on two or more occasions by a doctor or health professional. These data are limited to the proportion of people with hypertension who are aware of their condition. For the 1985 baseline, NHIS respondents reporting high blood pressure were asked if they were told to take blood pressure medication, diet to lose weight, cut down on salt, or exercise. In 1991 and 1993, the only actions asked about to reduce high blood pressure were taking medication or following doctor’s advice to diet.

Overweight (15.10) is being tracked with two data sources. The primary data source is the NHANES, which provided baseline data for most of the overweight objectives and the 1988–91 updates; these data are derived from measured height and weight. The second data source is the NHIS. This survey provides interim estimates shown in an earlier publication (5), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective 15.11 (light-to-moderate physical activity) is being tracked with the NHIS. Because the questionnaire changed in 1991, databases were made as similar as possible before calculating estimates. This process involved limiting the age group to 18–74 years (to correspond to the 1985 and 1990

surveys), and limiting the specific activities listed to those asked in all 3 years.

Objective 15.13 addresses blood pressure screening and whether people know if their blood pressure is normal or high. Baseline data and 1990 updates show the proportion of people 18 years of age and over who had their blood pressure measured within the preceding 2 years by a health professional or other trained observer and who were given the diastolic and systolic values of the measure. The 1991 and 1993 updates are the proportion of people 18 years and over who had their blood pressure checked and can state whether their blood pressure was high, low, borderline, or normal.

### Data Availability

Updates for objectives 15.4, 15.6, 15.7, 15.9, and 15.10 will be obtained from the NHANES III, Phase II.

### References

1. National Center for Health Statistics. Health, United States, 1993. Hyattsville, Maryland: Public Health Service. 1994.
2. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives for the Nation. Washington: Public Health Service. 1991.
3. Burt V, et al. Prevalence of hypertension in the U.S. adult population. *Hypertension* 25:305–13. 1995.
4. Sempos C, et al. Prevalence of high blood cholesterol among U.S. adults. *JAMA* 269:3009–14. 1993.
5. National Center for Health Statistics. Healthy people 2000 review, 1992. Hyattsville, Maryland: Public Health Service. 1993.

**Table 15. Heart disease and stroke objective status**

|               | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>         | <i>1993</i>       | <i>1994</i>       | <i>Target<br/>2000</i> |
|---------------|---|----------------------|---------------------|-------------------|-------------------|------------------------|
| <b>15.1*</b>  | <b>Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . . | <sup>1</sup> 135     | 114                 | 114               | ---               | 100                    |
|               | a. Blacks . . . . .   | <sup>1</sup> 168     | 151                 | 154               | ---               | 115                    |
| <b>15.2*</b>  | <b>Stroke deaths (age adjusted per 100,000)</b> . . . . .                 | <sup>1</sup> 30.4    | 26.2                | 26.5              | <sup>2</sup> 26.7 | 20.0                   |
|               | a. Blacks . . . . .   | <sup>1</sup> 52.5    | 45.0                | 45.0              | <sup>2</sup> 44.2 | 27.0                   |
| <b>15.3</b>   | <b>End-stage renal disease (per 100,000)</b> . . . . .                    | <sup>1</sup> 14.4    | 22.0                | ---               | ---               | 13.0                   |
|               | a. Blacks . . . . .   | <sup>1</sup> 34.0    | 52.5                | ---               | ---               | 30.0                   |
| <b>15.4*</b>  | <b>Controlled high blood pressure</b>                                     |                      |                     |                   |                   |                        |
|               | People with high blood pressure . . . . .                                 | <sup>3,4</sup> 11%   | <sup>4,5</sup> 29%  | ---               | ---               | 50%                    |
|               | a. Males with high blood pressure . . . . .                               | <sup>3,4</sup> 6%    | <sup>4,5</sup> 22%  | ---               | ---               | 40%                    |
|               | b. Mexican-Americans with high blood pressure . . . . .                   | <sup>4,5</sup> 14%   | ---                 | ---               | ---               | 50%                    |
|               | c. Females 70 years and over with high blood pressure . . . . .           | <sup>5</sup> 19%     | ---                 | ---               | ---               | 50%                    |
| <b>15.5</b>   | <b>Taking action to control blood pressure</b>                            |                      |                     |                   |                   |                        |
|               | People with high blood pressure 18 years and over                         |                      |                     |                   |                   |                        |
|               | Using medication, diet, low salt, and exercise . . . . .                  | <sup>6</sup> 79%     | <sup>7</sup> 80%    | ---               | ---               | 90%                    |
|               | Using medication and diet . . . . .                                       | ...                  | <sup>8</sup> 71%    | <sup>7</sup> 2%   | <sup>7</sup> 1%   | ...                    |
|               | a. White hypertensive males 18–34 years . . . . .                         | <sup>6</sup> 51%     | <sup>8</sup> 34%    | <sup>3</sup> 8%   | <sup>3</sup> 0%   | 80%                    |
|               | b. Black hypertensive males 18–34 years . . . . .                         | <sup>6</sup> 63%     | <sup>8</sup> 40%    | <sup>6</sup> 4%   | <sup>5</sup> 0%   | 80%                    |
| <b>15.6*</b>  | <b>Mean serum cholesterol level (mg/dL)</b>                               |                      |                     |                   |                   |                        |
|               | People 20–74 years . . . . .  | <sup>3,9</sup> 213   | <sup>5,9</sup> 205  | ---               | ---               | 200                    |
|               | Males 20–74 years . . . . .   | <sup>3,9</sup> 211   | <sup>5,9</sup> 205  | ---               | ---               | 200                    |
|               | Females 20–74 years . . . . .   | <sup>3,9</sup> 215   | <sup>5,9</sup> 205  | ---               | ---               | 200                    |
| <b>15.7*</b>  | <b>High blood cholesterol prevalence</b>                                  |                      |                     |                   |                   |                        |
|               | People 20–74 years . . . . .  | <sup>3,9</sup> 27%   | <sup>5,9</sup> 20%  | ---               | ---               | 20%                    |
|               | Males 20–74 years . . . . .   | <sup>3,9</sup> 25%   | <sup>5,9</sup> 19%  | ---               | ---               | 20%                    |
|               | Females 20–74 years . . . . .   | <sup>3,9</sup> 29%   | <sup>5,9</sup> 20%  | ---               | ---               | 20%                    |
| <b>15.8</b>   | <b>Awareness of high blood cholesterol condition</b>                      |                      |                     |                   |                   |                        |
|               | Adults with high blood cholesterol . . . . .                              | <sup>10</sup> 30%    | <sup>7</sup> 44%    | ---               | <sup>11</sup> 60% | 60%                    |
| <b>15.9*</b>  | <b>Dietary fat intake among people 2 years and over</b>                   |                      |                     |                   |                   |                        |
|               | National Health and Nutrition Examination Survey                          |                      |                     |                   |                   |                        |
|               | Average percent of calories from total fat <sup>12</sup> . . . . .        | <sup>3,13</sup> 36%  | <sup>5</sup> 34%    | ---               | ---               | 30%                    |
|               | Average percent of calories from saturated fat <sup>12</sup> . . . . .    | <sup>3,13</sup> 13%  | <sup>5</sup> 12%    | ---               | ---               | 10%                    |
|               | Percent who met goal for fat <sup>14</sup> . . . . .                      | <sup>5</sup> 21%     | ---                 | ---               | ---               | 50%                    |
|               | Percent who met goal for saturated fat <sup>14</sup> . . . . .            | <sup>5</sup> 21%     | ---                 | ---               | ---               | 50%                    |
|               | Continuing Survey of Food Intakes by Individuals                          |                      |                     |                   |                   |                        |
|               | Average percent of calories from total fat <sup>12</sup> . . . . .        | <sup>15</sup> 34%    | ---                 | ---               | <sup>3</sup> 3%   | 30%                    |
|               | Average percent of calories from saturated fat <sup>12</sup> . . . . .    | <sup>15</sup> 12%    | ---                 | ---               | <sup>11</sup> 1%  | 10%                    |
|               | Percent who met goal for fat . . . . .                                    | <sup>15,16</sup> 22% | ---                 | ---               | <sup>14</sup> 32% | 50%                    |
|               | Percent who met goal for saturated fat . . . . .                          | <sup>15,16</sup> 21% | ---                 | ---               | <sup>14</sup> 34% | 50%                    |
| <b>15.10*</b> | <b>Overweight prevalence</b>  |                      |                     |                   |                   |                        |
|               | (Based on measured height and weight unless otherwise indicated)          |                      |                     |                   |                   |                        |
|               | Adults 20–74 years . . . . .  | <sup>3</sup> 26%     | <sup>5,17</sup> 34% | ---               | ---               | 20%                    |
|               | Males . . . . .   | <sup>3</sup> 24%     | <sup>5,18</sup> 32% | ---               | ---               | 20%                    |
|               | Females . . . . .   | <sup>3</sup> 27%     | <sup>5,19</sup> 36% | ---               | ---               | 20%                    |
|               | Adolescents 12–19 years . . . . .   | <sup>3</sup> 15%     | <sup>5</sup> 21%    | ---               | ---               | 15%                    |
|               | a. Low-income females 20–74 years . . . . .                               | <sup>3</sup> 37%     | <sup>5</sup> 47%    | ---               | ---               | 25%                    |
|               | b. Black females 20–74 years . . . . .                                    | <sup>3</sup> 44%     | <sup>5,20</sup> 49% | ---               | ---               | 30%                    |
|               | c. Hispanic females 20–74 years . . . . .                                 | ---                  | ---                 | ---               | ---               | 25%                    |
|               | Hispanic females 20 years and over (self-reported) . . . . .              | ...                  | <sup>21</sup> 32%   | <sup>21</sup> 33% | ---               | ...                    |
|               | Mexican-American females 20–74 years . . . . .                            | <sup>22</sup> 39%    | <sup>5,23</sup> 47% | ---               | ---               | ...                    |
|               | Cuban females 20–74 years . . . . .                                       | <sup>22</sup> 34%    | ---                 | ---               | ---               | ...                    |
|               | Puerto Rican females 20–74 years . . . . .                                | <sup>22</sup> 37%    | ---                 | ---               | ---               | ...                    |
|               | d. American Indians/Alaska Natives 20 years and over . . . . .            | <sup>24</sup> 29–75% | <sup>21</sup> 36%   | <sup>21</sup> 48% | ---               | 30%                    |
|               | e. People with disabilities 20 years and over (self-reported) . . . . .   | <sup>6,21</sup> 36%  | <sup>21</sup> 37%   | <sup>21</sup> 38% | ---               | 25%                    |
|               | f. Females with high blood pressure 20–74 years . . . . .                 | <sup>3</sup> 50%     | ---                 | ---               | ---               | 41%                    |
|               | g. Males with high blood pressure 20–74 years . . . . .                   | <sup>3</sup> 39%     | ---                 | ---               | ---               | 35%                    |
|               | h. Mexican-American males 20–74 years . . . . .                           | <sup>22</sup> 30%    | <sup>6,25</sup> 36% | ---               | ---               | 25%                    |

**Table 15. Heart disease and stroke objective status—Con.**

|               | <i>Objective</i>   | <i>Baseline</i>      | <i>1992</i>       | <i>1993</i> | <i>1994</i>        | <i>Target<br/>2000</i> |
|---------------|--|----------------------|-------------------|-------------|--------------------|------------------------|
| <b>15.11*</b> | <b>Moderate physical activity</b>  |                      |                   |             |                    |                        |
|               | People 6 years and over . . . . .  | ---                  | ---               | ---         | ---                | 30%                    |
|               | People 18–74 years   |                      |                   |             |                    |                        |
|               | 5 or more times per week . . . . .   | <sup>6</sup> 22%     | <sup>8</sup> 24%  | ---         | ---                | 30%                    |
|               | 7 or more times per week . . . . .   | <sup>6</sup> 16%     | <sup>8</sup> 17%  | ---         | ---                | 30%                    |
|               | a. Hispanics 18 years and over   |                      |                   |             |                    |                        |
|               | 5 or more times per week . . . . .   | <sup>8</sup> 20%     | ---               | ---         | ---                | 25%                    |
| <b>15.12*</b> | <b>Cigarette smoking prevalence</b>  |                      |                   |             |                    |                        |
|               | People 18 years and over . . . . .   | <sup>1</sup> 29%     | 27%               | 25%         | 26%                | 15%                    |
|               | Males . . . . .  | <sup>1</sup> 31%     | 29%               | 28%         | 28%                | 15%                    |
|               | Females . . . . .  | <sup>1</sup> 27%     | 25%               | 22%         | 23%                | 15%                    |
|               | a. People with high school education or less 20 years and over . . . . .                 | <sup>1</sup> 34%     | 32%               | 30%         | 31%                | 20%                    |
|               | b. Blue-collar workers 18 years and over . . . . .                                       | <sup>1</sup> 41%     | 36%               | 34%         | 39%                | 20%                    |
|               | c. Military personnel . . . . .  | <sup>10</sup> 42%    | 35%               | ---         | ---                | 20%                    |
|               | d. Blacks 18 years and over . . . . .  | <sup>1</sup> 33%     | 28%               | 26%         | 27%                | 18%                    |
|               | e. Hispanics 18 years and over . . . . .   | <sup>1</sup> 24%     | 21%               | 20%         | 20%                | 15%                    |
|               | f. American Indians/Alaska Natives 18 years and over . . . . .                           | <sup>26</sup> 42–70% | 40%               | 39%         | 40%                | 20%                    |
|               | g. Southeast Asian males . . . . .   | <sup>27</sup> 55%    | ---               | ---         | ---                | 20%                    |
|               | h. Females of reproductive age (18–44 years) . . . . .                                   | <sup>1</sup> 29%     | 28%               | 26%         | 27%                | 12%                    |
|               | i. Pregnant females . . . . .  | <sup>6</sup> 25%     | <sup>8</sup> 20%  | 20%         | ---                | 10%                    |
|               | j. Females who use oral contraceptives . . . . .   | <sup>28</sup> 36%    | <sup>10</sup> 26% | ---         | ---                | 10%                    |
| <b>15.13</b>  | <b>Knowledge of blood pressure values</b>  |                      |                   |             |                    |                        |
|               | People given blood pressure values . . . . .   | <sup>6</sup> 61%     | <sup>7</sup> 76%  | ---         | ---                | 90%                    |
|               | People who can state blood pressure is high, low, or normal . . . . .                    | ...                  | ---               | 85%         | 84%                | ...                    |
|               | a. Mexican-American males . . . . .  | <sup>8</sup> 69%     | ---               | 68%         | 68%                | 90%                    |
| <b>15.14</b>  | <b>Blood cholesterol checked in past 5 years</b>   |                      |                   |             |                    |                        |
|               | People 18 years and over . . . . .   | <sup>29</sup> 66%    | ...               | ...         | ---                | 75%                    |
|               | Ever checked . . . . .   | <sup>10</sup> 59%    | <sup>8</sup> 63%  | 71%         | 75%                | ...                    |
|               | Within past 2 years . . . . .  | <sup>10</sup> 52%    | <sup>8</sup> 50%  | 54%         | ---                | ...                    |
|               | Ever checked   |                      |                   |             |                    |                        |
|               | a. Blacks . . . . .  | <sup>8</sup> 56%     | ---               | 68%         | ---                | 75%                    |
|               | b. Mexican-Americans . . . . .   | <sup>8</sup> 42%     | ---               | 55%         | ---                | 75%                    |
|               | c. American Indian/Alaska Natives . . . . .  | <sup>8</sup> 46%     | ---               | 60%         | ---                | 75%                    |
|               | Past two years   |                      |                   |             |                    |                        |
|               | d. Mexican-Americans . . . . .   | <sup>8</sup> 33%     | ---               | 38%         | ---                | 75%                    |
|               | e. American Indian/Alaska Natives . . . . .  | <sup>8</sup> 38%     | ---               | 50%         | ---                | 75%                    |
|               | f. Asian/Pacific Islanders . . . . .   | <sup>8</sup> 45%     | ---               | 44%         | ---                | 75%                    |
| <b>15.15</b>  | <b>Primary care providers who provide appropriate therapy for high blood cholesterol</b> |                      |                   |             |                    |                        |
|               | Median cholesterol level when diet therapy is initiated (mg/dL) . . . . .                | ---                  | ---               | ---         | ---                | 75%                    |
|               |  | <sup>30</sup> 240–   | <sup>7</sup> 200– | ---         | <sup>11</sup> 200– | ...                    |
|               |  | 259                  | 219               |             | 219                |                        |
|               | Median cholesterol level when drug therapy is initiated (mg/dL) . . . . .                | <sup>30</sup> 300–   | <sup>7</sup> 240– | ---         | <sup>11</sup> 240– | ...                    |
|               |  | 319                  | 259               |             | 259                |                        |
| <b>15.16</b>  | <b>Worksite blood pressure/cholesterol education programs</b>                            |                      |                   |             |                    |                        |
|               | High blood pressure and/or cholesterol activity . . . . .                                | <sup>31</sup> 35%    | ...               | ---         | ---                | 50%                    |
|               | High blood pressure activity . . . . .   | <sup>6</sup> 16.5%   | 29%               | ---         | ---                | ...                    |
|               | Nutrition education activity . . . . .   | <sup>6</sup> 16.8%   | 31%               | ---         | ---                | ...                    |
|               | Blood pressure screening . . . . .   | ...                  | 32%               | ---         | <sup>11</sup> 16%  | ...                    |
| <b>15.17</b>  | <b>Laboratory accuracy in cholesterol measurement</b>                                    | <sup>6</sup> 53%     | <sup>1</sup> 84%  | ---         | ---                | 90%                    |

--- Data not available.  
 ... Category not applicable.  
<sup>1</sup>1987 data.  
<sup>2</sup>Provisional data.  
<sup>3</sup>1976–80 data.  
<sup>4</sup>People 18–74 years.  
<sup>5</sup>1988–91 data.  
<sup>6</sup>1985 data.  
<sup>7</sup>1990 data.  
<sup>8</sup>1991 data.  
<sup>9</sup>Crude rates.

- <sup>10</sup>1988 data.  
<sup>11</sup>1995 data.  
<sup>12</sup>One-day dietary data.  
<sup>13</sup>Up to 74 years.  
<sup>14</sup>Two-day dietary data.  
<sup>15</sup>1989–91 data.  
<sup>16</sup>Three-day dietary data.  
<sup>17</sup>33 percent for people 20 years and over.  
<sup>18</sup>31 percent for people 20 years and over.  
<sup>19</sup>35 percent for people 20 years and over.  
<sup>20</sup>49 percent for people 20 years and over.  
<sup>21</sup>Estimate derived from self-reported height and weight.  
<sup>22</sup>1982–84 data.  
<sup>23</sup>47 percent for people 20 years and over.  
<sup>24</sup>1984–88 data for different tribes.  
<sup>25</sup>39 percent for people 20 years and over.  
<sup>26</sup>1979–87 data.  
<sup>27</sup>1984–88 data.  
<sup>28</sup>1983 data  
<sup>29</sup>1993 data.  
<sup>30</sup>1986 data.  
<sup>31</sup>1992 data.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i>             | <i>Data source</i>  |
|-------------------------------------|---|
| 15.1*, 15.1a                        | National Vital Statistics System, CDC, NCHS.  |
| 15.2*, 15.2a                        | National Vital Statistics System, CDC, NCHS.  |
| 15.3, 15.3a                         | End Stage Renal Disease Medicare Reimbursement Data, HCFA, Bureau of Data Management and Strategy.  |
| 15.4*, 15.4a–c                      | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 15.5, 15.5a,b                       | National Health Interview Survey, CDC, NCHS.  |
| 15.6*                               | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 15.7*                               | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 15.8                                | Baseline: Health and Diet Survey, FDA.<br>Update: Cholesterol Awareness Survey, NIH, NHLBI.   |
| 15.9*                               | 1976–80 and 1988–91 data: National Health and Nutrition Examination Survey, CDC, NCHS.<br>1989–91 Baselines and 1994 updates: Continuing Survey of Food Intakes by Individuals, USDA.   |
| 15.10*,<br>15.10a,b,f,g<br>15.10c,h | National Health and Nutrition Examination Survey, CDC, NCHS.  |
| 15.10d                              | Data for Hispanics: National Health Interview Survey, CDC, NCHS.<br>Baseline for Mexican-Americans, Cubans, Puerto Ricans: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.<br>Updates for Mexican-Americans: National Health and Nutrition Examination Survey, CDC, NCHS.<br>Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.<br>Updates: National Health Interview Survey, CDC, NCHS. |
| 15.10e                              | National Health Interview Survey, CDC, NCHS.  |
| 15.11*, 15.11a                      | National Health Interview Survey, CDC, NCHS.  |
| 15.12*, 15.12a,b,<br>d,e,h          | National Health Interview Survey, CDC, NCHS.  |
| 15.12c                              | Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DOD, OASD.   |
| 15.12f                              | Baseline: CDC, 1987.<br>Updates: National Health Interview Survey, CDC, NCHS.   |
| 15.12g                              | Baseline: Local surveys.  |
| 15.12i                              | Baseline and 1991 update: National Health Interview Survey, CDC, NCHS.<br>1993 Update: National Health and Pregnancy Survey, NIH, NIDA.   |
| 15.12j                              | Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.   |
| 15.13                               | National Health Interview Survey, CDC, NCHS.  |
| 15.14                               | Baseline: Health and Diet Survey, FDA.<br>1991 and 1993 updates: National Health Interview Survey, CDC, NCHS.<br>1995 update: Cholesterol Awareness Survey, NIH, NHLBI.   |
| 15.15                               | Cholesterol Awareness Physicians Survey, NIH, NHLBI.  |
| 15.16                               | 1985 and 1992 data: National Survey of Worksite Health Promotion Activities, OASH, ODPHP.<br>1995 update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.  |
| 15.17                               | Comprehensive Chemistry Survey of Laboratories Using Enzymatic Methods, College of American Pathologists.   |

\*Duplicate objective. See full text of objective following this table.

# Heart Disease and Stroke Objectives

**15.1\***: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 3.1

**15.1a\***: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 2.1a, and 3.1a

**15.2\***: Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 2.22 and 3.18

**15.2a\***: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 2.22a and 3.18a

**15.3**: Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) to attain an incidence of no more than 13 per 100,000.

**15.3a**: Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) among black persons to attain an incidence of no more than 30 per 100,000.

**15.4\***: Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

*NOTE: People with high blood pressure have blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or take antihypertensive medication. Blood pressure control is defined as maintaining a blood pressure less than 140 mm Hg systolic and 90 mm Hg diastolic. Control of hypertension does not include nonpharmacologic treatment.*

Duplicate objective: 2.26

**15.4a\***: Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26a

**15.4b\***: Increase to at least 50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26b

**15.4c\***: Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26c

**15.5**: Increase to at least 90 percent the proportion of people with high blood pressure who are taking action to help control their blood pressure.

*NOTE: People with high blood pressure are defined in the National Health Interview Survey as those who are told on two or more occasions by a physician or other health professional that they had blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking hypertensive medication. Actions to control blood pressure include taking medication, dieting to lose weight, cutting down on salt, and exercising.*

**15.5a**: Increase to at least 80 percent the proportion of white hypertensive men aged 18–34 who are taking action to help control their blood pressure.

**15.5b**: Increase to at least 80 percent the proportion of black hypertensive men aged 18–34 who are taking action to help control their blood pressure.

**15.6\***: Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

Duplicate objective: 2.27

**15.7\***: Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 2.25

**15.8**: Increase to at least 60 percent the proportion of adults with high blood cholesterol who are aware of their condition and are taking action to reduce their blood cholesterol to recommended levels.

*NOTE: “High blood cholesterol” means a level that requires diet and, if necessary, drug treatment. Actions to*

*control high blood cholesterol include keeping medical appointments, making recommended dietary changes (e.g., reducing saturated fat, total fat, and dietary cholesterol), and, if necessary, taking prescribed medication.*

**15.9\***: Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines’ average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 2.5 and 16.7

**15.10\***: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the age- and gender-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 2.3, and 17.12

**15.10a\***: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 17.12a

**15.10b\***: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 17.12b

**15.10c\***: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 17.12c

**15.10d\***: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 17.12d

**15.10e\***: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 17.12e

**15.10f\***: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 2.3f, and 17.12f

**15.10g\***: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 2.3g, and 17.12g

**15.10h\***: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 17.12h

**15.11\***: Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light-to-moderate physical activity for at least 30 minutes per day.

*NOTE: Light-to-moderate physical activity requires sustained, rhythmic muscular movements and is at least equivalent to sustained walking. Maximum heart rate equals roughly 220*

*beats per minute minus age. Examples may include walking, swimming, cycling, dancing, gardening and yard work, various domestic and occupational activities, and games and other childhood pursuits.*

Duplicate objectives: 1.3 and 17.13

**15.11a\***: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 17.13a

**15.12\***: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 3.4 and 16.6

**15.12a\***: Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 16.6a

**15.12b\***: Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 18 and older.

Duplicate objectives: 3.4b and 16.6b

**15.12c\***: Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 16.6c

**15.12d\***: Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.

Duplicate objectives: 3.4d and 16.6d

**15.12e\***: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.

Duplicate objectives: 3.4e and 16.6e

**15.12f\***: Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 16.6f

**15.12g\***: Reduce cigarette smoking to a prevalence of no more than

20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 16.6g

**15.12h\***: Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 16.6h

**15.12i\***: Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 16.6i

**15.12j\***: Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 16.6j

**15.13**: Increase to at least 90 percent the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

*NOTE: A blood pressure measurement within the preceding 2 years refers to a measurement by a health professional or other trained observer.*

**15.13a**: Increase to at least 90 percent the proportion of Mexican-American men who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

**15.14**: Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

**15.14a**: Increase to at least 75 percent the proportion of blacks who have ever had their blood cholesterol checked.

**15.14b**: Increase to at least 75 percent the proportion of Mexican-Americans who have ever had their blood cholesterol checked.

**15.14c**: Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have ever had their blood cholesterol checked.

**15.14d**: Increase to at least 75 percent the proportion of Mexican-Americans who have had their blood cholesterol checked within the preceding 2 years.

**15.14e:** Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have had their blood cholesterol checked within the preceding 2 years.

**15.14f:** Increase to at least 75 percent the proportion of Asian/Pacific Islanders who have had their blood cholesterol checked within the preceding 2 years.

**15.15:** Increase to at least 75 percent the proportion of primary care providers who initiate diet and, if necessary, drug therapy at levels of blood cholesterol consistent with current management guidelines for patients with high blood cholesterol.

*NOTE: Treatment recommendations at baseline are outlined in detail in the Report of the Expert Panel on the Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, released by the National Cholesterol Education Program in 1987. Current treatment recommendations are described in the Second Report of the Expert Panel on the Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, released in 1993. Treatment recommendations are likely to be refined over time. Thus, for the year 2000, "current" means whatever recommendations are then in effect.*

**15.16:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer high blood pressure and/or cholesterol education and control activities to their employees.

**15.17:** Increase to at least 90 percent the proportion of clinical laboratories that meet the recommended accuracy standard for cholesterol measurement.

\*Duplicate objective.



# Priority Area 16 Cancer

## Background

Cancer is the second leading cause of death in the United States, accounting for nearly one out of every four deaths (1). It is estimated that 1,252,000 Americans were diagnosed with cancer in 1995 and approximately 547,000 died of cancer that year. These American Cancer Society estimates are based on an increase in the number of older Americans who are at higher risk for developing the disease; one-half of the cases occur in persons 67 years of age and over (2).

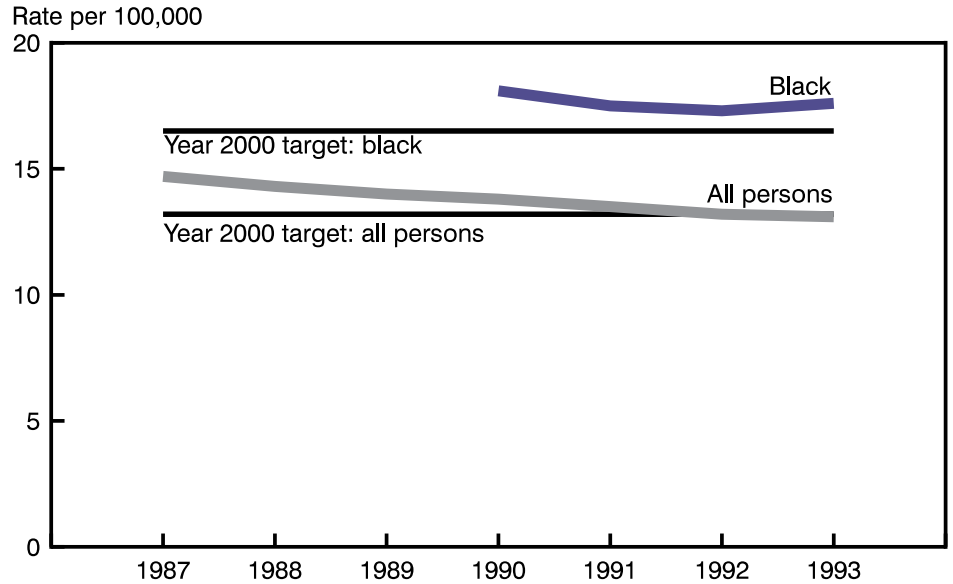
Although cancer remains a major health problem in the United States, there is evidence that the prospects of preventing and surviving cancer continue to improve. Specifically, perhaps as much as 50 percent or more of cancer incidence can be prevented through smoking cessation and changed dietary habits (3). The scientific evidence for smoking as a cause of cancer has been recognized for over 40 years. The evidence for diet has emerged over the past decade and has progressed to the extent that recommendations for prudent dietary changes, such as less fat and more fruits and vegetables, can now be made.

## Midcourse Modifications

One new objective targeting a reduction in oral cancer mortality (16.17) was added to this chapter. This is a duplicate of an existing objective in the Oral Health priority area. As part of the Midcourse Review, it was also added to the Tobacco chapter.

To address disparities among certain population groups, a number of new subobjectives were also added. In addition to tracking overall cancer mortality (16.1) for the total population, the death rate will now be monitored for the black population. Special population subobjectives were also added for lung cancer (16.2) for females and black males, and for colorectal cancer (16.5) for the black population. Breast cancer deaths (16.3) will be tracked for the black population and cervical cancer deaths (16.4) for black and Hispanic females. In addition, passage of the

**Figure 17. Age-adjusted death rates for colorectal cancer: United States, 1987–93, and year 2000 targets for objective 16.5**



|                       | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | Year 2000 targets |
|-----------------------|------|------|------|------|------|------|------|-------------------|
| All persons . . . . . | 14.7 | 14.3 | 14.0 | 13.8 | 13.5 | 13.2 | 13.1 | 13.2              |
| Black . . . . .       | ---  | ---  | ---  | 18.1 | 17.5 | 17.3 | 17.6 | 16.5              |

--- Data not available.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

Mammogram Quality Standards Act has led to a change in the target for objective 16.16 because all mammography facilities must now fully comply.

Objective 16.11 (receipt of mammogram and clinical breast exam) has been modified to include only women 50 years of age and over. The targets for women 40 years and over have been dropped. Clinical trials to date have not shown a definitive reduction of mortality for women 40–49 years of age undergoing regular screening.

The objective targeting receipt of Pap tests has been modified to include all women 18 years and over. Previously, this objective was limited to women with a uterine cervix.

The nutrition-related risk reduction objectives (16.7—fat intake and 16.8—fruit, vegetable, and grain intake) were modified to include measurement of the proportion of people who meet the average daily goals of the *Dietary Guidelines* for fat intake as a percentage

of calories and for the number of servings of fruits, vegetables, and grains. To be consistent with the *Dietary Guidelines* and the *Food Pyramid*, objective 16.8 now includes people 2 years and over. The text for objective 16.10 was also revised so that counseling by primary care providers includes a discussion of screening tests and risk factors associated with breast, prostate, cervical, and colorectal cancer.

## Data Summary

### Highlights

Trends for objectives related to cancer mortality (16.1–16.5 and 16.17) improved or stayed constant in 1993. Until 1991, the trend for lung cancer mortality (16.2) had been rising at a rate that would surpass the target. The rate actually declined in 1991 for the first time in at least 50 years and again in 1992. Lung cancer mortality remained level in 1993. The age-adjusted death rate for colorectal cancer (16.5)

continued to decline in 1993 and surpassed the year 2000 target. Improvement was also observed in cancer risk factors such as smoking (16.6) and dietary fat intake (16.7). Data for 1993 indicate that substantial progress is being made in increasing the numbers of women receiving mammograms (16.11) and Pap tests (16.12). In fact the 1993 rate for ever receiving Pap tests for women 18 and over was very close to the year 2000 target.

## Summary of Progress

Progress toward the year 2000 targets has been made for a majority (13) of the 16 objectives (16.1, 16.2, 16.3, 16.4, 16.6, 16.7, 16.10, 16.11, 16.12, 16.13, 16.14, 16.16, and 16.17). It should be noted that in many cases the actual improvement is small. The objective tracking colorectal cancer mortality (16.5) has surpassed the year 2000 target. There were no new data available to update progress for objectives 16.8 and 16.9. Baseline data for 16.15 are expected to be available in late 1996 from the Health Care Financing Administration.

## Data Issues

### Age-Adjusted Death Rates

The death rates shown in objectives 16.1–16.5 are age adjusted to the 1940 U.S. population. (See appendix for more information on age-adjusted rates.) The National Cancer Institute age adjusts cancer deaths to the 1970 U.S. population. When the 1970 standard population is used, the equivalent baseline, interim, and target rates are all somewhat higher than those generated using the 1940 population. However, the trends are very similar.

## Definitions

Beginning in 1992, the definition of current smoker (16.6) was modified to specifically include persons who smoked only “some days.” Prior to 1992, a current smoker was defined by the questions “Have you ever smoked 100 cigarettes in your lifetime?” and “Do you smoke now?” In 1992, data were collected and analyzed for half the respondents using these smoking questions and for the other half of respondents using a revised smoking question: “Do you smoke everyday,

some days, or not at all?” The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

The 1992 data for objective 16.10 from the Primary Care Provider Survey refer to the proportion of providers who routinely provided service to 81–100 percent of their clients who needed the intervention.

Two subobjectives in this chapter, 16.11b (mammograms) and 16.12d (Pap tests), target women with low income. Prior to 1993 these subobjectives were tracked with data for women with family incomes of less than \$10,000. Because of changes in the poverty level over time, beginning with data for 1993 these subobjectives are being tracked with data for women with family incomes below the Census poverty threshold (see appendix).

For objective 16.16, 1990 baseline and 1992 update data represent the proportion of mammography facilities that were certified by the American College of Radiology. The 1995 update measures how well the 4,200 facilities performing mammograms met the Mammogram Quality Standards Act (MQSA) quality standards. “No noncompliances” means the facility was in full compliance with MQSA. Level 1 findings are the most serious and facilities with level 1 findings receive a warning letter from the Food and Drug Administration (FDA) and must respond to it. Although level 2 and level 3 findings are considered less serious, they also must be corrected. Specifics on the types of violations included in these levels has been published by FDA (4).

## References

1. National Center for Health Statistics. Advance report of final mortality statistics, 1993. Monthly vital statistics report; vol 44 no 7 suppl. Hyattsville, Maryland. February. 1996.
2. American Cancer Society, Cancer facts and figures, 1994. American Cancer Society, Inc. Atlanta, GA. 1994.
3. National Cancer Institute, Division of Cancer Prevention and Control. Fiscal Year 1994 Annual Report. Rockville, MD. 1994.
4. Food and Drug Administration/Center for Devices and Radiological Health. Mammography Matters, vol 2, issue 3. Columbia, MD. 1995.

**Table 16. Cancer objective status**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>          | <i>1993</i> | <i>1994</i>       | <i>Target<br/>2000</i> |
|--------------|---|----------------------|----------------------|-------------|-------------------|------------------------|
| <b>16.1*</b> | <b>Cancer deaths (age adjusted per 100,000)</b> . . . . .                       | <sup>1</sup> 134     | 133                  | 133         | <sup>2</sup> 132  | 130                    |
|              | a. Blacks . . . . .   | <sup>3</sup> 182     | 178                  | 177         | <sup>2</sup> 176  | 175                    |
| <b>16.2*</b> | <b>Slow the rise in lung cancer deaths (age adjusted per 100,000)</b> . . . . . | <sup>1</sup> 38.5    | 39.3                 | 39.3        | ---               | 42                     |
|              | a. Females . . . . .  | <sup>3</sup> 25.6    | 26.3                 | 26.5        | ---               | 27                     |
|              | b. Black males . . . . .  | <sup>3</sup> 86.1    | 81.2                 | 80.7        | ---               | 91                     |
| <b>16.3</b>  | <b>Female breast cancer deaths (age adjusted per 100,000)</b> . . . . .         | <sup>1</sup> 23.0    | 21.9                 | 21.5        | <sup>2</sup> 21.0 | 20.6                   |
|              | a. Black females . . . . .  | <sup>3</sup> 27.5    | 27.0                 | 27.1        | <sup>2</sup> 27.0 | 25                     |
| <b>16.4</b>  | <b>Cervical cancer deaths (age adjusted per 100,000)</b> . . . . .              | <sup>1</sup> 2.8     | 2.7                  | 2.6         | ---               | 1.3                    |
|              | a. Black females . . . . .  | <sup>3</sup> 5.9     | 6.1                  | 5.7         | ---               | 3                      |
|              | b. Hispanic females <sup>4</sup> . . . . .                                      | <sup>5</sup> 3.6     | 3.4                  | 3.1         | ---               | 2                      |
| <b>16.5*</b> | <b>Colorectal cancer deaths (age adjusted per 100,000)</b> . . . . .            | <sup>1</sup> 14.7    | 13.2                 | 13.1        | ---               | 13.2                   |
|              | a. Blacks . . . . .   | <sup>3</sup> 18.1    | 17.3                 | 17.6        | ---               | 16.5                   |
| <b>16.6*</b> | <b>Cigarette smoking prevalence</b>   |                      |                      |             |                   |                        |
|              | People 18 years and over . . . . .  | <sup>1</sup> 29%     | 27%                  | 25%         | 26%               | 15%                    |
|              | Males . . . . .   | <sup>1</sup> 31%     | 29%                  | 28%         | 28%               | 15%                    |
|              | Females . . . . .   | <sup>1</sup> 27%     | 25%                  | 22%         | 23%               | 15%                    |
|              | a. People with high school education or less 20 years and over . . . . .        | <sup>1</sup> 34%     | 32%                  | 30%         | 31%               | 20%                    |
|              | b. Blue-collar workers 18 years and over . . . . .                              | <sup>1</sup> 41%     | 36%                  | 34%         | 39%               | 20%                    |
|              | c. Military personnel . . . . .   | <sup>6</sup> 42%     | 35%                  | ---         | ---               | 20%                    |
|              | d. Blacks 18 years and over . . . . .   | <sup>1</sup> 33%     | 28%                  | 26%         | 27%               | 18%                    |
|              | e. Hispanics 18 years and over . . . . .  | <sup>1</sup> 24%     | 21%                  | 20%         | 20%               | 15%                    |
|              | f. American Indians/Alaska Natives 18 years and over . . . . .                  | <sup>7</sup> 42–70%  | 40%                  | 39%         | 40%               | 20%                    |
|              | g. Southeast Asian males . . . . .  | <sup>8</sup> 55%     | ---                  | ---         | ---               | 20%                    |
|              | h. Females of reproductive age (18–44 years) . . . . .                          | <sup>1</sup> 29%     | 28%                  | 26%         | 27%               | 12%                    |
|              | i. Pregnant females . . . . .   | <sup>9</sup> 25%     | <sup>10</sup> 20%    | 20%         | ---               | 10%                    |
|              | j. Females who use oral contraceptives . . . . .                                | <sup>11</sup> 36%    | <sup>6</sup> 26%     | ---         | ---               | 10%                    |
| <b>16.7*</b> | <b>Dietary fat intake among people 2 years and over</b>                         |                      |                      |             |                   |                        |
|              | National Health and Nutrition Examination Survey                                |                      |                      |             |                   |                        |
|              | Average percent of calories from total fat <sup>12</sup> . . . . .              | <sup>13,14</sup> 36% | <sup>15</sup> 34%    | ---         | ---               | 30%                    |
|              | Average percent of calories from saturated fat <sup>12</sup> . . . . .          | <sup>13,14</sup> 13% | <sup>15</sup> 12%    | ---         | ---               | 10%                    |
|              | Percent who met goal for fat <sup>16</sup> . . . . .                            | <sup>15</sup> 21%    | ---                  | ---         | ---               | 50%                    |
|              | Percent who met goal for saturated fat <sup>16</sup> . . . . .                  | <sup>15</sup> 21%    | ---                  | ---         | ---               | 50%                    |
|              | Continuing Survey of Food Intakes by Individuals                                |                      |                      |             |                   |                        |
|              | Average percent of calories from total fat <sup>12</sup> . . . . .              | <sup>17</sup> 34%    | ---                  | ---         | 33%               | 30%                    |
|              | Average percent of calories from saturated fat <sup>12</sup> . . . . .          | <sup>17</sup> 12%    | ---                  | ---         | 11%               | 10%                    |
|              | Percent who met goal for fat . . . . .  | <sup>17,18</sup> 22% | ---                  | ---         | <sup>16</sup> 32% | 50%                    |
|              | Percent who met goal for saturated fat . . . . .                                | <sup>17,18</sup> 21% | ---                  | ---         | <sup>16</sup> 34% | 50%                    |
| <b>16.8*</b> | <b>Average daily intake of vegetables, fruits, and grain products</b>           |                      |                      |             |                   |                        |
|              | People 2 years and over <sup>18</sup>   |                      |                      |             |                   |                        |
|              | Average number of servings  |                      |                      |             |                   |                        |
|              | Vegetables and fruits . . . . .   | <sup>17</sup> 4.1    | ---                  | ---         | ---               | 5.0                    |
|              | Grain products . . . . .  | <sup>17</sup> 5.8    | ---                  | ---         | ---               | 6.0                    |
|              | Proportion who met Dietary Guidelines goal                                      |                      |                      |             |                   |                        |
|              | Vegetables and fruits . . . . .   | <sup>17</sup> 29%    | ---                  | ---         | ---               | 50%                    |
|              | Grain products . . . . .  | <sup>17</sup> 40%    | ---                  | ---         | ---               | 50%                    |
| <b>16.9</b>  | <b>Actions to limit sun exposure</b>  |                      |                      |             |                   |                        |
|              | Among total population those very likely to:                                    |                      |                      |             |                   |                        |
|              | Limit sun exposure . . . . .  | <sup>19,a</sup> 32%  | ...                  | ---         | ---               | 60%                    |
|              | Use sun screen . . . . .  | <sup>19,a</sup> 29%  | ...                  | ---         | ---               | 60%                    |
|              | Wear protective clothing . . . . .  | <sup>19</sup> 28%    | ...                  | ---         | ---               | 60%                    |
|              | Avoid artificial ultraviolet light . . . . .                                    | ---                  | ---                  | ---         | ---               | 60%                    |
| <b>16.10</b> | <b>Tobacco, diet, and cancer screening and counseling by clinicians</b>         |                      |                      |             |                   |                        |
|              | Smoking patients . . . . .  | <sup>20,21</sup> 52% | <sup>21,22</sup> 96% | ---         | ---               | 75%                    |
|              | Digital rectal . . . . .  | ...                  | <sup>22</sup> 49%    | ---         | ---               | 75%                    |
|              | Blood stool . . . . .   | ...                  | <sup>22</sup> 56%    | ---         | ---               | 75%                    |
|              | Proctoscopic exam . . . . .   | ...                  | <sup>22</sup> 23%    | ---         | ---               | 75%                    |
|              | Breast physical . . . . .   | ...                  | <sup>22</sup> 78%    | ---         | ---               | 75%                    |
|              | Mammogram . . . . .   | ...                  | <sup>22</sup> 37%    | ---         | ---               | 75%                    |

**Table 16. Cancer objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i>       | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|--------------|--|-------------------|-------------------|-------------|-------------|------------------------|
|              | Pap test . . . . .   | ...               | <sup>22</sup> 55% | ---         | ---         | 75%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients                                     |                   |                   |             |             |                        |
|              | Formulation of diet/nutrition plan   |                   |                   |             |             |                        |
|              | Pediatricians . . . . .  | ...               | 31%               | ---         | ---         | 75%                    |
|              | Nurse practitioners . . . . .  | ...               | 31%               | ---         | ---         | 75%                    |
|              | Obstetricians/gynecologists . . . . .  | ...               | 19%               | ---         | ---         | 75%                    |
|              | Internists . . . . .   | ...               | 33%               | ---         | ---         | 75%                    |
|              | Family physicians . . . . .  | ...               | 24%               | ---         | ---         | 75%                    |
|              | Discussion of strategies to quit smoking   |                   |                   |             |             |                        |
|              | Pediatricians . . . . .  | ...               | 19%               | ---         | ---         | 75%                    |
|              | Nurse practitioners . . . . .  | ...               | 20%               | ---         | ---         | 75%                    |
|              | Obstetricians/gynecologists . . . . .  | ...               | 28%               | ---         | ---         | 75%                    |
|              | Internists . . . . .   | ...               | 50%               | ---         | ---         | 75%                    |
|              | Family physicians . . . . .  | ...               | 43%               | ---         | ---         | 75%                    |
| <b>16.11</b> | <b>Breast examination and mammogram</b>  |                   |                   |             |             |                        |
|              | Females 50 years and over (preceding 1–2 years) . . . . .  | <sup>1</sup> 25%  | 51%               | 55%         | 56%         | 60%                    |
|              | a. Hispanic females 50 years and over . . . . .  | <sup>1</sup> 18%  | 47%               | 47%         | 50%         | 60%                    |
|              | b. Low-income females 50 years and over<br>(annual family income less than \$10,000) <sup>23</sup> . . . . . | <sup>1</sup> 15%  | 32%               | 39%         | 38%         | 60%                    |
|              | c. Females 50 years and over with less than high school education . . . . .                                  | <sup>1</sup> 16%  | 35%               | 42%         | 42%         | 60%                    |
|              | d. Females 70 years and over . . . . .   | <sup>1</sup> 18%  | 39%               | 44%         | 45%         | 60%                    |
|              | e. Black females 50 years and over . . . . .   | <sup>1</sup> 19%  | 48%               | 54%         | 56%         | 60%                    |
| <b>16.12</b> | <b>Pap test<sup>24</sup></b>   |                   |                   |             |             |                        |
|              | Ever received . . . . .  | <sup>1</sup> 88%  | 93%               | 95%         | 94%         | 95%                    |
|              | Received within preceding 3 years . . . . .  | <sup>1</sup> 75%  | 74%               | 78%         | 77%         | 85%                    |
|              | Ever received  |                   |                   |             |             |                        |
|              | a. Hispanic females 18 years and over . . . . .  | <sup>1</sup> 75%  | 88%               | 88%         | 91%         | 95%                    |
|              | b. Females 70 years and over . . . . .   | <sup>1</sup> 76%  | 86%               | 91%         | 90%         | 95%                    |
|              | c. Females 18 years and over with less than high school education . . . . .                                  | <sup>1</sup> 79%  | 87%               | 91%         | 91%         | 95%                    |
|              | d. Low-income females 18 years and over (annual family income less than<br>\$10,000) <sup>23</sup> . . . . . | <sup>1</sup> 80%  | 89%               | 89%         | 91%         | 95%                    |
|              | Received within preceding 3 years  |                   |                   |             |             |                        |
|              | a. Hispanic females 18 years and over . . . . .  | <sup>1</sup> 66%  | 74%               | 77%         | 74%         | 80%                    |
|              | b. Females 70 years and over . . . . .   | <sup>1</sup> 44%  | 46%               | 54%         | 53%         | 70%                    |
|              | c. Females 18 years and over with less than high school education . . . . .                                  | <sup>1</sup> 58%  | 58%               | 64%         | 62%         | 75%                    |
|              | d. Low-income females 18 years and over (annual family income less than<br>\$10,000) <sup>23</sup> . . . . . | <sup>1</sup> 64%  | 65%               | 71%         | 72%         | 80%                    |
| <b>16.13</b> | <b>Fecal occult blood test and proctosigmoidoscopy</b>   |                   |                   |             |             |                        |
|              | (People 50 years and over)   |                   |                   |             |             |                        |
|              | Received fecal occult blood testing within preceding 2 years . . . . .                                       | <sup>1</sup> 27%  | 30%               | ---         | ---         | 50%                    |
|              | Ever received proctosigmoidoscopy . . . . .  | <sup>1</sup> 25%  | 33%               | ---         | ---         | 40%                    |
|              | People 65 years and over with routine checkup in past 2 years<br>who had a fecal blood test . . . . .        | <sup>10</sup> 36% | ---               | ---         | ---         | ...                    |
| <b>16.14</b> | <b>Oral, skin, and digital rectal examinations</b>   |                   |                   |             |             |                        |
|              | People 50 years and over (during past year) . . . . .  | ---               | ---               | ---         | ---         | 40%                    |
|              | Oral . . . . .   | ...               | 9%                | ---         | ---         | ...                    |
|              | Skin . . . . .   | ...               | 17%               | ---         | ---         | ...                    |
|              | Digital rectal . . . . .   | <sup>1</sup> 27%  | 38%               | ---         | ---         | ...                    |
| <b>16.15</b> | <b>Pap test quality</b>  |                   |                   |             |             |                        |
|              | Monitoring cytology laboratory . . . . .   | ---               | ---               | ---         | ---         | 100%                   |

**Table 16. Cancer objective status—Con.**

|               | <i>Objective</i>  | <i>Baseline</i>     | <i>1992</i> | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|---|---------------------|-------------|-------------|-------------|------------------------|
| <b>16.16</b>  | <b>Monitoring and certifying mammography facilities</b> |                     |             |             |             |                        |
|               | Certified by American College of Radiology . . . . .    | <sup>3</sup> 18–21% | 64%         | ---         | ---         | 100%                   |
|               | Mammogram Quality Standards Act compliance              |                     |             |             |             |                        |
|               | No noncompliances . . . . .                             | <sup>25</sup> 32.5% | ...         | ...         | ...         | ...                    |
|               | Level 3 findings . . . . .                              | <sup>25</sup> 48.6% | ...         | ...         | ...         | ...                    |
|               | Level 2 findings . . . . .                              | <sup>25</sup> 15.8% | ...         | ...         | ...         | ...                    |
|               | Level 1 findings . . . . .                              | <sup>25</sup> 3.1%  | ...         | ...         | ...         | ...                    |
| <b>16.17*</b> | <b>Oral cancer deaths (per 100,000)</b>                 |                     |             |             |             |                        |
|               | Males 45–74 years . . . . .                             | <sup>1</sup> 13.6   | 12.2        | 12.1        | ---         | 10.5                   |
|               | Females 45–74 years . . . . .                           | <sup>1</sup> 4.8    | 4.3         | 4.2         | ---         | 4.1                    |
|               | a. Black males 45–74 years . . . . .                    | <sup>3</sup> 29.4   | 27.3        | 26.2        | ---         | 26.0                   |
|               | b. Black females 45–74 years . . . . .                  | <sup>3</sup> 6.9    | 6.0         | 5.8         | ---         | 6.9                    |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1987 data.

<sup>2</sup>Provisional data.

<sup>3</sup>1990 data.

<sup>4</sup>Excludes data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic origin data were not of sufficient quality.

See appendix.

<sup>5</sup>1977–83 data.

<sup>6</sup>1988 data.

<sup>7</sup>1979–87 data.

<sup>8</sup>1984–88 data.

<sup>9</sup>1985 data.

<sup>10</sup>1991 data.

<sup>11</sup>1983 data.

<sup>12</sup>One day of dietary data.

<sup>13</sup>1976–80 data.

<sup>14</sup>For persons up to 74 years.

<sup>15</sup>1988–91 data.

<sup>16</sup>Two-day dietary data.

<sup>17</sup>1989–91 data.

<sup>18</sup>Three-day dietary data.

<sup>19</sup>1992 data.

<sup>20</sup>1986 data.

<sup>21</sup>Data reflect tobacco screening and counseling only.

<sup>22</sup>1989 data.

<sup>23</sup>Beginning with 1993, data are for women with family incomes below the Census poverty threshold.

<sup>24</sup>Includes women without a uterine cervix.

<sup>25</sup>1995 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i>  | <i>Data source</i>  |
|--------------------------|---|
| 16.1*, 16.1a             | National Vital Statistics System, CDC, NCHS.  |
| 16.2*, 16.2a,b           | National Vital Statistics System, CDC, NCHS.  |
| 16.3, 16.3a              | National Vital Statistics System, CDC, NCHS.  |
| 16.4, 16.4a              | National Vital Statistics System, CDC, NCHS.  |
| 16.4b                    | Baseline: Surveillance, Epidemiology, and End Results (SEER), NIH, NCI.<br>Updates: National Vital Statistics System, CDC, NCHS.  |
| 16.5*, 16.5a             | National Vital Statistics System, CDC, NCHS.  |
| 16.6*, 16.6a,b,<br>d,e,h | National Health Interview Survey, CDC, NCHS.  |
| 16.6c                    | Worldwide Survey of Substance Abuse and Health Behaviors Among<br>Military Personnel, DOD, OASD.  |
| 16.6f                    | Baseline: CDC, 1987.<br>Updates: National Health Interview Survey, CDC, NCHS.   |
| 16.6g                    | Baseline: Local surveys.  |
| 16.6i                    | Baseline and 1991 update: National Health Interview Survey, CDC, NCHS.<br>1993 Update: National Health and Pregnancy Survey, NIH, NIDA.   |
| 16.6j                    | Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.   |
| 16.7*                    | 1976–80 and 1988–91 data: National Health and Nutrition Examination Survey,<br>CDC, NCHS.<br>1989–91 baselines and 1994 updates: Continuing Survey of Food Intakes by Individuals, USDA.        |
| 16.8*                    | Continuing Survey of Food Intakes by Individuals, USDA.   |
| 16.9                     | National Health Interview Survey. CDC, NCHS.  |
| 16.10                    | 1986 Baseline: Wells, et al, 1986.<br>1989 updates: Survey of Physician's Attitudes and Practices in Early Cancer Detection, NCI.<br>1992 baseline: Primary Care Provider Surveys, OASH, ODPHP. |
| 16.11, 16.11a–d          | National Health Interview Survey, CDC, NCHS.  |
| 16.12, 16.12a–d          | National Health Interview Survey, CDC, NCHS.  |
| 16.13                    | National Health Interview Survey, CDC, NCHS.  |
| 16.14                    | National Health Interview Survey, CDC, NCHS.  |
| 16.16                    | Baseline and 1992 update: American College of Radiology;<br>1995 updates: Mammography Quality Assurance Program, FDA.   |
| 16.17*, 16.17a,b         | National Vital Statistics System, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.

# Cancer Objectives

**16.1\*:** Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

Duplicate objective: 2.2

**16.1a\*:** Reverse the rise in cancer deaths among blacks to achieve a rate of no more than 175 per 100,000 people.

Duplicate objective: 2.2a

**16.2\*:** Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

Duplicate objective: 3.2

**16.2a\*:** Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.

Duplicate objective: 3.2a

**16.2b\*:** Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.

Duplicate objective: 3.2b

**16.3:** Reduce breast cancer deaths to no more than 20.6 per 100,000 women.

**16.3a:** Reduce breast cancer deaths among black females to no more than 25 per 100,000 women.

**16.4:** Reduce deaths from cancer of the uterine cervix to no more than 1.3 per 100,000 women.

**16.4a:** Reduce deaths from cancer of the uterine cervix among black females to no more than 3 per 100,000 women.

**16.4b:** Reduce deaths from cancer of the uterine cervix among Hispanic females to no more than 2 per 100,000 women.

**16.5\*:** Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 2.23

**16.5a\*:** Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000 people.

Duplicate objective: 2.23a

**16.6\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

Duplicate objectives: 3.4 and 15.12

**16.6a\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 15.12a

**16.6b\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 18 and older.

Duplicate objectives: 3.4b and 15.12b

**16.6c\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 15.12c

**16.6d\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 18 and older.

Duplicate objectives: 3.4d and 15.12d

**16.6e\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 and older.

Duplicate objectives: 3.4e and 15.12e

**16.6f\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 15.12f

**16.6g\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 15.12g

**16.6h\*:** Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 15.12h

**16.6i\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 15.12i

**16.6j\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 15.12j

**16.7\*:** Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 2.5 and 15.9

**16.8\*:** Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of 5 or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of 6 or more servings of grain products.

Duplicate objective: 2.6

*NOTE: The definition of vegetables, fruits, and grain products and serving size designations are derived from the Food Guide Pyramid. Vegetable, fruit, and grain ingredients from mixtures are included in the total, and fractions of servings are counted.*

**16.9:** Increase to at least 60 percent the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light (e.g., sun lamps, tanning booths).

**16.10:** Increase to at least 75 percent the proportion of primary care providers who routinely counsel patients about tobacco-use cessation, diet modification, and cancer screening recommendations,

which includes providing information on the potential benefit or harm attributed to the various screening modalities and discussion of risk factors associated with breast, prostate, cervical, colorectal, and lung cancers.

**16.11:** Increase to at least 60 percent those women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 1 to 2 years.

**16.11a:** Increase to at least 60 percent Hispanic women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

**16.11b:** Increase to at least 60 percent low-income women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

**16.11c:** Increase to at least 60 percent women aged 50 and older with less than high school education who have received a clinical breast examination and a mammogram within the preceding 2 years.

**16.11d:** Increase to at least 60 percent women aged 70 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

**16.11e:** Increase to at least 60 percent black women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

**16.12:** Increase to at least 95 percent the proportion of women aged 18 and older who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years.

**16.12a:** Increase to at least 95 percent the proportion of Hispanic women aged 18 and older who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 3 years.

**16.12b:** Increase to at least 95 percent the proportion of women aged 70 and older who have ever

received a Pap test, and to at least 70 percent those who received a Pap test within the preceding 3 years.

**16.12c:** Increase to at least 95 percent the proportion of women aged 18 and older with less than a high school education who have ever received a Pap test, and to at least 75 percent those who received a Pap test within the preceding 3 years.

**16.12d:** Increase to at least 95 percent the proportion of low-income women (annual family income less than \$10,000) aged 18 and older who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 3 years.

**16.13:** Increase to at least 50 percent the proportion of people aged 50 and older who have received fecal occult blood testing within the preceding 1 to 2 years, and to at least 40 percent those who have ever received proctosigmoidoscopy.

**16.14:** Increase to at least 40 percent the proportion of people aged 50 and older visiting a primary care provider in the preceding year who have received oral, skin, and digital rectal examinations during one such visit.

**16.15:** Ensure that Pap tests meet quality standards by monitoring and certifying all cytology laboratories.

**16.16:** Ensure that mammograms meet quality standards by inspecting and certifying 100 percent of mammography facilities according to the requirements of the Mammography Quality Standards Act.

**16.17\*:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

Duplicate objectives: 3.17 and 13.7

**16.17a\*:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.

Duplicate objectives: 3.17a and 13.7a

**16.17b\*:** Reduce deaths due to cancer of the oral cavity and

pharynx to no more than 6.9 per 100,000 among black females aged 45–74.

Duplicate objectives: 3.17b and 13.7b

\*Duplicate objective.



# Priority Area 17 Diabetes and Chronic Disabling Conditions

## Background

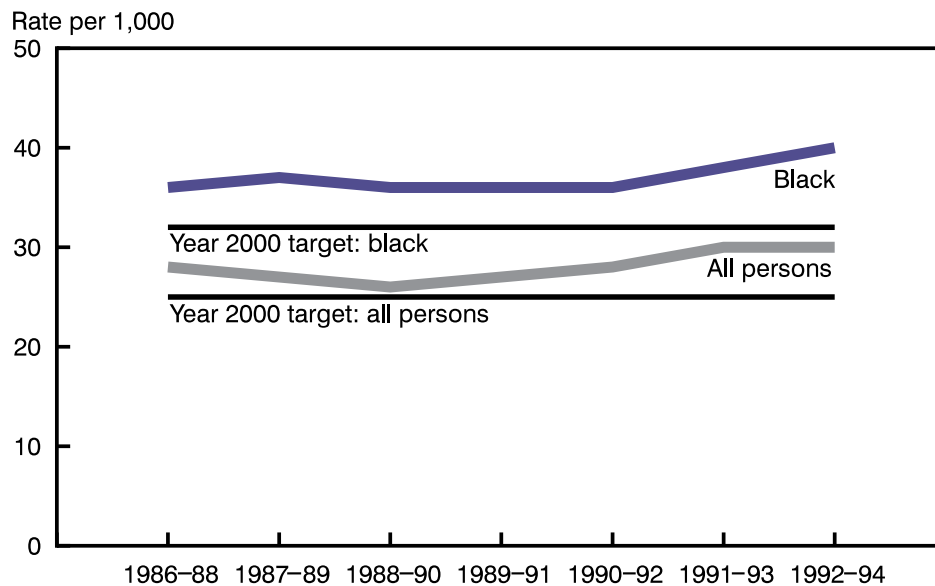
Preventing unnecessary deaths is only one item on the public health agenda. The preservation of physical and mental function is also important. Quality, not merely quantity, of life has become the issue. As the population of the United States grows older, the problems posed by chronic and disabling conditions increasingly demand the Nation's attention. Chronic and disabling conditions that significantly affect quality of life include diabetes, arthritis, deformities or orthopedic impairments, hearing and visual impairments, and mental retardation.

Disability, defined by a limitation of the ability to perform major activities caused by chronic health conditions and impairments, affects an increasing number of Americans (more than 10 percent in 1994) (1). Nearly 40 million people have functional limitations that interfere with their daily activities, and about 12 million have limitations that prevent them from working, attending school, or maintaining a household. The underlying conditions most often responsible for these limitations are arthritis, heart disease, back conditions, lower extremity impairments, and intervertebral disc disorders (2). For those under 18 years of age, the most frequent causes of activity limitation are asthma, mental retardation, mental illness, and hearing and speech impairments.

## Midcourse Modifications

Two new objectives have been added reflecting scientific developments and newly available data. As a result of recently available therapy for preventing the usual recurrence of peptic ulcer disease, most of the direct and indirect economic costs as well as the impact on human suffering and disability associated with this disease are now avoidable. Consequently, a new objective (17.21) aimed at reducing the

**Figure 18. Prevalence of diabetes: United States, 1986–88 to 1992–94, and year 2000 targets for objective 17.11**



|                       | 1986-88 | 1987-89 | 1988-90 | 1989-91 | 1990-92 | 1991-93 | 1992-94 | Year 2000 targets |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| All persons . . . . . | 28      | 27      | 26      | 27      | 28      | 30      | 30      | 25                |
| Black . . . . .       | 36      | 37      | 36      | 36      | 36      | 38      | 40      | 32                |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

prevalence of peptic ulcer disease by preventing recurrence has been added. The second new objective (17.23) seeks to increase the number of people with diabetes who receive annual dilated eye exams to detect treatable retinopathy.

In addition, objective 22.4 regarding identifying and closing data gaps for special populations has been added as a shared objective (17.22) in Priority Area 17 to highlight the need for systematic national surveillance for people with disabilities.

Four new subobjectives were added for the black population (17.3b, 17.4a, 17.14c, and 17.16a) and seven new subobjectives were added for either the total Hispanic population or Hispanic subgroups (17.2d, 17.4b, 17.9 c-d, 17.12h, 17.13a, and 17.14d).

Finally, objective 17.19 has been revised to be consistent with the Americans with Disabilities Act passed by Congress in 1990.

## Data Summary

### Highlights

Several measures of chronic disability that had been increasing showed declines in 1994. These included people limited in major activity due to chronic conditions (17.2), people limited in activity due to asthma (17.4), and people with significant hearing impairment (17.6). Rates for people with activity limitation due to chronic back conditions (17.5) and people with significant visual impairment (17.7) continued their upward trends away from the year 2000 targets in 1994. Data for 1992–94 indicate a sharp increase in diabetes incidence (17.11). The prevalence of diabetes (17.11), although remaining constant in 1992–94, has generally been increasing, especially for blacks and American Indians/Alaska Natives. Data from the 1994 National Health Interview Survey (NHIS) indicate that 80 percent of women 40–60 years of age have been counseled about the benefits of estrogen replacement therapy in the prevention of osteoporosis (17.18). Data for the new

objective on prevalence of peptic ulcer (17.21) indicate that, despite a decrease in 1994, the prevalence for 1994 was still considerably higher than the 1991 baseline.

## Summary of Progress

Data are available to assess progress for 17 of the 23 objectives in this priority area. Two objectives (17.13 and 17.23) are moving toward the year 2000 targets. Eleven (17.1, 17.2, 17.4, 17.5, 17.6, 17.7, 17.8, 17.10, 17.11, 17.12, and 17.21) are moving away from the targets. The progress of 17.14 is being measured with the data for the subobjectives and the trends are mixed. The year 2000 target for worksites with policies for hiring people with disabilities (17.19) has been met via legislation. People with self-care problems (17.3) showed no change for the noninstitutionalized population. Diabetes-related mortality (17.9) and earlier detection of significant hearing impairments (17.16) also showed no change. New baselines have been established for women receiving counseling on the benefits of estrogen replacement therapy to prevent osteoporosis (17.18). For the remaining four objectives one has no baseline (17.20) and two have no data beyond the baseline to assess progress (17.15 and 17.17). Progress for 17.22 is described in the text for Priority Area 22, which discusses the duplicate objective (22.4).

Objective 17.19 calls for the voluntary establishment of policies or programs for the hiring of people with disabilities. Since this objective was created, Congress has passed the Americans with Disabilities Act of 1990 (ADA) that prohibits all employers from discriminating against a “qualified disabled individual because of the disability in regard to job application procedures, hiring, advancement...” (3). Assuming full compliance with the ADA, this objective has been achieved via legislation.

## Data Issues

### Years of Healthy Life

The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track an objective in three priority areas

(8.1, 17.1, and 21.1). See the appendix for a discussion of years of healthy life.

## Definitions

Subobjective 17.2a (limitation in major activity due to chronic conditions) targets people with low income. Originally this subobjective was tracked with data for people with family incomes of less than \$10,000. Because of changes in the poverty level over time, data are also shown for people with family incomes below Census poverty threshold (see appendix).

The 1990 baseline data for diabetes-related deaths for Puerto Ricans (17.9d) have been revised. The original baseline published in the Midcourse Review and 1995 Revisions (4) included data for 45 States and the District of Columbia. It did not include data for New York where more than half of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States and the District of Columbia (including New York), is considerably lower than originally published and, in fact, is below the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on their birth and death certificates has varied from year to year; see appendix for more information.

Overweight (objective 17.12) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 National Health and Nutrition Examination Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective 17.12).

The data on testing/evaluation/-inquiry for objectives 17.15 and 17.17 refer to the proportion of providers who routinely provided service to 81–100 percent of their clients. Treatment/referral data represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention.

## Data Source Description

Diabetes-related mortality data (17.9) are derived from the multiple-cause-of-death files. Data include all mentions of diabetes on the death certificate, whether as an underlying or contributing cause of death. Diabetes is approximately three

times as likely to be listed as contributing cause of death than as the underlying cause.

## Comparability of Data Sources

Overweight (objective 17.12) is being tracked with two main data sources. The primary data source is the NHANES, which provided baseline data for most of the overweight objectives and the 1988–91 updates. These data are derived from measured height and weight. Interim estimates shown in an earlier publication (5), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities are derived from the NHIS. These estimates are based on self-reported heights and weights and are not comparable to the actual measured data from NHANES. Trends from the NHIS that are based on self-reported measures also show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective 17.13 (light to moderate physical activity) is being tracked with the NHIS. Because the questionnaire changed in 1991, databases for all 3 years of data (1985, 1990, and 1991) were made as similar as possible before calculating estimates. This process involved limiting the age group to 18–74 years (to correspond to the 1985 and 1990 surveys), and limiting the specific activities listed to those asked in all 3 years.

## Data Availability

The 1984–85 baseline figures for 17.3 were derived by combining estimates for the noninstitutionalized population from the NHIS with data for the nursing home population from the National Nursing Home Survey. At the present time, only data for the noninstitutionalized population are available to update progress. Update data for the total U.S. population will be available by combining data from the 1994 NHIS Second Supplement on Aging with data from the 1995 National Nursing Home Survey.

Baseline data on the proportion of perimenopausal women who have been counseled about the benefits and risks of estrogen replacement (17.18) will be available in early 1996 from the 1994 NHIS.

## References

1. National Center for Health Statistics. Unpublished data from the National Health Interview Survey. Hyattsville, Maryland. 1996.
2. LaPlante MP. Data on disability from the National Health Interview Survey, 1983–85. An Info Use Report. Washington: National Institute on Disability and Rehabilitation Research. 1988.
3. Americans with Disabilities Act of 1990. Public Law 101–336, 101st Congress. Washington: July. 1990.
4. U.S. Department of Health and Human Services. Healthy People 2000 midcourse review and 1995 revisions. Washington: Public Health Service. 1995.
5. National Center for Health Statistics. Healthy people 2000 review, 1992. Hyattsville, Maryland: Public Health Service. 1993.

**Table 17. Diabetes and chronic disabling conditions objective status**

|               | <i>Objective</i>   | <i>Baseline</i>     | <i>1992</i>        | <i>1993</i>        | <i>1994</i>        | <i>Target<br/>2000</i> |
|---------------|--|---------------------|--------------------|--------------------|--------------------|------------------------|
| <b>17.1*</b>  | <b>Years of healthy life</b>   | <sup>1</sup> 64.0   | 63.7               | 63.5               | ---                | 65                     |
|               | a. Blacks  | <sup>1</sup> 56.0   | 55.6               | 55.2               | ---                | 60                     |
|               | b. Hispanics <sup>2</sup>  | <sup>1</sup> 64.8   | <sup>3</sup> 64.0  | 63.2               | ---                | 65                     |
|               | c. People 65 years and over <sup>4</sup>                                 | <sup>1</sup> 11.9   | 11.9               | 11.9               | ---                | 14                     |
| <b>17.2</b>   | <b>Limitation in major activity due to chronic conditions</b>            | <sup>5</sup> 9.4%   | 10.3%              | 10.6%              | 10.3%              | 8%                     |
|               | a. Low-income people (annual family income less than \$10,000)           | <sup>5</sup> 18.9%  | 20.2%              | 20.9%              | 21.1%              | 15%                    |
|               | Below poverty level  | ...                 | 16.2%              | 16.5%              | 16.8%              | ...                    |
|               | b. American Indians/Alaska Natives                                       | <sup>6</sup> 13.4%  | <sup>7</sup> 12.6% | <sup>8</sup> 12.4% | <sup>9</sup> 13.3% | 11%                    |
|               | c. Blacks  | <sup>5</sup> 11.2%  | 12.2%              | 12.6%              | 12.5%              | 9%                     |
|               | d. Puerto Ricans   | <sup>10</sup> 11.7% | <sup>7</sup> 12.0% | <sup>8</sup> 12.7% | <sup>9</sup> 13.4% | 10%                    |
| <b>17.3*</b>  | <b>People with self-care problems (per 1,000)</b>                        |                     |                    |                    |                    |                        |
|               | People 65 years and over   | <sup>11</sup> 111   | ---                | ---                | ---                | 90                     |
|               | Noninstitutionalized population  | ...                 | <sup>12</sup> 77   | <sup>13</sup> 77   | ---                | ...                    |
|               | a. People 85 years and over  | <sup>11</sup> 371   | ---                | ---                | ---                | 325                    |
|               | Noninstitutionalized population  | ...                 | <sup>12</sup> 223  | <sup>13</sup> 204  | ---                | ...                    |
|               | b. Blacks 65 years and over  | <sup>11,a</sup> 132 | ---                | ---                | ---                | 98                     |
|               | Noninstitutionalized population  | ...                 | <sup>12</sup> 104  | <sup>13</sup> 112  | ---                | ...                    |
| <b>17.4</b>   | <b>Percent of people with asthma with activity limitation</b>            | <sup>14</sup> 19.4% | <sup>7</sup> 21.8% | <sup>8</sup> 22.5% | <sup>9</sup> 22.0% | 10%                    |
|               | a. Blacks  | <sup>10</sup> 30.5% | <sup>7</sup> 30.3% | <sup>8</sup> 32.1% | <sup>9</sup> 31.5% | 19%                    |
|               | b. Puerto Ricans   | <sup>10</sup> 51.5% | <sup>7</sup> 50.9% | <sup>8</sup> 42.1% | <sup>9</sup> 30.1% | 22%                    |
| <b>17.5</b>   | <b>Activity limitation due to chronic back conditions (per 1,000)</b>    | <sup>14</sup> 21.9  | <sup>7</sup> 25.3  | <sup>8</sup> 27.3  | <sup>9</sup> 28.1% | 19.0                   |
| <b>17.6</b>   | <b>Significant hearing impairment (per 1,000)</b>                        | <sup>14</sup> 88.9  | <sup>7</sup> 93.5  | <sup>8</sup> 93.6  | <sup>9</sup> 91.9  | 82.0                   |
|               | a. People 45 years and over  | <sup>14</sup> 203   | <sup>7</sup> 215.7 | <sup>8</sup> 213.2 | <sup>9</sup> 207.4 | 180                    |
| <b>17.7</b>   | <b>Significant visual impairment (per 1,000)</b>                         | <sup>14</sup> 34.5  | <sup>7</sup> 32.8  | <sup>8</sup> 34.8  | <sup>9</sup> 35.1  | 30.0                   |
|               | a. People 65 years and over  | <sup>14</sup> 87.7  | <sup>7</sup> 79.8  | <sup>8</sup> 87.4  | <sup>9</sup> 88.3  | 70.0                   |
| <b>17.8*</b>  | <b>Mental retardation (per 1,000)</b>                                    |                     |                    |                    |                    |                        |
|               | Children 10-years old  | <sup>15,a,3</sup> 1 | <sup>16</sup> 4.0  | ---                | ---                | 2.0                    |
| <b>17.9</b>   | <b>Diabetes-related deaths (age adjusted per 100,000)</b>                | <sup>13</sup> 38    | 38                 | ---                | ---                | 34                     |
|               | a. Blacks (age adjusted per 100,000)                                     | <sup>13</sup> 67    | 71                 | ---                | ---                | 58                     |
|               | b. American Indians/Alaska Natives (age adjusted per 100,000)            | <sup>13</sup> 46    | 57                 | ---                | ---                | 41                     |
|               | c. Mexican-Americans <sup>17</sup>                                       | <sup>1,a</sup> 55.7 | 51.1               | 56.6               | ---                | 50                     |
|               | d. Puerto Ricans <sup>17</sup>   | <sup>1,a</sup> 40.7 | 48.7               | 48.5               | ---                | 42                     |
| <b>17.10</b>  | <b>Diabetes-related complications</b>                                    |                     |                    |                    |                    |                        |
|               | People with diabetes   |                     |                    |                    |                    |                        |
|               | End-stage renal disease (ESRD)(per 1,000)                                | <sup>18</sup> 1.5   | <sup>19</sup> 2.0  | ---                | ---                | 1.4                    |
|               | Blindness (per 1,000)  | <sup>5</sup> 2.2    | <sup>12</sup> 5    | ---                | ---                | 1.4                    |
|               | Lower extremity amputation (per 1,000)                                   | <sup>18</sup> 8.2   | 7.8                | 7.3                | 8.6                | 4.9                    |
|               | Perinatal mortality (among infants of females with established diabetes) | <sup>5</sup> 5%     | ---                | ---                | ---                | 2%                     |
|               | Major congenital malformations   | <sup>5</sup> 8%     | ---                | ---                | ---                | 4%                     |
|               | ESRD due to diabetes (per 1,000)   |                     |                    |                    |                    |                        |
|               | a. Blacks with diabetes  | <sup>20</sup> 2.2   | <sup>19</sup> 3.1  | ---                | ---                | 2.0                    |
|               | b. American Indians/Alaska Natives with diabetes                         | <sup>20</sup> 2.1   | 5.4                | ---                | ---                | 1.9                    |
|               | Lower extremity amputations due to diabetes                              |                     |                    |                    |                    |                        |
|               | c. Blacks with diabetes (per 1,000)                                      | <sup>18,a,9</sup> 0 | 8.6                | 8.6                | 9.1                | 6.1                    |
| <b>17.11*</b> | <b>Diabetes incidence and prevalence</b>                                 |                     |                    |                    |                    |                        |
|               | Total population (per 1,000)   |                     |                    |                    |                    |                        |
|               | Incidence of diabetes  | <sup>14</sup> 2.9   | <sup>7</sup> 2.4   | <sup>8</sup> 2.8   | <sup>9</sup> 3.1   | 2.5                    |
|               | Prevalence of diabetes   | <sup>14</sup> 28    | <sup>7</sup> 28    | <sup>8</sup> 30    | <sup>9</sup> 30    | 25                     |
|               | Prevalence of diabetes (per 1,000)                                       |                     |                    |                    |                    |                        |
|               | a. American Indians/Alaska Natives <sup>21</sup>                         | <sup>18</sup> 69    | 67                 | 70                 | 73                 | 62                     |
|               | b. Puerto Ricans (ages 20–74)  | <sup>22</sup> 55    | ---                | ---                | ---                | 49                     |
|               | c. Mexican-Americans (ages 20–74)  | <sup>22</sup> 54    | ---                | ---                | ---                | 49                     |
|               | d. Cuban Americans (ages 20–74)  | <sup>22</sup> 36    | ---                | ---                | ---                | 32                     |
|               | e. Blacks (all ages)   | <sup>14</sup> 36    | <sup>7</sup> 36    | <sup>8</sup> 38    | <sup>9</sup> 40    | 32                     |

**Table 17. Diabetes and chronic disabling conditions objective status—Con.**

|               | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>          | <i>1993</i>       | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|---|----------------------|----------------------|-------------------|-------------|------------------------|
| <b>17.12*</b> | <b>Overweight prevalence</b>  |                      |                      |                   |             |                        |
|               | (Based on measured height and weight unless otherwise indicated)                    |                      |                      |                   |             |                        |
|               | Adults 20–74  | <sup>23</sup> 26%    | <sup>24,25</sup> 34% | ---               | ---         | 20%                    |
|               | Males   | <sup>23</sup> 24%    | <sup>24,26</sup> 32% | ---               | ---         | 20%                    |
|               | Females   | <sup>23</sup> 27%    | <sup>24,27</sup> 36% | ---               | ---         | 20%                    |
|               | Adolescents 12–19 years   | <sup>23</sup> 15%    | <sup>24</sup> 21%    | ---               | ---         | 15%                    |
|               | a. Low-income females 20–74 years   | <sup>23</sup> 37%    | <sup>24</sup> 47%    | ---               | ---         | 25%                    |
|               | b. Black females 20–74 years  | <sup>23</sup> 44%    | <sup>24,28</sup> 49% | ---               | ---         | 30%                    |
|               | c. Hispanic females 20–74 years   | ---                  | ---                  | ---               | ---         | 25%                    |
|               | Hispanic females 20 years and over (self-reported)                                  | ...                  | <sup>29</sup> 32%    | <sup>29</sup> 33% | ---         | ...                    |
|               | Mexican-American females 20–74 years  | <sup>22</sup> 39%    | <sup>24,30</sup> 47% | ---               | ---         | ...                    |
|               | Cuban females 20–74 years   | <sup>22</sup> 34%    | ---                  | ---               | ---         | ...                    |
|               | Puerto Rican females 20–74 years  | <sup>22</sup> 37%    | ---                  | ---               | ---         | ...                    |
|               | d. American Indians/Alaska Natives 20 years and over                                | <sup>31</sup> 29–75% | <sup>29</sup> 36%    | <sup>29</sup> 48% | ---         | 30%                    |
|               | e. People with disabilities 20 years and over (self-reported)                       | <sup>29,32</sup> 36% | <sup>29</sup> 37%    | <sup>29</sup> 38% | ---         | 25%                    |
|               | f. Females with high blood pressure 20–74 years                                     | <sup>23</sup> 50%    | ---                  | ---               | ---         | 41%                    |
|               | g. Males with high blood pressure 20–74 years                                       | <sup>23</sup> 39%    | ---                  | ---               | ---         | 35%                    |
|               | h. Mexican-American males 20–74 years   | <sup>22</sup> 30%    | <sup>24,33</sup> 36% | ---               | ---         | 25%                    |
| <b>17.13*</b> | <b>Moderate physical activity</b>   |                      |                      |                   |             |                        |
|               | People 6 years and over   | ---                  | ---                  | ---               | ---         | 30%                    |
|               | People 18–74 years  |                      |                      |                   |             |                        |
|               | 5 or more times per week  | <sup>32</sup> 22%    | <sup>34</sup> 24%    | ---               | ---         | 30%                    |
|               | 7 or more times per week  | <sup>32</sup> 16%    | <sup>34</sup> 17%    | ---               | ---         | 30%                    |
|               | a. Hispanics 18 years and over  |                      |                      |                   |             |                        |
|               | 5 or more times per week  | <sup>34</sup> 20%    | ---                  | ---               | ---         | 25%                    |
| <b>17.14</b>  | <b>Patient education for people with chronic and disabling conditions</b>           |                      |                      |                   |             |                        |
|               | a. People with diabetes   | <sup>35</sup> 32%    | <sup>34</sup> 39%    | 43%               | ---         | 75%                    |
|               |   | (classes)            |                      |                   |             |                        |
|               |   | <sup>35</sup> 68%    |                      |                   |             |                        |
|               |   | (coun-<br>selling)   |                      |                   |             |                        |
|               | b. People with asthma   | <sup>34</sup> 9%     | ---                  | 10%               | ---         | 50%                    |
|               | c. Blacks with diabetes   | <sup>34</sup> 34%    | ---                  | 50%               | ---         | 75%                    |
|               | d. Hispanics with diabetes  | <sup>34</sup> 27%    | ---                  | 26%               | ---         | 75%                    |
| <b>17.15</b>  | <b>Clinician assessment of childhood development</b>                                |                      |                      |                   |             |                        |
|               | Percent of clinicians routinely providing service to 81–100% of patients (children) |                      |                      |                   |             |                        |
|               | Visual acuity testing (3 years and over)  |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 55%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 49%    | ...                  | ---               | ---         | 80%                    |
|               | Family physicians   | <sup>36</sup> 30%    | ...                  | ---               | ---         | 80%                    |
|               | Hearing testing (3 years and over)  |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 47%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 46%    | ...                  | ---               | ---         | 80%                    |
|               | Family physicians   | <sup>36</sup> 19%    | ...                  | ---               | ---         | 80%                    |
|               | Evaluation of speech  |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 65%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 51%    | ...                  | ---               | ---         | 80%                    |
|               | Family physicians   | <sup>36</sup> 39%    | ...                  | ---               | ---         | 80%                    |
|               | Evaluation of motor development   |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 72%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 56%    | ...                  | ---               | ---         | 80%                    |
|               | Family physicians   | <sup>36</sup> 45%    | ...                  | ---               | ---         | 80%                    |
|               | Treatment/referral for vision problems  |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 67%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 35%    | ...                  | ---               | ---         | 80%                    |
|               | Family physicians   | <sup>36</sup> 56%    | ...                  | ---               | ---         | 80%                    |
|               | Treatment/referral for hearing problems   |                      |                      |                   |             |                        |
|               | Pediatricians   | <sup>36</sup> 66%    | ...                  | ---               | ---         | 80%                    |
|               | Nurse practitioners   | <sup>36</sup> 35%    | ...                  | ---               | ---         | 80%                    |

**Table 17. Diabetes and chronic disabling conditions objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>      | <i>1992</i>      | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|--------------|--|----------------------|------------------|-------------|-------------|------------------------|
|              | Family physicians . . . . .  | <sup>36</sup> 55%    | ...              | ---         | ---         | 80%                    |
|              | Treatment/referral for speech problems   |                      |                  |             |             |                        |
|              | Pediatricians . . . . .  | <sup>36</sup> 62%    | ...              | ---         | ---         | 80%                    |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 34%    | ...              | ---         | ---         | 80%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 48%    | ...              | ---         | ---         | 80%                    |
|              | Treatment/referral for motor problems  |                      |                  |             |             |                        |
|              | Pediatricians . . . . .  | <sup>36</sup> 55%    | ...              | ---         | ---         | 80%                    |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 33%    | ...              | ---         | ---         | 80%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 49%    | ...              | ---         | ---         | 80%                    |
| <b>17.16</b> | <b>Earlier detection of significant hearing impairment in children (average age in months)</b> . . . . . | <sup>2,5</sup> 24–30 | <sup>35</sup> 27 | ---         | ---         | 12                     |
|              | a. Blacks . . . . .  | <sup>34</sup> 36     | ---              | ---         | ---         | 12                     |
| <b>17.17</b> | <b>Clinician assessment of cognitive and other functioning in older adults</b> . . . . .                 | ---                  | ---              | ---         | ---         | 60%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients age 65 years and over           |                      |                  |             |             |                        |
|              | Visual acuity testing  |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 24%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 3%     | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 15%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 12%    | ...              | ---         | ---         | 60%                    |
|              | Hearing testing  |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 16%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 2%     | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 9%     | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 7%     | ...              | ---         | ---         | 60%                    |
|              | Evaluation of physical mobility  |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 41%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 18%    | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 42%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 26%    | ...              | ---         | ---         | 60%                    |
|              | Evaluation for dementia  |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 28%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 9%     | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 23%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 13%    | ...              | ---         | ---         | 60%                    |
|              | Inquiry about urinary incontinence   |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 33%    | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 30%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 15%    | ...              | ---         | ---         | 60%                    |
|              | Treatment/referral for vision problems   |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 33%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 35%    | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 63%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 54%    | ...              | ---         | ---         | 60%                    |
|              | Treatment/referral for hearing problems  |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 30%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 34%    | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 52%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 46%    | ...              | ---         | ---         | 60%                    |
|              | Prescription of mobility aids/modification of living environment to improve mobility                     |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 18%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 15%    | ...              | ---         | ---         | 60%                    |
|              | Internists . . . . .   | <sup>36</sup> 31%    | ...              | ---         | ---         | 60%                    |
|              | Family physicians . . . . .  | <sup>36</sup> 25%    | ...              | ---         | ---         | 60%                    |
|              | Investigation of referral for treatable causes of dementia   |                      |                  |             |             |                        |
|              | Nurse practitioners . . . . .  | <sup>36</sup> 31%    | ...              | ---         | ---         | 60%                    |
|              | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 27%    | ...              | ---         | ---         | 60%                    |

**Table 17. Diabetes and chronic disabling conditions objective status—Con.**

|               | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i>       | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|---------------|--|--------------------|-------------------|-------------|-------------|------------------------|
|               | Internists . . . . .   | <sup>36</sup> 54%  | ...               | ---         | ---         | 60%                    |
|               | Family physicians . . . . .  | <sup>36</sup> 40%  | ...               | ---         | ---         | 60%                    |
|               | Treatment/referral for urinary incontinence  |                    |                   |             |             |                        |
|               | Nurse practitioners . . . . .  | <sup>36</sup> 31%  | ...               | ---         | ---         | 60%                    |
|               | Obstetricians/gynecologists . . . . .  | <sup>36</sup> 56%  | ...               | ---         | ---         | 60%                    |
|               | Internists . . . . .   | <sup>36</sup> 37%  | ...               | ---         | ---         | 60%                    |
|               | Family physicians . . . . .  | <sup>36</sup> 31%  | ...               | ---         | ---         | 60%                    |
| <b>17.18</b>  | <b>Perimenopausal women counseled about estrogen replacement therapy</b>                                   |                    |                   |             |             |                        |
|               | Women 40–60 years of age . . . . .   | <sup>37</sup> 80%  | ...               | ...         | ...         | 90%                    |
|               | Women 40–49 years of age . . . . .   | <sup>37</sup> 83%  | ...               | ...         | ...         | 90%                    |
|               | Women 50–60 years of age . . . . .   | <sup>37</sup> 76%  | ...               | ...         | ...         | 90%                    |
| <b>17.19</b>  | <b>Worksites with policies for hiring people with disabilities</b>   |                    |                   |             |             |                        |
|               | Worksites with voluntary policy <sup>38</sup> . . . . .  | <sup>13</sup> 37%  | <sup>1</sup> 100% | ...         | ...         | 75%                    |
| <b>17.20</b>  | <b>Service systems for children with or at risk of chronic and disabling conditions (number of States)</b> | ---                | ---               | ---         | ---         | 50                     |
| <b>17.21</b>  | <b>Prevalence of peptic ulcer (per 1,000)</b>  |                    |                   |             |             |                        |
|               | People 18 years and over . . . . .   | <sup>34</sup> 19.9 | 23.7              | 24.4        | 23.0        | 18                     |
| <b>17.22*</b> | <b>Identify gaps in health data to establish mechanisms to meet needs<sup>39</sup></b>                     | ...                | ...               | ...         | ...         | ...                    |
| <b>17.23</b>  | <b>People with diabetes who have an annual dilated eye exam</b>  |                    |                   |             |             |                        |
|               | People 18 years and over . . . . .   | <sup>19</sup> 49%  | <sup>24</sup> 52% | ---         | ---         | 70%                    |

--- Data not available.

... Category not applicable.

<sup>0</sup>Baseline has been revised.

<sup>1</sup>1990 data.

<sup>2</sup>Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic origin data were not of sufficient quality. See appendix.

<sup>3</sup>Estimate derived from 1991–93 health status data and 1992 mortality data.

<sup>4</sup>Years of healthy life remaining at age 65.

<sup>5</sup>1988 data.

<sup>6</sup>1983–85 data.

<sup>7</sup>1990–92 data.

<sup>8</sup>1991–93 data.

<sup>9</sup>1992–94 data.

<sup>10</sup>1989–91 data.

<sup>11</sup>1984–85 data.

<sup>12</sup>1984 data.

<sup>13</sup>1986 data.

<sup>14</sup>1986–88 data.

<sup>15</sup>1985–87 data.

<sup>16</sup>1991–92 data.

<sup>17</sup>Excludes data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic origin data were not of sufficient quality. See appendix.

<sup>18</sup>1987 data.

<sup>19</sup>1989 data.

<sup>20</sup>1983–86 data.

<sup>21</sup>Data are for American Indians/Alaska Natives 15 years and over in Indian Health Service areas only.

<sup>22</sup>1982–84 data.

<sup>23</sup>1976–80 data.

<sup>24</sup>1988–91 data.

<sup>25</sup>33 percent for ages 20 years and over.

<sup>26</sup>31 percent for ages 20 years and over.

<sup>27</sup>35 percent for ages 20 years and over.

<sup>28</sup>49 percent for ages 20 years and over.

<sup>29</sup>Estimate derived from self-reported height and weight.

<sup>30</sup>47 percent for ages 20 years and over.

<sup>31</sup>1984–88 data for different tribes.

<sup>32</sup>1985 data.

<sup>33</sup>39 percent for ages 20 years and over.

<sup>34</sup>1991 data.

<sup>35</sup>1983–84 data.

<sup>36</sup>1992 data.

<sup>37</sup>1994 data.

<sup>38</sup>Assuming full compliance, achieved through passage of the Americans with Disabilities Act of 1990.

<sup>39</sup>See text for Priority Area 22 for a discussion of this objective (duplicate objective 22.4).

NOTE: Data may include revisions and, therefore, may differ from data previously published.

| <i>Objective number</i>  | <i>Data source</i>   |
|--------------------------|--|
| 17.1*, 17.1a–c           | National Vital Statistics System, CDC, NCHS; National Health Interview Survey, CDC, NCHS.  |
| 17.2, 17.2a–c            | National Health Interview Survey, CDC, NCHS.   |
| 17.3*, 17.3a             | Baseline: National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.<br>Updates: National Health Interview Survey, CDC, NCHS.   |
| 17.3b                    | National Health Interview Survey, CDC, NCHS.   |
| 17.4                     | National Health Interview Survey, CDC, NCHS.   |
| 17.5                     | National Health Interview Survey, CDC, NCHS.   |
| 17.6, 17.6a              | National Health Interview Survey, CDC, NCHS.   |
| 17.7, 17.7a              | National Health Interview Survey, CDC, NCHS.   |
| 17.8*                    | Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH.<br>Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH.  |
| 17.9, 17.9a,b            | National Vital Statistics System, CDC, NCHS.   |
| 17.10                    | For blindness: Massachusetts Blind Registry, Massachusetts Commission on the Blind;<br>For perinatal mortality and congenital malfunctions: Clinical series and selected data;<br>For ESRD: Health Care Financing Administration, Bureau of Data Management and Strategy;<br>For amputation:<br>Denominator: National Health Interview Survey, CDC, NCHS;<br>Numerator: National Hospital Discharge Survey, CDC, NCHS. |
| 17.10a                   | Health Care Financing Administration Bureau of Data Management and Strategy.   |
| 17.10b                   | Program Statistics, PHS, IHS.  |
| 17.10c                   | National Hospital Discharge Survey, CDC, NCHS.   |
| 17.11*, 17.11e           | National Health Interview Survey, CDC, NCHS.   |
| 17.11a                   | Ambulatory Utilization Data, Indian Health Service.  |
| 17.11b-d                 | Hispanic Health and Nutrition Examination Survey, CDC, NCHS.   |
| 17.12*, 17.12a,b,<br>f,g | National Health and Nutrition Examination Survey, CDC, NCHS.   |
| 17.12c,h                 | Data for Hispanics: National Health Interview Survey, CDC, NCHS.<br>Baseline for Mexican-Americans, Cubans, Puerto Ricans: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.<br>Updates for Mexican-Americans: National Health and Nutrition Examination Survey, CDC, NCHS.   |
| 17.12d                   | Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.<br>Updates: National Health Interview Survey, CDC, NCHS.  |
| 17.12e                   | National Health Interview Survey, CDC, NCHS.   |
| 17.13*, 17.13a           | National Health Interview Survey, CDC, NCHS.   |
| 17.14a                   | 1983–84 Baseline: Halpern M. The impact of diabetes education in Michigan. <i>Diabetes</i> 38(2):151A, 1989.<br>1991 Baseline and updates: National Health Interview Survey, CDC, NCHS.  |
| 17.14b                   | National Health Interview Survey, CDC, NCHS.   |
| 17.15                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 17.16                    | 1988 Baseline: Annual Survey of Hearing Impaired Children and Youth, Commission on Education of the Deaf.<br>1991 Baseline and updates: National Health Interview Survey, CDC, NCHS.   |
| 17.17                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 17.18                    | National Health Interview Survey, CDC, NCHS.   |
| 17.19                    | Baseline: Survey of Persons with Disability, International Center for the Disabled.<br>Updates: Americans with Disabilities Act of 1990.   |
| 17.21                    | National Health Interview Survey, CDC, NCHS.   |
| 17.22*                   | Subcommittee on State and Community Health Statistics, NCVHS; CDC, NCHS; OPHS, ODPHP   |
| 17.23                    | Baseline: National Health Interview Survey, CDC, NCHS; Update: National Health and Nutrition Examination Survey, CDC, NCHS.  |

\*Duplicate objective. See full text of objective following this table.



# Diabetes and Chronic Disabling Conditions Objectives

**17.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life (also referred to as quality-adjusted life years) is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure.*

Duplicate objectives: 8.1 and 21.1

**17.1a\*:** Increase years of healthy life among blacks to at least 60 years.

Duplicate objectives: 8.1a and 21.1a

**17.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 8.1b and 21.1b

**17.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 more years of healthy life.

Duplicate objectives: 8.1c and 21.1c

**17.2:** Reduce to no more than 8 percent the proportion of people who experience a limitation in major activity due to chronic conditions.

*NOTE: Major activity refers to the usual activity for one's age-gender group whether it is working, keeping house, going to school, or living independently. Chronic conditions are defined as conditions that either (1) were first noticed 3 or more months ago, or (2) belong to a group of conditions such as heart disease and diabetes, which are considered chronic regardless of when they began.*

**17.2a:** Reduce to no more than 15 percent the proportion of low-income people (annual family income of less than \$10,000 in 1988) who experience a limitation in major activity due to chronic conditions.

**17.2b:** Reduce to no more than 11 percent the proportion of

American Indians and Alaska Natives who experience a limitation in major activity due to chronic conditions.

**17.2c:** Reduce to no more than 9 percent the proportion of blacks who experience a limitation in major activity due to chronic conditions.

**17.2d:** Reduce to no more than 10 percent the proportion of Puerto Ricans who experience a limitation in major activity due to chronic conditions.

**17.3\*:** Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

*NOTE: Personal care activities are bathing, dressing, using the toilet, getting in and out of bed or chair, and eating.*

Duplicate objective: 1.13 and age-related objective for people aged 65 and older

**17.3a\*:** Reduce to no more than 325 per 1,000 people the proportion of all people aged 85 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13a

**17.3b\*:** Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13b

**17.4:** Reduce to no more than 10 percent the proportion of people with asthma who experience activity limitation.

*NOTE: Activity limitation refers to any self-reported limitation in activity attributed to asthma.*

**17.4a:** Reduce to no more than 19 percent the proportion of blacks with asthma who experience activity limitation.

**17.4b:** Reduce to no more than 22 percent the proportion of Puerto Ricans with asthma who experience activity limitation.

**17.5:** Reduce activity limitation due to chronic back conditions to a prevalence of no more than 19 per 1,000 people.

*NOTE: Chronic back conditions include intervertebral disk disorders, curvature of the back or spine, and other self-reported chronic back impairments such as permanent stiffness or deformity of the back or repeated trouble with the back. Activity limitation refers to any self-reported limitation in activity attributed to a chronic back condition.*

**17.6:** Reduce significant hearing impairment to a prevalence of no more than 82 per 1,000 people.

*NOTE: Hearing impairment covers the range of hearing deficits from mild loss in one ear to profound loss in both ears. Generally, inability to hear sounds at levels softer (less intense) than 20 decibels (dB) constitutes abnormal hearing. Significant hearing impairment is defined as having hearing thresholds for speech poorer than 25 dB. However, for this objective, self-reported hearing impairment (that is, deafness in one or both ears or any trouble hearing in one or both ears) will be used as a proxy measure for significant hearing impairment.*

**17.6a:** Reduce significant hearing impairment among people aged 45 and older to a prevalence of no more than 180 per 1,000.

**17.7:** Reduce significant visual impairment to a prevalence of no more than 30 per 1,000 people.

*NOTE: Significant visual impairment is generally defined as a permanent reduction in visual acuity and/or field of vision that is not correctable with eyeglasses or contact lenses. Severe visual impairment is defined as inability to read ordinary newsprint even with corrective lenses. For this objective, self-reported blindness in one or both eyes and other self-reported visual impairments (that is, any trouble seeing with one or both eyes even when wearing glasses or color blindness) will be used as a proxy measure for significant visual impairment.*

**17.7a:** Reduce significant visual impairment among people aged 65 and older to a prevalence of no more than 70 per 1,000.

**17.8\***: Reduce the prevalence of serious mental retardation among school-aged children to no more than 2 per 1,000 children.

*NOTE: Serious mental retardation is defined as an Intelligence Quotient (I.Q.) less than 50. This includes individuals defined by the American Association of Mental Retardation as profoundly retarded (I.Q. of 20 or less), severely retarded (I.Q. of 21–35), and moderately retarded (I.Q. of 36–50).*

Duplicate objective: 11.2

**17.9**: Reduce diabetes-related deaths to no more than 34 per 100,000.

*NOTE: Diabetes-related deaths refer to deaths from diabetes as an underlying or contributing cause.*

**17.9a**: Reduce diabetes-related deaths among blacks to no more than 58 per 100,000.

**17.9b**: Reduce diabetes-related deaths among American Indians and Alaska Natives to no more than 48 per 100,000.

**17.9c**: Reduce diabetes-related deaths among Mexican-Americans to no more than 50 per 100,000.

**17.9d**: Reduce diabetes-related deaths among Puerto Ricans to no more than 42 per 100,000.

**17.10**: Reduce the most severe complications of diabetes as follows:

|   |               |
|---|---------------|
| Complications among people with diabetes: | 2000 target   |
| End-stage renal disease                   | 1.4 per 1,000 |
| Blindness                                 | 1.4 per 1,000 |
| Lower extremity amputation                | 4.9 per 1,000 |
| Perinatal mortality <sup>1</sup>          | 2 percent     |
| Major congenital malformation             | 4 percent     |

<sup>1</sup>Among infants of women with established diabetes.

*NOTE: End-stage renal disease (ESRD) is defined as requiring dialysis or transplantation and is limited to ESRD due to diabetes. Blindness refers to blindness due to diabetic eye disease.*

**17.10a**: Reduce end-stage renal disease due to diabetes among black persons with diabetes to no more than 2 per 1,000.

**17.10b**: Reduce end-stage renal disease due to diabetes among American Indians and Alaska

Natives with diabetes to no more than 1.9 per 1,000.

**17.10c**: Reduce lower extremity amputations due to diabetes among blacks with diabetes to no more than 6.1 per 1,000.

**17.11\***: Reduce diabetes to an incidence of no more than 2.5 per 1,000 people and a prevalence of no more than 25 per 1,000 people.

Duplicate objective: 2.24

**17.11a\***: Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 2.24a

**17.11b\***: Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24b

**17.11c\***: Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24c

**17.11d\***: Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24d

**17.11e\***: Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24e

**17.12\***: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define*

*overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 2.3, and 15.10

**17.12a\***: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 15.10a

**17.12b\***: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 15.10b

**17.12c\***: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 15.10c

**17.12d\***: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 15.10d

**17.12e\***: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 15.10e

**17.12f\***: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 2.3f, and 15.10f

**17.12g\***: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 2.3g, and 15.10g

**17.12h\***: Reduce overweight to a prevalence of no more than 35 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 15.10h

**17.13\*:** Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light-to-moderate physical activity for at least 30 minutes per day.

*NOTE: Light-to-moderate physical activity requires sustained, rhythmic muscular movements, is at least equivalent to sustained walking, and is performed at less than 60 percent of maximum heart rate. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include walking, swimming, cycling, dancing, gardening and yardwork, various domestic and occupational activities, and games and other childhood pursuits.*

Duplicate objectives: 1.3 and 15.11

**17.13a\*:** Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 15.11a

**17.14:** Increase to at least 40 percent the proportion of people with chronic and disabling conditions who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14a:** Increase to at least 75 percent the proportion of people with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14b:** Increase to at least 50 percent the proportion of people with asthma who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14c:** Increase to at least 75 percent the proportion of blacks with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14d:** Increase to at least 75 percent the proportion of Hispanics with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.15:** Increase to at least 80 percent the proportion of providers of primary care for children who routinely refer or screen infants and children for impairments of vision, hearing, speech and language, and assess other developmental milestones as part of well-child care.

**17.16:** Reduce the average age at which children with significant hearing impairment are identified to no more than 12 months.

**17.16a:** Reduce the average age at which black children with significant hearing impairment are identified to no more than 12 months.

**17.17:** Increase to at least 60 percent the proportion of providers of primary care for older adults who routinely evaluate people aged 65 and older for urinary incontinence and impairments of vision, hearing, cognition, and functional status.

**17.18:** Increase to at least 90 percent the proportion of perimenopausal women who have been counseled about the benefits and risks of estrogen replacement therapy (combined with progestin, when appropriate) for prevention of osteoporosis.

**17.19:** Increase to at least 75 percent the proportion of worksites with 50 or more employees that have a policy or program for the hiring of people with disabilities.

*NOTE: Mandated by the Americans with Disabilities Act.*

**17.20:** Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101–239.

*NOTE: Children with or at risk of chronic and disabling conditions, often referred to as children with special health care needs, include children with psychosocial as well as physical problems. This population encompasses children with a wide variety of actual or potential disabling conditions, including*

*children with or at risk for cerebral palsy, mental retardation, sensory deprivation, developmental disabilities, spina bifida, hemophilia, other genetic disorders, and health-related educational and behavioral problems. Service systems for such children are organized networks of comprehensive, community-based, coordinated, and family-centered services.*

**17.21:** Reduce the prevalence of peptic ulcer disease to no more than 18 per 1,000 people aged 18 and older by preventing its recurrence.

**17.22\*:** Develop and implement a national process to identify significant gaps in the Nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs.

*NOTE: Disease prevention and health promotion data include disease status, risk factors, and services receipt data. Public health problems include such issue areas as HIV infection, domestic violence, mental health, environmental health, occupational health, and disabling conditions.*

Duplicate objective: 22.4

**17.23:** Increase to 70 percent the proportion of people with diabetes who have an annual dilated eye exam.

\*Duplicate objective.

# Priority Area 18 HIV Infection

## Background

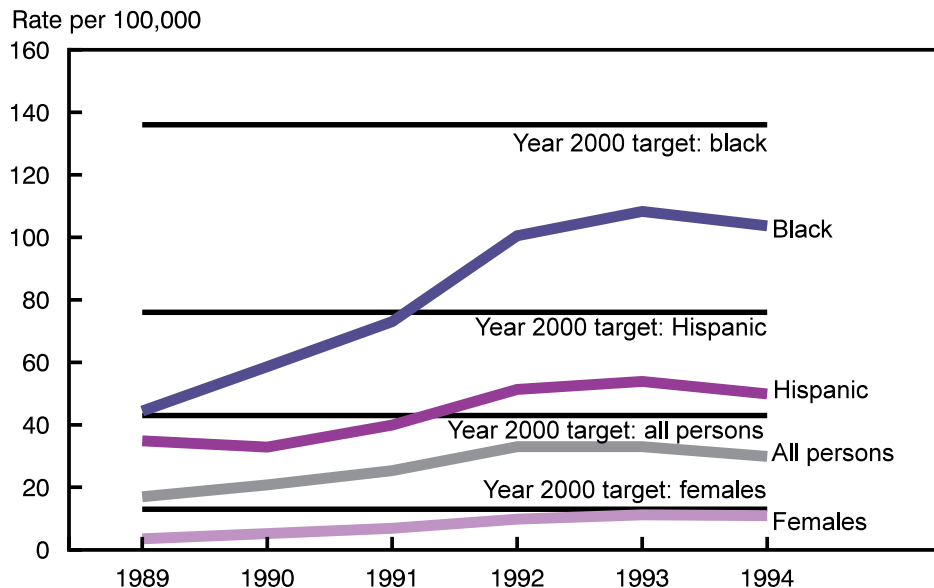
Over 500,000 people have been diagnosed with acquired immunodeficiency syndrome (AIDS) in the United States since the disease was first recognized (1). No treatment is available to cure AIDS, although antimicrobial treatments now available extend survival among those who are HIV infected. With current knowledge the HIV epidemic can only be controlled through primary preventive strategies, particularly through modifying personal behavioral risk factors. The objectives in the HIV priority area address sexual abstinence among adolescents, condom use among sexually active adolescents and unmarried adults, treatment for injecting drug users, use of uncontaminated injecting equipment among drug users who are not in treatment, HIV testing and counseling, workplace policies and employee education programs, and improving the safety of the country's blood supply.

## Midcourse Modifications

Three new objectives were added to the HIV priority area. Objective 18.16 addresses comprehensive HIV/AIDS workplace programs and objective 18.17 targets linkages between federally funded substance abuse treatment programs and primary care clinics. Objective 18.15 (adolescents' abstinence from sexual intercourse) was added as a duplicate of objective 5.5. Two new subobjectives were added to objective 18.1 to target AIDS among women and injecting drug users. Three new subobjectives were added to 18.3 targeting sexual intercourse among black males 15 years of age and 17 years of age and black females 17 years of age. One new subobjective added to 18.4 targets black females 15–44 years of age. Subobjectives for six specific health care providers who counsel their patients on prevention of HIV and other sexually transmitted diseases (STDs) were added to objective 18.9.

Because the HIV epidemic has not become as widespread as originally estimated, the target to stay under for

**Figure 19. Incidence of diagnosed AIDS cases: United States, 1989–1994, and year 2000 targets for objective 18.1**



|                        | All persons | Black | Hispanic | Females |
|------------------------|-------------|-------|----------|---------|
| 1989.....              | 17.0        | 44.4  | 34.9     | 3.5     |
| 1990.....              | 20.8        | 58.6  | 32.9     | 5.2     |
| 1991.....              | 25.3        | 73.0  | 39.9     | 6.9     |
| 1992.....              | 33.0        | 100.5 | 51.3     | 9.8     |
| 1993.....              | 33.0        | 108.3 | 53.9     | 11.2    |
| 1994.....              | 29.9        | 103.7 | 49.9     | 10.9    |
| Year 2000 targets..... | 43.0        | 136.0 | 76.0     | 13.0    |

SOURCE: Centers for Disease Control and Prevention, National Center for Infectious Diseases, AIDS Surveillance System.

objective 18.2 (HIV seroprevalence) was modified from 800 to 400 HIV-infected persons per 100,000. The target for objective 18.6, which addresses use of uncontaminated drug paraphernalia by injecting drug users, was revised to a more challenging level (from 50 to 75 percent).

Modifications in the wording were made to several objectives. Objective 18.1, which targets AIDS cases, was modified to track AIDS case rates per 100,000 population rather than the number of cases except for subobjectives 18.1a and e, which target men who have sex with men and injecting drug users, respectively. The focus of objective 18.8 was changed so that it now addresses the proportion of HIV-infected people who know their serostatus rather than the proportion who have been tested. The language of objective 18.10 was modified so that HIV and other STD education curricula

are considered together and to assure that these curricula are part of a comprehensive school health education program. This objective is now a duplicate of objective 19.12. Objective 18.11 has been modified so that it now targets the proportion of college and university students who receive information about HIV rather than the proportion of colleges and universities that provide information. Objective 18.13 (duplicate objectives 5.11 and 19.11) was expanded to include groups who are at high risk for STDs. Other objectives had slight changes in the text to make them more clear (18.5, 18.6, 18.12).

## Data Summary

### Highlights

The estimated number of AIDS cases per 100,000 population by year of

diagnosis (objective 18.1) decreased between 1993 and 1994 for the total population, blacks, Hispanics, and women. The number of cases diagnosed in 1994 among men who have sex with men and among injecting drug users also decreased compared with the number of cases in 1993. This decrease is explained in large part by the effect of the expanded 1993 AIDS surveillance case definition (2) (see Data Issues). The incidence rate of AIDS opportunistic infections, a measure that takes into account changes in the AIDS case definition, shows an 8-percent increase between 1992 and 1994 (2). The latest estimates of HIV infection (18.2) indicate that 650,000 to 900,000 Americans were infected with HIV in 1992, a rate of 250–350 per 100,000 population (shown in the table as 300 per 100,000) (3). The prevalence of HIV infection among women delivering liveborn infants (18.2c) remained at 160 per 100,000 in 1994. There has been no overall change in this rate from the 1989 baseline.

### Summary of Progress

Data to assess progress are available for 10 of the 17 objectives in this priority area. Data show progress toward the year 2000 targets for 7 objectives (18.1, 18.2, 18.4, 18.5, 18.6, 18.7, and 18.14). Objective 18.1, which aims to slow the rise in the rate of AIDS cases, shows the number of AIDS cases diagnosed in 1994 per 100,000 population as below the target. The revised data for 1992 updating objective 18.2 indicate that the prevalence of HIV infection has slowed beyond all expectation. For 18.4, condom use at last sexual intercourse, progress has been determined by the subobjectives that target adolescents. Objective 18.14, to extend to all workplaces regulations to protect workers from exposure to bloodborne infections, was met with the passage of Occupational Safety and Health Administration regulations on December 12, 1991. Two objectives (18.3 and 18.12) show trends that are moving away from the targets. Trends are mixed for objective 18.15. New baselines were established for objectives 18.10 for middle and senior high schools, and 18.16 for large and small businesses; however, there are no data available to evaluate progress. Data beyond baseline are not available for three additional objectives (18.8, 18.9,

and 18.13). Baseline data are not yet available for objectives 18.11 and 18.17.

## Data Issues

### Definitions

In January 1993 a new AIDS case definition was implemented for the AIDS Surveillance System (4). The expanded definition adds pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer to the list of diseases that indicate that AIDS has fully developed among HIV-infected people. In addition, the new definition includes HIV-infected people with a CD4 cell count below 200 cells per microliter of blood, regardless of whether those persons have opportunistic infections, neoplasms, or any other symptoms of HIV infection. These changes resulted in cases being diagnosed earlier in the course of the disease and effected a temporary increase in the number of cases reported in 1992 and 1993. The expanded definition increased the number of cases diagnosed in 1992 and 1993 because it applied to cases diagnosed in earlier years if they were reported after the new definition was implemented in 1993. In 1995, CDC began to publish estimates of the incidence of cases of AIDS opportunistic illnesses (including HIV dementia and wasting syndrome) by year of diagnosis. This will improve comparability for trend purposes.

The National Household Survey on Drug Abuse (NHSDA) provides updates to monitor objective 18.5 on the proportion of intravenous drug users who are in treatment (5). The 1992 measure shows the proportion of injecting drug users who received drug abuse treatment in the past year. Injecting drug users are defined as anyone who used a needle to inject drugs for nonmedical reasons in the past year. Enumeration of injecting drug users is difficult because of the illegality of the behavior. Therefore, the number of injecting drug users may be underestimated using this data source. In addition, the NHSDA will miss an unknown proportion of injecting drug users who are homeless, institutionalized, or difficult to locate. The NHSDA data are not comparable to the baseline measure, which was estimated from various sources.

Recent data on the proportion of injecting drug users who are not in treatment who use uncontaminated injecting equipment (objective 18.6) are available from the Cooperative Agreement for AIDS Community-Based Outreach and Intervention Research Program from the National Institute on Drug Abuse (NIDA). Baseline data were from a similar research project, the National AIDS Demonstration Research Program, also from NIDA. Data from both data sources are from selected cities and are not nationally representative. The measure to monitor this objective is the proportion of current injecting drug users who did not share needles during the last 30 days. Injecting drug users are newly recruited study participants who report injecting drugs during the past 30 days and whose drug-using behavior is confirmed by observation of track marks or positive urine tests.

### Data Source Descriptions

Data for objective 18.1 on the number of AIDS cases by year of diagnosis are available from the AIDS Surveillance System of the Centers for Disease Control and Prevention and are adjusted for both delayed and incomplete reporting (2). Data on AIDS cases are more often published by year of report than by year of diagnosis. Approximately 20 percent of AIDS cases are reported more than a year after diagnosis. The estimated number of AIDS cases by year of diagnosis changes as new data become available because AIDS cases diagnosed in previous years continue to be reported and because the adjustment factor for delays in reporting changes as new data become available. The adjustment factor for underreporting is based on the assumption that 85 percent of all AIDS cases are eventually reported, as studies of the completeness of reporting show that greater than 80 percent of AIDS cases are reported through the surveillance system (6). *Healthy People 2000* data from this surveillance system cover only the 50 States and the District of Columbia. The data usually published by this system also include United States dependencies, possessions, and Nations in free association with the United States.

## Comparability of Data Sources

The Youth Risk Behavior Survey (YRBS) provides the most recent information on adolescent postponement of sexual intercourse (18.3) and on the proportion of sexually active teenagers who used condoms during last sexual intercourse (18.4a and 18.4b). The YRBS is a school-based survey and so does not include teenagers who are not in school (truants and dropouts) and potentially at higher risk of these behaviors (7). Baseline data for females are from the National Survey of Family Growth and for males from the National Survey of Adolescent Males. Neither source of baseline data is comparable to the YRBS data. For objective 18.3, 1993 and 1995 data are for 10th and 12th grade students; earlier data are for teenagers 15 and 17 years of age. In 1993 and 1995, data for objective 18.4a and 18.4b are for all students in the 9th–12th grades; for most students, ages ranged from 14–17 years of age. Data for previous years are for teenagers 15–19 years old.

## Data Availability

No national data are routinely available that directly measure HIV seroprevalence among the general population (objective 18.2). Estimates of the prevalence of HIV infection in the U.S. population as a whole are based on mathematical models using back calculation, a statistical method that estimates the number of prior HIV infections that would account for the number of AIDS cases that have subsequently occurred (1) as well as serostatus data from the Survey in Childbearing Women and from the National Health and Nutrition Examination Survey III (3).

Nationally representative estimates of HIV seroprevalence among high-risk groups are not available. Information on the proportion infected among men who have sex with men and injecting drug users has been obtained from seroprevalence studies conducted in clinical settings as part of a sentinel surveillance system conducted by CDC in collaboration with State and local health departments (8). The surveillance system covers various clinical settings in selected metropolitan areas. Seroprevalence estimates for men who have sex with men are based on anonymous surveys conducted in STD clinics. For injecting drug users,

estimates are based on surveys among drug users entering treatment programs. Clients attending STD clinics and drug treatment programs are not representative of all persons with these high-risk behaviors. In addition, there is considerable geographic variation in seroprevalence in both groups.

## References

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**Table 18. HIV infection objective status**

|               | <i>Objective</i>   | <i>Baseline</i>                          | <i>1992</i>                    | <i>1993</i>      | <i>1994</i>        | <i>Target<br/>2000</i> |
|---------------|--|--|--------------------------------|------------------|--------------------|------------------------|
| <b>18.1</b>   | <b>Slow the rise in incidence of AIDS cases (per 100,000)</b> . . . . .                                | <sup>1</sup> 17.0                        | 33.0                           | 33.0             | 29.9               | 43                     |
|               | a. Men who have sex with men (number of cases) . . . . .   | <sup>1</sup> 27,000                      | 42,624                         | 39,440           | 33,954             | 48,000                 |
|               | b. Blacks . . . . .  | <sup>1</sup> 44.4                        | 100.5                          | 108.3            | 103.7              | 136                    |
|               | c. Hispanics . . . . .   | <sup>1</sup> 34.9                        | 51.3                           | 53.9             | 49.9               | 76                     |
|               | d. Women . . . . .   | <sup>1</sup> 3.5                         | 9.8                            | 11.2             | 10.9               | 13                     |
|               | e. Injecting drug users (number of cases) . . . . .  | <sup>1</sup> 10,300                      | 21,809                         | 23,409           | 20,608             | 25,000                 |
| <b>18.2</b>   | <b>Slow the rise in prevalence of HIV infection (per 100,000)</b> . . . . .                            | <sup>1</sup> 400                         | 300                            | ---              | ---                | 400                    |
|               | a. Men who have sex with men . . . . .   | <sup>1,a</sup> 15,000–<br>61,800         | <sup>2</sup> 3,900–<br>47,400  | ---              | ---                | 20,000                 |
|               | b. Injecting drug users . . . . .  | <sup>1,a0</sup> –48,200                  | <sup>2</sup> 600–<br>52,900    | ---              | ---                | 40,000                 |
|               | c. Females giving birth to live-born infants . . . . .   | <sup>1</sup> 160                         | 170                            | 160              | 160                | 100                    |
| <b>18.3*</b>  | <b>Adolescents who ever had sexual intercourse</b>   |  |                                |                  |                    |                        |
|               | Adolescents 15 years   |  |                                |                  |                    |                        |
|               | Females . . . . .  | <sup>3</sup> 27%                         | ---                            | 37%              | <sup>4</sup> 38%   | 15%                    |
|               | Males . . . . .  | <sup>3</sup> 33%                         | ---                            | 45%              | <sup>4</sup> 42%   | 15%                    |
|               | a. Black males . . . . .   | <sup>3</sup> 69%                         | ---                            | 82%              | <sup>4</sup> 77%   | 15%                    |
|               | Adolescents 17 years   |  |                                |                  |                    |                        |
|               | Females . . . . .  | <sup>3</sup> 50%                         | ---                            | 65%              | <sup>4</sup> 67%   | 40%                    |
|               | Males . . . . .  | <sup>3</sup> 66%                         | ---                            | 68%              | <sup>4</sup> 65%   | 40%                    |
|               | b. Black males . . . . .   | <sup>3</sup> 90%                         | ---                            | 92%              | <sup>4</sup> 88%   | 40%                    |
|               | c. Black females . . . . .   | <sup>3</sup> 66%                         | ---                            | 80%              | <sup>4</sup> 75%   | 40%                    |
| <b>18.4*</b>  | <b>Condom use at last sexual intercourse</b>   |  |                                |                  |                    |                        |
|               | Sexually active unmarried females 15–44 years . . . . .  | <sup>3</sup> 19%                         | ---                            | ---              | ---                | 50%                    |
|               | a. Sexually active females 15–19 years . . . . .   | <sup>3</sup> 26%                         | ---                            | <sup>5</sup> 46% | <sup>4</sup> 49%   | 60%                    |
|               | b. Sexually active males 15–19 years . . . . .   | <sup>3</sup> 57%                         | ---                            | <sup>5</sup> 59% | <sup>4</sup> 61%   | 75%                    |
|               | c. Injecting drug users . . . . .  | <sup>6</sup> 34%                         | ...                            | ---              | ---                | 75%                    |
|               | d. Black women 15–44 years . . . . .   | <sup>3</sup> 12.4%                       | ---                            | ---              | ---                | 75%                    |
| <b>18.5</b>   | <b>Injecting drug users in treatment</b> . . . . .   | <sup>1</sup> 11%                         | 25.5%                          | 38.0%            | ---                | 50%                    |
| <b>18.6</b>   | <b>Injecting drug users in treatment who did not share needles</b> . . . . .                           | <sup>7</sup> 30.8%                       | <sup>8</sup> 57.7%             | ...              | <sup>9</sup> 60.6% | 75%                    |
| <b>18.7</b>   | <b>Risk of transfusion-transmitted HIV infection (per units of blood)</b> . . . . .                    | <sup>1</sup> 1 per<br>40,000–<br>150,000 | <sup>10</sup> 1 per<br>221,000 | ---              | ---                | 1 per<br>250,000       |
| <b>18.8</b>   | <b>Testing for HIV infection</b>   |  |                                |                  |                    |                        |
|               | Percent of HIV-infected people who return for post test counseling . . . . .                           | <sup>10</sup> 72.5                       | ---                            | ---              | ---                | 80%                    |
| <b>18.9*</b>  | <b>Clinician counseling to prevent HIV and other sexually transmitted diseases</b> . . . . .           | <sup>11</sup> 10%                        | ---                            | ---              | ---                | 75%                    |
|               | Percent of clinicians routinely providing service to 81–100% of patients                               |  |                                |                  |                    |                        |
|               | a. Providers practicing in high incidence areas . . . . .  | ---                                      | ---                            | ---              | ---                | 90%                    |
|               | b. Family physicians . . . . .   | <sup>6</sup> 27%                         | ...                            | ---              | ---                | 75%                    |
|               | c. Internists . . . . .  | <sup>6</sup> 30%                         | ...                            | ---              | ---                | 75%                    |
|               | d. Nurse practitioners . . . . .   | <sup>6</sup> 50%                         | ...                            | ---              | ---                | 75%                    |
|               | e. Obstetricians/gynecologists . . . . .   | <sup>6</sup> 46%                         | ...                            | ---              | ---                | 75%                    |
|               | f. Pediatricians . . . . .   | <sup>6</sup> 46%                         | ...                            | ---              | ---                | 75%                    |
|               | g. Mental health care providers . . . . .  | ---                                      | ---                            | ---              | ---                | 75%                    |
| <b>18.10*</b> | <b>HIV and other STD education curricula</b>   |  |                                |                  |                    |                        |
|               | Schools offering at least one STD class . . . . .  | <sup>3</sup> 95%                         | ---                            | ---              | ---                | 95%                    |
|               | Proportion of middle and senior high schools:  |  |                                |                  |                    |                        |
|               | With HIV prevention in required courses . . . . .  | <sup>12</sup> 86%                        | ...                            | ...              | ...                | 95%                    |
|               | With STD prevention in required courses . . . . .  | <sup>12</sup> 84%                        | ...                            | ...              | ...                | 95%                    |
| <b>18.11*</b> | <b>HIV and STD education for students at colleges and universities</b> . . . . .                       | ---                                      | ---                            | ---              | ---                | 90%                    |
| <b>18.12</b>  | <b>Outreach HIV programs for drug abusers (cities with populations greater than 100,000)</b> . . . . . | <sup>7</sup> 35%                         | 32%                            | ---              | ---                | 90%                    |
| <b>18.13*</b> | <b>Clinic services for HIV and other sexually transmitted diseases</b>                                 |  |                                |                  |                    |                        |
|               | Family planning clinics . . . . .  | <sup>1</sup> 40%                         | ---                            | ---              | ---                | 50%                    |

**Table 18. HIV infection objective status—Con.**

|               | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i> | <i>1993</i> | <i>1994</i>      | <i>Target<br/>2000</i> |
|---------------|--|--------------------|-------------|-------------|------------------|------------------------|
| <b>18.14</b>  | <b>Regulations to protect workers from occupational exposure to bloodborne infections, including HIV</b> |                    |             |             |                  |                        |
|               | Proportion of work places . . . . .  | <sup>6</sup> 100%  | ...         | ---         | ---              | 100%                   |
| <b>18.15*</b> | <b>Adolescent abstinence from sexual intercourse for previous 3 months</b>                               |                    |             |             |                  |                        |
|               | Sexually active females 15–17 years. . . . .   | <sup>3</sup> 23.6% | ---         | 25%         | <sup>4</sup> 23% | 40%                    |
|               | Sexually active males 15–17 years . . . . .  | <sup>3</sup> 33%   | ---         | 33%         | <sup>4</sup> 34% | 40%                    |
| <b>18.16</b>  | <b>Comprehensive HIV/AIDS workplace programs</b>   |                    |             |             |                  |                        |
|               | Proportion of businesses with policies, management training, and employee education:                     |                    |             |             |                  |                        |
|               | Small businesses (15–49 employees) . . . . .   | <sup>4</sup> 2%    | ...         | ...         | ...              | 10%                    |
|               | Medium businesses (50–749 businesses) . . . . .  | ...                | ...         | ...         | <sup>4</sup> 7%  | ...                    |
|               | Large businesses (750 or more employees). . . . .  | <sup>4</sup> 25%   | ...         | ...         | ...              | 50%                    |
|               | Proportion of businesses with policies:  |                    |             |             |                  |                        |
|               | Small businesses (15–49 employees) . . . . .   | ...                | ...         | ...         | <sup>4</sup> 18% | ...                    |
|               | Medium businesses (50–749 businesses) . . . . .  | ...                | ...         | ...         | <sup>4</sup> 42% | ...                    |
|               | Large businesses (750 or more employees). . . . .  | ...                | ...         | ...         | <sup>4</sup> 79% | ...                    |
|               | Proportion of businesses with management training:   |                    |             |             |                  |                        |
|               | Small businesses (15–49 employees) . . . . .   | ...                | ...         | ...         | <sup>4</sup> 18% | ...                    |
|               | Medium businesses (50–749 businesses) . . . . .  | ...                | ...         | ...         | <sup>4</sup> 41% | ...                    |
|               | Large businesses (750 or more employees). . . . .  | ...                | ...         | ...         | <sup>4</sup> 77% | ...                    |
|               | Proportion of businesses with employee education:  |                    |             |             |                  |                        |
|               | Small businesses (15–49 employees) . . . . .   | ...                | ...         | ...         | <sup>4</sup> 6%  | ...                    |
|               | Medium businesses (50–749 businesses) . . . . .  | ...                | ...         | ...         | <sup>4</sup> 16% | ...                    |
|               | Large businesses (750 or more employees). . . . .  | ...                | ...         | ...         | <sup>4</sup> 32% | ...                    |
|               | Federal government departments and agencies . . . . .  | <sup>5</sup> 80%   | ...         | ...         | ...              | 100%                   |
| <b>18.17</b>  | <b>Linkages between substance abuse treatment programs and primary care clinics</b>                      |                    |             |             |                  |                        |
|               | Federally funded primary care clinics . . . . .  | ---                | ---         | ---         | ---              | 40%                    |
|               | Federally funded substance abuse treatment programs . . . . .  | ---                | ---         | ---         | ---              | 40%                    |

--- Data not available.

... Category not applicable.

<sup>8</sup>Baseline has been revised.

<sup>1</sup>1989 data.

<sup>2</sup>1991–92 data.

<sup>3</sup>1988 data.

<sup>4</sup>1995 data.

<sup>5</sup>Data are from 9th–12th grade students.

<sup>6</sup>1992 data.

<sup>7</sup>1991 data.

<sup>8</sup>Data are from January 1992 through April 1993.

<sup>9</sup>Data are from May 1993 through December 1995.

<sup>10</sup>1990 data.

<sup>11</sup>1987 data.

<sup>12</sup>1994 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.



| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 18.1,18.1a–e            | AIDS Surveillance System, CDC, NCHSTP.  |
| 18.2, 18.2a–c           | CDC, NCHSTP.  |
| 18.3*                   | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.            |
| 18.4*, 18.4d            | National Survey of Family Growth, CDC, NCHS.  |
| 18.4a                   | Baseline: National Survey of Family Growth, CDC, NCHS.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 18.4b                   | Baseline: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.  |
| 18.4c                   | National AIDS Demonstration Research Program, NIH, NIDA.  |
| 18.5                    | Baseline: National Institute on Drug Abuse, NIH.<br>Updates: National Household Survey on Drug Abuse, OAS, SAMHSA.  |
| 18.6                    | Baseline: National AIDS Demonstration Research Program, NIH, NIDA.<br>Updates: Cooperative Agreement for AIDS Community-based Outreach/Intervention Research Program, NIH, NIDA.                            |
| 18.7                    | Baseline: American Association of Blood Banks.<br>Updates: Comprehensive Blood Donations Data Set, CDC, NCHSTP.   |
| 18.8                    | HIV Counseling and Testing Data Sites System, CDC, NCHSTP.  |
| 18.9*                   | Primary Care Physician Survey of Sexual History-taking and Counseling Practices, Lewis CE and Freeman HE. <i>Western Journal of Medicine</i> , 147:165–7. 1987; Primary Care Provider Surveys, OASH, ODPHP. |
| 18.10*                  | 1989 data: AIDS education: Public school programs require more student information and teacher training, GAO, 1990.<br>1995 Baseline: School Health Policies and Programs Study, CDC, NCCDPHP.              |
| 18.12                   | CDC, NCPS.<br>Update: School Health Policies and Programs Study, CDC, NCCDPHP.  |
| 18.13*                  | National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.   |
| 18.14                   | OSHA.   |
| 18.15*                  | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.            |
| 18.16                   | Federal government: CDC.<br>Businesses: Business responds to AIDS Benchmark Survey, CDC, NCHSTP.  |

\*Duplicate objective. See full text of objective following this table.

# HIV Infection Objectives

**18.1:** Confine annual incidence of diagnosed AIDS cases to no more than 43 per 100,000 population.

*NOTE: Cases are by year of diagnosis and are corrected for delays in reporting and underreporting.*

**18.1a:** Confine annual incidence of diagnosed AIDS cases among men who have sex with men to no more than 48,000 cases.

**18.1b:** Confine annual incidence of diagnosed AIDS cases among blacks to no more than 136 per 100,000 population.

**18.1c:** Confine annual incidence of diagnosed AIDS cases among Hispanics to no more than 76 per 100,000 population.

**18.1d:** Confine annual incidence of diagnosed AIDS cases among women to no more than 13 per 100,000 population.

**18.1e:** Confine annual incidence of diagnosed AIDS cases among injecting drug users to no more than 25,000.

**18.2:** Confine the prevalence of HIV infection to no more than 400 per 100,000 people.

**18.2a:** Confine the prevalence of HIV infection among men who have sex with men to no more than 20,000 per 100,000.

**18.2b:** Confine the prevalence of HIV infection among injecting drug users to no more than 40,000 per 100,000.

**18.2c:** Confine the prevalence of HIV infection among women giving birth to live-born infants to no more than 100 per 100,000.

**18.3\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 19.9

**18.3a\*:** Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse

to no more than 15 percent.

Duplicate objectives: 5.4a and 19.9a

**18.3b\*:** Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4b and 19.9b

**18.3c\*:** Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4c and 19.9c

**18.4\*:** Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

Duplicate objective: 19.10

**18.4a\*:** Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10a

**18.4b\*:** Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.

Duplicate objective: 19.10b

**18.4c\*:** Increase to at least 75 percent the proportion of injecting drug users who used a condom at last sexual intercourse.

Duplicate objective: 19.10c

**18.4d\*:** Increase to at least 75 percent the proportion of black women aged 15–44 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10d

**18.5:** Increase to at least 50 percent the estimated proportion of all injecting drug users who are in drug abuse treatment programs.

**18.6:** Increase to at least 75 percent the estimated proportion of active injecting drug users who use only new or properly decontaminated syringes, needles, and other drug paraphernalia (“works”).

**18.7:** Reduce to no more than 1 per 250,000 units of blood and blood

components the risk of transfusion-transmitted HIV infection.

**18.8:** Increase to at least 80 percent the proportion of HIV-infected people who know their serostatus.

**18.9\*:** Increase to at least 75 percent the proportion of primary care and mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

*NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Mental health care providers include psychiatrists, psychologists, social workers, psychiatric nurses, and mental health counselors. Areas of high AIDS and sexually transmitted disease incidence are cities and States with incidence rates of AIDS cases, HIV seroprevalence, gonorrhea, or syphilis that are at least 25 percent above the national average.*

Duplicate objective: 19.14

**18.9a\*:** Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence, who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14a

**18.9b\*:** Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14b

**18.9c\*:** Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14c

**18.9d\*:** Increase to at least 75 percent the proportion of nurse practitioners who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14d

**18.9e\*:** Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14e

**18.9f\*:** Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14f

**18.9g\*:** Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14g

**18.10\*:** Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that includes the way HIV and other STDs are prevented and transmitted.

Duplicate objective: 19.12

**18.11\*:** Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 19.17

**18.12:** Increase to at least 90 percent the proportion of cities with populations over 100,000 that have outreach programs to contact drug users (particularly injecting drug users) to deliver HIV-risk-reduction messages.

*NOTE: HIV-risk-reduction messages include messages about reducing or eliminating drug use, entering drug treatment, disinfection of injection equipment if still injecting drugs, and safer sex practices.*

**18.13\*:** Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary

prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 5.11 and 19.11

**18.14:** Extend to all facilities where workers are at risk for occupational transmission of HIV regulations to protect workers from exposure to blood borne infections, including HIV infection.

**18.15\*:** Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objectives: 5.5 and 19.16

**18.16:** Increase to at least 50 percent the proportion of large businesses and to 10 percent the proportion of small businesses that implemented a comprehensive HIV/AIDS workplace program. Increase to 100 percent the proportion of Federal Government departments and agencies that implemented a comprehensive HIV/AIDS workplace program.

*NOTE: An HIV/AIDS workplace program consists of (1) an HIV/AIDS written policy, (2) managerial training about the policy and its application, and (3) HIV/AIDS employee education.*

**18.17:** Increase to at least 40 percent the number of federally funded primary care clinics that have formal established linkages with substance abuse treatment programs and increase to at least 40 percent the number of federally funded substance abuse treatment programs that have formal established linkages with primary care clinics.

\*Duplicate objective.

# Priority Area 19 Sexually Transmitted Diseases

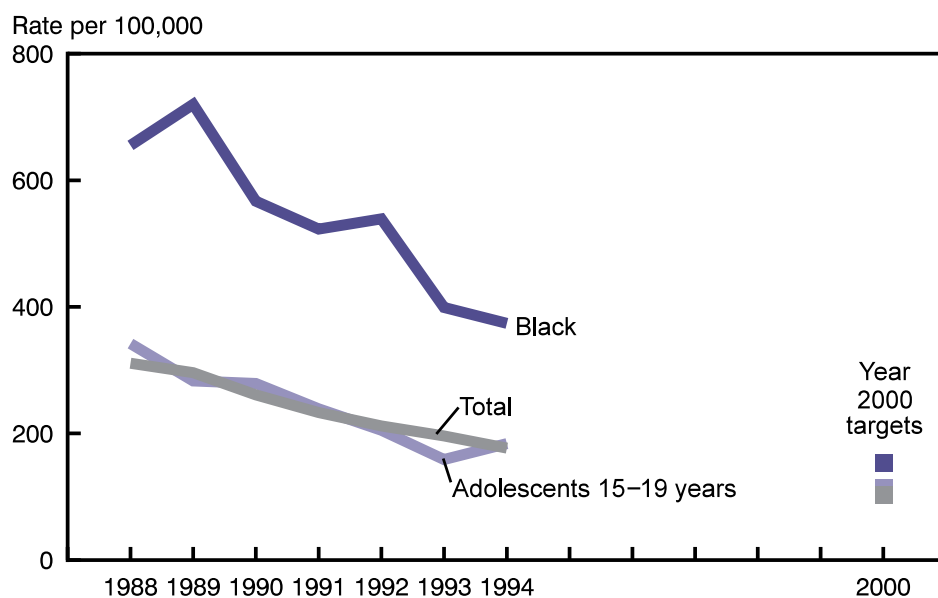
## Background

In 1989, excluding infection with the human immunodeficiency virus (HIV), almost 12 million cases of sexually transmitted diseases were reported, 86 percent of them in people 15–29 years of age (1). By age 21, approximately one of every five young people has received treatment for a sexually transmitted disease (2). Women and children suffer a disproportionate amount of the sexually transmitted disease burden, with pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects among the most serious complications. Ethnic and racial minorities also shoulder a disproportionate share of the sexually transmitted disease burden, experiencing higher rates of disease and disability than the population as a whole.

## Midcourse Modifications

Two objectives were added as duplicate objectives as part of the midcourse revision process. These are objective 19.16 (duplicate of 5.5 and 18.15), which targets adolescents' abstinence from sexual intercourse and objective 19.17 (duplicate of 18.11), which targets HIV and STD education among college students. New subobjectives to address disparities related to race and ethnicity were added. These are 19.4a and 19.4b (congenital syphilis among blacks and Hispanics), 19.6a and 19.6b (pelvic inflammatory disease hospitalizations among blacks and Hispanics), and 19.8a (repeat gonorrhea infections among black males), 19.9a, 19.9b, and 19.9c (proportion of black males 15 and 17 years of age and black females 17 years of age who have engaged in sexual intercourse), and 19.10d (black females 15–44 years whose partner used a condom at last sexual intercourse). Subobjectives for six specific health care providers who counsel their patients on prevention of HIV and other STDs were added to objective 19.14.

**Figure 20. Pelvic inflammatory disease hospitalizations among females 15–44 years of age: United States, 1988–94 and year 2000 targets for objective 19.6**



|                            | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | Year 2000 targets |
|----------------------------|------|------|------|------|------|------|------|-------------------|
| Females . . . . .          | 311  | 296  | 261  | 233  | 212  | 196  | 177  | 100               |
| Black . . . . .            | 655  | 720  | 567  | 523  | 539  | 399  | 378  | 150               |
| Ages 15–19 years . . . . . | 342  | 283  | 279  | 239  | 205  | 159  | 184  | 110               |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey.

Because of recent success in reducing sexually transmitted diseases, targets were made more challenging for objective 19.1 (gonorrhea incidence), 19.3 (incidence of primary and secondary syphilis), and 19.6 (hospitalizations for pelvic inflammatory disease). The baseline and target for objective 19.4 were modified to reflect the revised case definition for congenital syphilis. The baseline and targets for objective 19.5 (physician consultations for genital herpes and genital warts) were revised based on a reanalysis of the 1988 baseline data. Objective 19.2 originally used physician visits for nongonococcal urethritis as an indicator of chlamydia infection. Since the implementation of *Healthy People 2000*, a direct diagnostic test of chlamydia infection has become widely available. This objective was modified to directly target and track the prevalence of chlamydia infection in young women. Objective 19.6 was modified so that

initial physician visits for pelvic inflammatory disease will be targeted in addition to hospitalizations for this condition. Objective 19.11 (duplicates 5.11 and 18.13) was expanded to include groups at high risk for sexually transmitted diseases. Objective 19.12 was modified to duplicate objective 18.10 and to consider school education about both HIV infection and other sexually transmitted diseases as part of a comprehensive school health education curricula.

## Data Summary

### Highlights

Progress has been made toward achieving the sexually transmitted disease objectives. The incidence of gonorrhea infection in the general population has decreased; however, among special population subgroups

(blacks, adolescents, and women of childbearing age) 1994 data indicate a reversal of the downward trend of previous years (19.1). Progress has been made in reducing primary and secondary syphilis (19.3), congenital syphilis cases (19.4), sexually transmitted hepatitis B cases (19.7), repeat gonorrhea infections (19.8), and in increasing condom use at last sexual intercourse among sexually active teenagers (19.10). The percent of adolescents having sexual intercourse (19.9) has increased and is moving away from the year 2000 targets.

## Summary of Progress

Data to assess trends are available for 10 of 17 objectives in this priority area. Progress has been made toward targets for seven objectives (19.1, 19.3, 19.4, 19.6, 19.7, 19.8, and 19.10). Objective 19.8 met the year 2000 target. The progress for 19.10 is being measured by the update data for two subobjectives (sexually active females and males 15–19 years). The trend is mixed for two objectives (19.5 and 19.16). Data for one objective (19.9) show trends moving away from the targets (adolescents ages 15 and 17 years who ever had sexual intercourse). Data subsequent to baseline measures are unavailable for six objectives (19.2, 19.11, 19.12, 19.13, 19.14, and 19.15). Baseline data are not yet available for objective 19.17 (HIV and STD education for students at colleges and universities).

## Data Issues

### Definitions

In January 1988, CDC issued new guidelines for classifying and reporting cases of congenital syphilis (19.4). The new surveillance case definition is more useful for public health surveillance; the previous definition involved physical examination, laboratory and radiographic results, and followup serological data (3). Followup information was often difficult to obtain and led to delayed and incomplete reporting. In addition, the clinical criteria excluded stillbirths to mothers with untreated syphilis. The new case definition includes criteria for presumptive and confirmed cases of syphilis in infants and children and includes stillbirths. It allows classification for public health surveillance purposes soon after

delivery. A presumptive case includes all infants whose mothers have untreated or inadequately treated syphilis at delivery (4). The number of cases increased dramatically during 1989–91, partly as a result of the new case definition. The case definition was fully implemented in all States on January 1, 1992; trends after this point will more accurately reflect changes in the true incidence of congenital syphilis.

The data on counseling for objective 19.14 refer to the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the intervention.

## Comparability of Data Sources

The Youth Risk Behavior Survey (YRBS) provides the most recent information on adolescent postponement of sexual intercourse (19.9) and on the proportion of sexually active teenagers who used condoms during last sexual intercourse (19.10a and 19.10b). The YRBS is a school-based survey and does not include teenagers who are not in school (truants and dropouts) and potentially at higher risk of these behaviors (5). Baseline data for females are from the National Survey of Family Growth and for males from the National Survey of Adolescent Males. Neither source of baseline data is comparable to the YRBS data. For objective 19.9, 1993 and 1995 data are for 10th and 12th grade students; earlier data are for teenagers 15 and 17 years of age. In 1993 and 1995, data for subobjectives 19.10a and 19.10b are for all students in the 9th–12th grades; for most students, ages ranged from 14–17 years of age. Data for previous years are for teenagers 15–19 years of age.

## References

1. Centers for Disease Control and Prevention. Division of STD/HIV prevention annual report, 1989. Atlanta, GA: U.S. Department of Health and Human Services. 1990.
2. Washington AE, Arno PS, Brooks MA. The economic cost of pelvic inflammatory disease. *JAMA* 255:1735–8. 1986.
3. Kaufman RE, Jones OG, Blount JH, Wiesner PJ. Questionnaire survey of reported early congenital syphilis: Problems in diagnosis, prevention, and treatment. *Sex Transm Dis* 4:135–9.
4. Zenker P. New case definition for congenital syphilis reporting. *Sex Transm Dis* 18:44–5. 1991.
5. Centers for Disease Control and Prevention. Health risk behaviors among adolescents who do and do not attend schools: United States, 1992. *MMWR* 43:129–32. 1994.

**Table 19. Sexually transmitted diseases objective status**

|               | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i> | <i>1993</i>      | <i>1994</i>      | <i>Target 2000</i> |
|---------------|---|----------------------|-------------|------------------|------------------|--------------------|
| <b>19.1</b>   | <b>Gonorrhea (per 100,000)</b> . . . . .  | <sup>1</sup> 300     | 197         | 172              | 168              | 100                |
|               | a. Blacks . . . . .   | <sup>1</sup> 1,990   | 1,404       | 1,215            | 1,219            | 650                |
|               | b. Adolescents 15–19 years . . . . .  | <sup>1</sup> 1,123   | 870         | 742              | 763              | 375                |
|               | c. Females 15–44 years . . . . .  | <sup>1</sup> 501     | 336         | 278              | 312              | 175                |
| <b>19.2</b>   | <b>Chlamydia prevalence among females under 25 years</b>  |                      |             |                  |                  |                    |
|               | Females 19 years and under . . . . .  | <sup>2</sup> 12.2%   | ---         | ---              | ---              | 5%                 |
|               | Females 20–24 years . . . . .   | <sup>2</sup> 8.5%    | ---         | ---              | ---              | 5%                 |
| <b>19.3</b>   | <b>Primary and secondary syphilis (per 100,000)</b> . . . . .                                       | <sup>1</sup> 18.1    | 13.3        | 10.4             | 8.1              | 4                  |
|               | a. Blacks . . . . .   | <sup>1</sup> 118     | 97          | 77               | 60               | 30                 |
| <b>19.4</b>   | <b>Congenital syphilis (per 100,000 live births)</b> . . . . .                                      | <sup>3</sup> 91.0    | 94.7        | 79.0             | 55.6             | 40                 |
|               | a. Blacks . . . . .   | <sup>4</sup> 427     | ...         | 352              | 213.7            | 175                |
|               | b. Hispanics . . . . .  | <sup>4</sup> 135     | ...         | 102              | 71.3             | 50                 |
| <b>19.5</b>   | <b>Annual number of first time consultations<sup>5</sup></b>  |                      |             |                  |                  |                    |
|               | Genital herpes . . . . .  | <sup>2</sup> 163,000 | 139,000     | 172,000          | ---              | 138,500            |
|               | Genital warts . . . . .   | <sup>2</sup> 290,000 | 218,000     | 167,000          | ---              | 246,500            |
| <b>19.6</b>   | <b>Pelvic inflammatory disease</b>  |                      |             |                  |                  |                    |
|               | Hospitalizations per 100,000 (women 15–44 years) . . . . .  | <sup>2</sup> 311     | 212         | 196              | 177              | 100                |
|               | Initial visits to physicians (number of visits) . . . . .   | <sup>2</sup> 430,800 | ---         | ---              | ---              | 290,000            |
|               | Hospitalizations per 100,000 women  |                      |             |                  |                  |                    |
|               | a. Blacks (15–44 years) . . . . .   | <sup>2</sup> 655     | 539         | 399              | 378              | 150                |
|               | b. Adolescents (15–19 years) . . . . .  | <sup>2</sup> 342     | 205         | 159              | 184              | 110                |
| <b>19.7*</b>  | <b>Sexually transmitted hepatitis B (number of cases)</b> . . . . .                                 | <sup>6</sup> 47,593  | 52,882      | 35,849           | 31,952           | 30,500             |
| <b>19.8</b>   | <b>Repeat gonorrhea infection</b> . . . . .   | <sup>6</sup> 20%     | 18%         | 17.4%            | 14.1%            | 15%                |
|               | a. Blacks . . . . .   | <sup>4</sup> 21.3%   | ...         | 21.2%            | 15.9%            | 17%                |
| <b>19.9*</b>  | <b>Adolescents who ever had sexual intercourse</b>  |                      |             |                  |                  |                    |
|               | Adolescents 15 years  |                      |             |                  |                  |                    |
|               | Females . . . . .   | <sup>2</sup> 27%     | ---         | 37%              | <sup>7</sup> 38% | 15%                |
|               | Males . . . . .   | <sup>2</sup> 33%     | ---         | 45%              | <sup>7</sup> 42% | 15%                |
|               | a. Black males . . . . .  | <sup>2</sup> 69%     | ---         | 82%              | <sup>7</sup> 77% | 15%                |
|               | Adolescents 17 years  |                      |             |                  |                  |                    |
|               | Females . . . . .   | <sup>2</sup> 50%     | ---         | 65%              | <sup>7</sup> 67% | 40%                |
|               | Males . . . . .   | <sup>2</sup> 66%     | ---         | 68%              | <sup>7</sup> 65% | 40%                |
|               | b. Black males . . . . .  | <sup>2</sup> 90%     | ---         | 92%              | <sup>7</sup> 88% | 40%                |
|               | c. Black females . . . . .  | <sup>2</sup> 66%     | ---         | 80%              | <sup>7</sup> 75% | 40%                |
| <b>19.10*</b> | <b>Condom use at last sexual intercourse</b>  |                      |             |                  |                  |                    |
|               | Sexually active unmarried females 15–44 years . . . . .   | <sup>2</sup> 19%     | ---         | ---              | ---              | 50%                |
|               | a. Sexually active females 15–19 years . . . . .  | <sup>2</sup> 26%     | ---         | <sup>8</sup> 46% | <sup>7</sup> 49% | 60%                |
|               | b. Sexually active males 15–19 years . . . . .  | <sup>2</sup> 57%     | ---         | <sup>8</sup> 59% | <sup>7</sup> 61% | 75%                |
|               | c. Injecting drug users . . . . .   | <sup>4</sup> 34%     | ---         | ---              | ---              | 75%                |
|               | d. Black women 15–44 years . . . . .  | <sup>2</sup> 12.4%   | ---         | ---              | ---              | 75%                |
| <b>19.11*</b> | <b>Clinic services for HIV and other sexually transmitted diseases</b>                              |                      |             |                  |                  |                    |
|               | Family planning clinics . . . . .   | <sup>1</sup> 40%     | ---         | ---              | ---              | 50%                |
| <b>19.12*</b> | <b>HIV and other STD education curricula in schools</b> . . . . .                                   | <sup>2</sup> 95%     | ---         | ---              | ---              | 95%                |
|               | Proportion of middle and senior high schools  |                      |             |                  |                  |                    |
|               | HIV prevention included in required courses . . . . .   | <sup>9</sup> 86%     | ...         | ...              | ...              | 95%                |
|               | STD prevention included in required courses . . . . .   | <sup>9</sup> 84%     | ...         | ...              | ...              | 95%                |
| <b>19.13</b>  | <b>Correct management of sexually transmitted disease cases by primary care providers</b> . . . . . | <sup>2</sup> 70%     | ---         | ---              | ---              | 90%                |
| <b>19.14*</b> | <b>Clinician counseling to prevent HIV and other sexually transmitted diseases</b> . . . . .        | <sup>6</sup> 10%     | ---         | ---              | ---              | 75%                |
|               | Percent of clinicians routinely providing service to 81–100% of patients                            |                      |             |                  |                  |                    |
|               | a. Providers practicing in high incidence areas . . . . .   | ---                  | ---         | ---              | ---              | 90%                |
|               | b. Family physicians . . . . .  | <sup>4</sup> 27%     | ...         | ---              | ---              | 75%                |
|               | c. Internists . . . . .   | <sup>4</sup> 30%     | ...         | ---              | ---              | 75%                |
|               | d. Nurse practitioners . . . . .  | <sup>4</sup> 50%     | ...         | ---              | ---              | 75%                |
|               | e. Obstetricians/Gynecologists . . . . .  | <sup>4</sup> 46%     | ...         | ---              | ---              | 75%                |
|               | f. Pediatricians . . . . .  | <sup>4</sup> 46%     | ...         | ---              | ---              | 75%                |
|               | g. Mental health care providers . . . . .   | ---                  | ---         | ---              | ---              | 75%                |

**Table 19. Sexually transmitted diseases objective status—Con.**

|               | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i> | <i>1993</i> | <i>1994</i>      | <i>Target<br/>2000</i> |
|---------------|--|--------------------|-------------|-------------|------------------|------------------------|
| <b>19.15</b>  | <b>Partner notification of exposure to sexually transmitted diseases</b>         |                    |             |             |                  |                        |
|               | Patients with bacterial sexually transmitted diseases . . . . .                  | <sup>2</sup> 20%   | ---         | ---         | ---              | 50%                    |
| <b>19.16*</b> | <b>Adolescent abstinence from sexual intercourse for previous 3 months</b>       |                    |             |             |                  |                        |
|               | Sexually active females 15–17 years . . . . .                                    | <sup>2</sup> 23.6% | ---         | 25%         | <sup>7</sup> 23% | 40%                    |
|               | Sexually active males 15–17 years . . . . .                                      | <sup>2</sup> 33%   | ---         | 33%         | <sup>7</sup> 34% | 40%                    |
| <b>19.17*</b> | <b>HIV and STD education for students at colleges and universities . . . . .</b> | ---                | ---         | ---         | ---              | 90%                    |

--- Data not available.

. . . Category not applicable.

<sup>1</sup>1989 data.

<sup>2</sup>1988 data.

<sup>3</sup>1990 data.

<sup>4</sup>1992 data.

<sup>5</sup>As measured by first time visits to physicians' offices.

<sup>6</sup>1987 data.

<sup>7</sup>1995 data.

<sup>8</sup>Data are from 9th–12th grade students.

<sup>9</sup>1994 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 19.1, 19a–c             | Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.   |
| 19.2                    | Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.   |
| 19.3, 19.3a             | Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.   |
| 19.4                    | Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.   |
| 19.5                    | National Disease and Therapeutic Index, IMS America, Ltd.  |
| 19.6, 19.6a–b           | For hospitalizations, National Hospital Discharge Survey, CDC, NCHS.<br>For number of visits, National Disease and Therapeutic Index, IMSA.  |
| 19.7*                   | Viral Hepatitis Surveillance System, CDC, NCID.  |
| 19.8                    | Gonococcal Isolate Surveillance Project, CDC, NCHSTP.  |
| 19.9*                   | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.           |
| 19.10*, 19.10d          | National Survey of Family Growth, CDC, NCHS.   |
| 19.10a                  | Baseline: National Survey of Family Growth, CDC, NCHS.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.   |
| 19.10b                  | Baseline: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.   |
| 19.10c                  | National AIDS Demonstration Research Program, NIH, NIDA.   |
| 19.11*                  | National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.  |
| 19.12*                  | 1989 data: AIDS education: Public school programs require more student information and teacher training, GAO, 1990.<br>1995 Baseline: School Health Policies and Programs Study, CDC, NCCDPHP.             |
| 19.13                   | National Disease and Therapeutic Index, IMS America, Ltd.  |
| 19.14*                  | Primary Care Physician Survey of Sexual History-taking and Counseling Practices,<br>Lewis CE and Freeman HE. Western Journal of Medicine, 147: 165–7. 1987.<br>Primary Care Provider Surveys, OASH, ODPHP. |
| 19.15                   | Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.   |
| 19.16*                  | Baseline for females: National Survey of Family Growth, CDC, NCHS.<br>Baseline for males: National Survey of Adolescent Males, NIH, NICHD.<br>Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.           |

\*Duplicate objective. See full text of objective following this table.

# Sexually Transmitted Diseases Objectives

**19.1:** Reduce gonorrhea to an incidence of no more than 100 cases per 100,000 people.

**19.1a:** Reduce gonorrhea among blacks to an incidence of no more than 650 cases per 100,000.

**19.1b:** Reduce gonorrhea among adolescents aged 15–19 to no more than 375 cases per 100,000.

**19.1c:** Reduce gonorrhea among women aged 15–44 to no more than 175 cases per 100,000.

**19.2:** Reduce the prevalence of Chlamydia trachomatis infections among young women (under the age of 25 years) to no more than 5 percent.

*NOTE: As measured by a decrease in the prevalence of chlamydia infection among family planning clients*

**19.3:** Reduce primary and secondary syphilis to an incidence of no more than 4 cases per 100,000 people.

**19.3a:** Reduce primary and secondary syphilis among blacks to an incidence of no more than 30 cases per 100,000.

**19.4:** Reduce congenital syphilis to an incidence of no more than 40 cases per 100,000 live births.

**19.4a:** Reduce congenital syphilis among blacks to an incidence of no more than 175 cases per 100,000 live births.

**19.4b:** Reduce congenital syphilis among Hispanics to an incidence of no more than 50 cases per 100,000 live births.

**19.5:** Reduce genital herpes and genital warts, as measured by a reduction to 138,500 and 246,500, respectively, in the annual number of first-time consultations with a physician for the conditions.

**19.6:** Reduce the incidence of pelvic inflammatory disease, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 100 per 100,000 women aged 15–44 and a reduction in the number of initial visits to physicians for pelvic

inflammatory disease to no more than 290,000.

**19.6a:** Reduce the incidence of pelvic inflammatory disease among blacks, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 150 per 100,000 women aged 15–44.

**19.6b:** Reduce the incidence of pelvic inflammatory disease among adolescents, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 110 per 100,000 females aged 15–19.

**19.7\*:** Reduce sexually transmitted hepatitis B infection to no more than 30,500 cases.

Duplicate objectives: 20.03b and 20.03c, combined

**19.8:** Reduce the rate of repeat gonorrhea infection to no more than 15 percent within the previous year.

*NOTE: As measured by a reduction in the proportion of gonorrhea patients who, within the previous year, were treated for a separate case of gonorrhea.*

**19.8a:** Reduce the rate of repeat gonorrhea infection among blacks to no more than 17 percent within the previous year.

*NOTE: Proportion of male gonorrhea patients with one or more gonorrhea infections within the previous 12 months.*

**19.9\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 18.3

**19.9a\*:** Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 5.4a and 18.3a

**19.9b\*:** Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4b and 18.3b

**19.9c\*:** Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4c and 18.3c

**19.10\*:** Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

Duplicate objective: 18.4

**19.10a\*:** Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partner used a condom at last sexual intercourse.

Duplicate objective: 18.4a

**19.10b\*:** Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.

Duplicate objective: 18.4b

**19.10c\*:** Increase to at least 60 percent the proportion of intravenous drug users who used a condom at last sexual intercourse.

Duplicate objective: 18.4c

**19.10d\*:** Increase to at least 75 percent the proportion of black women aged 15–44 whose partner used a condom at last sexual intercourse.

Duplicate objective: 18.4d

**19.11\*:** Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 5.11 and 18.13

**19.12\*:** Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that



includes the way HIV and other STDs are prevented and transmitted. Duplicate objective: 18.10

**19.13:** Increase to at least 90 percent the proportion of primary care providers treating patients with sexually transmitted diseases who correctly manage cases, as measured by their use of appropriate types and amounts of therapy.

**19.14\*:** Increase to at least 75 percent the proportion of primary care and mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

*NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Mental health care providers include psychiatrists, psychologists, social workers, psychiatric nurses, and mental health counselors. Areas of high AIDS and sexually transmitted disease incidence are cities and States with incidence rates of AIDS cases, HIV seroprevalence, gonorrhea, or syphilis that are at least 25 percent above the national average.*

Duplicate objective: 18.9

**19.14a\*:** Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9a

**19.14b\*:** Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9b

**19.14c\*:** Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9c

**19.14d\*:** Increase to at least 75 percent the proportion of nurse practitioners who provide

appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9d

**19.14e\*:** Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9e

**19.14f\*:** Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9f

**19.14g\*:** Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9g

**19.15:** Increase to at least 50 percent the proportion of all patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) who are offered provider referral services.

*NOTE: Provider referral (previously called contact tracing) is the process whereby health department personnel directly notify the sexual partners of infected individuals of their exposure to an infected individual for the purpose of education, counseling, and referral to health care services.*

**19.16\*:** Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objective: 5.5 and 18.15

**19.17\*:** Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 18.11

\*Duplicate objective.

# Priority Area 20 Immunization and Infectious Diseases

## Background

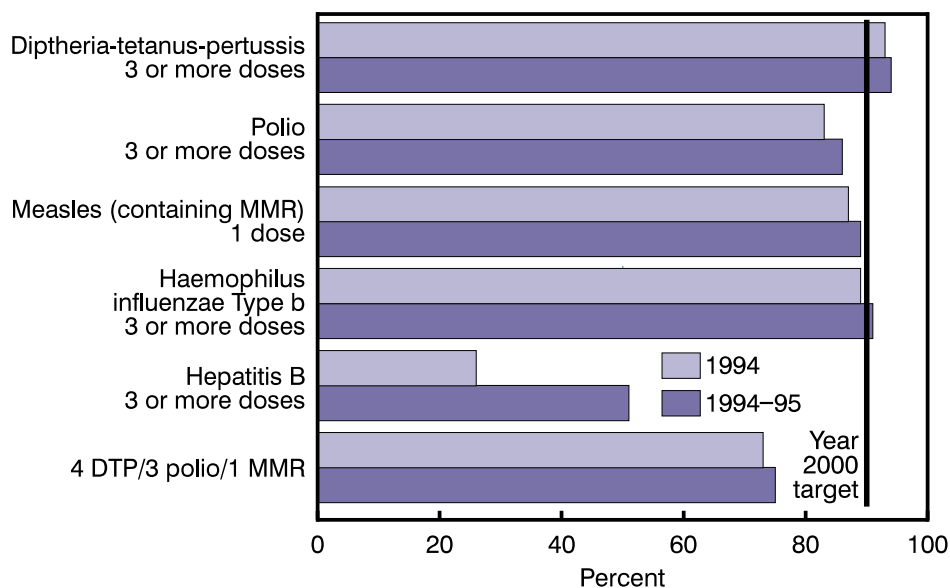
The reduction in incidence of infectious diseases is a significant public health achievement of this century. Despite the progress that has been made, infectious diseases remain an important cause of illness and death in the United States. Each of the causative agents of infectious diseases, even those that are currently rare, pose a potential threat of recurrence or development of resistance to current treatment. For example, susceptibility to active tuberculosis among persons infected with the human immunodeficiency virus (HIV) has contributed to an increase in the number of tuberculosis cases after a steady decline since the 1950's (1). The development and widespread use of vaccines has been instrumental in reducing the incidence of many infectious diseases, particularly childhood diseases. Approximately 80 percent of childhood vaccine doses are recommended for administration before the second birthday; however, under-vaccination in this age group has been a continuing problem (2). Protecting children against vaccine preventable diseases has become a national priority.

## Midcourse Modifications

Several new subobjectives were added to target racial and ethnic minorities as part of the midcourse modifications to the Infectious Diseases and Immunizations priority area. Objective 20.3h targets hepatitis B cases per 100,000 among blacks; 20.3i and j address hepatitis A case rates among Hispanics and American Indians/Alaska Natives, respectively; and 20.3k targets hepatitis C case rates among Hispanics. Objectives 20.11a and 20.11b were added to target pneumococcal pneumonia and influenza immunizations among blacks and Hispanics 65 years of age and over.

Because of previous revisions to baseline measures, the midcourse review process established new targets for 20.2 (epidemic-related pneumonia and

**Figure 21. Vaccine coverage levels for children 19–35 months of age: United States, 1994–95, and year 2000 target for objective 20.11**



|   | 1994 | 1994–95 | Year 2000 target |
|---|------|---------|------------------|
| Diphtheria-tetanus-pertussis, 3 or more doses . . . . . | 93   | 94      | 90               |
| Polio, 3 or more doses . . . . .                        | 83   | 86      | 90               |
| Measles (containing MMR), 1 dose . . . . .              | 87   | 89      | 90               |
| Haemophilus influenzae Type b, 3 or more doses . . .    | 89   | 91      | 90               |
| Hepatitis B, 3 or more doses . . . . .                  | 26   | 51      | 90               |
| 4DTP/3Polio/1MMR . . . . .                              | 73   | 75      | 90               |

SOURCES: 1994 data: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.  
1994–95 data: Centers for Disease Control and Prevention, National Immunization Program, National Immunization Survey, July 1994–June 1995.

influenza deaths), 20.3 (viral hepatitis cases), 20.6 (illness among international travelers), and 20.10 (pneumonia-related illness). Objective 20.3f was modified to address the number of chronic hepatitis B infections in infants; the baseline and target were also revised for this subobjective. Because immunization levels among preschool-aged children are measured for children 19–35 months old, the wording of objective 20.11 was modified to address the receipt of the basic immunization series among children through age 2 rather than by age 2.

## Data Summary

### Highlights

Immunization levels among children are the highest ever recorded in the

United States (objective 20.11). The proportion of children 19–35 months who have been immunized against measles, mumps, and rubella (MMR) increased from 84 percent in 1993 to 89 percent in 1994–95. The 1994 National Health Interview Survey (NHIS) data have been provider-verified and adjusted; providers were contacted and asked to provide vaccination information for each sample child. Immunization levels for *Haemophilus influenzae* Type b increased from 55 to 91 percent over the same time period. The proportion of children who have received a complete set of vaccinations comprising four doses of diphtheria-tetanus-pertussis vaccine, three doses of polio vaccine, and one dose of measles-containing (MMR) vaccine increased from 67 percent in 1993 to 75 percent in 1994–95.

Vaccination levels for pneumococcal pneumonia and influenza among people 65 years and over have also increased among the total population and also among blacks and Hispanics, although coverage in minority groups remains substantially below the year 2000 target.

Incidences of almost all vaccine-preventable diseases (20.1) continued to be low during 1994, with no cases of polio due to wild virus and fewer than 10 cases each of diphtheria and tetanus among persons under 25 years of age, and reported congenital rubella. An interruption of indigenous measles transmission likely occurred in the fall of 1993, although reintroduction of the disease resulted in moderate measles outbreaks in 1994 primarily among groups that refuse vaccination. Pertussis incidence declined by 15 percent from the 20-year high reported in 1993. Provisional data for 1995 show declines in all these vaccine-preventable diseases except congenital rubella syndrome, which indicate the same level (7 cases) as in 1994. The provisional number of measles cases in 1995 dropped to about a third of the cases in 1994 (from 963 to 301).

Although the rate is still above the 1988 baseline level, the incidence of tuberculosis has continued to decrease in the total population (20.4). Tuberculosis incidence increased between 1993 and 1994 for Asians/Pacific Islanders and American Indians/Alaska Natives. The incidence of hepatitis B has continued to decline and the number of cases among high risk groups have also declined (20.3). Data are now available to establish baseline measures to show the proportion of local health departments that have active programs to identify tuberculosis cases (20.17) and the proportion of men who have sex with men who have received hepatitis B immunizations (20.11).

### Summary of Progress

Data are available to assess progress for 14 of the 19 objectives in the Immunization and Infectious Diseases priority area. For five objectives (20.2, 20.3, 20.11, 20.13, and 20.16), there is progress toward achieving the year 2000 targets. Objective 20.2 has met the target. Trends for six objectives (20.4, 20.6, 20.9, 20.10, 20.12, and 20.18) are moving away from the target. Mixed results are shown for three objectives (20.1, 20.15, and 20.19). Data are not

yet available to provide measures after baseline for five objectives (20.5, 20.7, 20.8, 20.14, and 20.17).

## Data Issues

### Definitions

Epidemic-related pneumonia and influenza deaths are defined as those that are above the normal yearly fluctuations of mortality from these diseases. The data cannot be obtained directly from published mortality figures. Each year expected numbers of pneumonia and influenza deaths are calculated through a cyclical regression model using data for previous years but excluding data for the periods when mortality was known to be raised by influenza epidemics (3). Epidemic-related deaths are defined as those that exceed the predicted number during epidemic periods based on the model.

### Data Source Description

The National Notifiable Disease Surveillance System (NNDSS) is the data source for tracking cases of vaccine-preventable diseases (20.1). Interim data from this system are routinely published in the *Morbidity and Mortality Weekly Report*. Final data, used to track objective 20.1, are published in the *Annual Summary of Notifiable Diseases* (4). Detailed epidemiologic analyses of data from NNDSS are sometimes published in special surveillance reports. Data in these reports may not agree exactly with reports published in the *Morbidity and Mortality Weekly Report* because of differences in timing or refinements in case definition. The NNDSS is the data source for specific disease surveillance systems, such as the *Viral Hepatitis Surveillance System* and the *Tuberculosis Morbidity Data System* (20.3 and 20.4). In the case of the *Viral Hepatitis Surveillance System*, the data are corrected for underreporting.

### Comparability of Data Sources

Data sources on immunization coverage have changed over the years. The baseline data (20.11) were obtained from the 1985 United States Immunization Survey (USIS) and show the range of antigen-specific vaccination levels at the time of the interview among children 24–35 months of age.

From 1991 to 1994, the source of the immunization data changed from USIS to the NHIS and the age included in the data set was expanded to children 19–35 months of age. In 1992, the NHIS questions on childhood immunizations were modified; therefore, the 1991 data are not directly comparable to data for subsequent years. The 1992 data are now considered the baseline data for estimates from the NHIS.

In April 1994, CDC changed the data source to the National Immunization Survey (NIS) because NHIS provided only national estimates, while the NIS provides comparable national, State, and local vaccination coverage estimates. The NIS is a new, ongoing survey that provides the first population-based State and urban area-specific estimates of vaccination coverage by a standard methodology for the United States for children 19–35 months of age. The 1994–95 NIS data are for the period from July 1994 through June 1995. A full year of data for 1995 from the NIS is not available at this time.

## References

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3. Lui K-J, Kendal AP. Impact of influenza epidemics on mortality in the United States from October 1972 to May 1985. *Am J Public Health* 77:712–6. 1987.
4. Centers for Disease Control and Prevention. Summary of notifiable diseases, United States, 1990. *MMWR* 39(53). 1991.

**Table 20. Immunization and infectious diseases objective status**

|              | <i>Objective</i>  | <i>Baseline</i>      | <i>1992</i>        | <i>1993</i>        | <i>1994</i>        | <i>Target<br/>2000</i> |
|--------------|---|----------------------|--------------------|--------------------|--------------------|------------------------|
| <b>20.1</b>  | <b>Vaccine-preventable diseases (number of cases)</b>   |                      |                    |                    |                    |                        |
|              | Diphtheria among people 25 years and under . . . . .  | 11                   | 20                 | 32                 | 4,50               | 0                      |
|              | Tetanus among people 25 years and under . . . . .   | 13                   | 24                 | 35                 | ---                | 0                      |
|              | Polio (wild-type virus) . . . . .   | 10                   | 20                 | 30                 | 4,50               | 0                      |
|              | Measles . . . . .   | <sup>1,a</sup> 3,396 | <sup>2</sup> 312   | <sup>3</sup> 963   | 4,5301             | 0                      |
|              | Rubella . . . . .   | <sup>1</sup> 225     | <sup>2</sup> 192   | <sup>3</sup> 227   | 4,5146             | 0                      |
|              | Congenital Rubella Syndrome . . . . .   | 16                   | 25                 | 37                 | 4,57               | 0                      |
|              | Mumps . . . . .   | 14,866               | <sup>2</sup> 1,692 | <sup>3</sup> 1,537 | 4,5840             | 500                    |
|              | Pertussis . . . . .   | 13,450               | <sup>2</sup> 6,586 | <sup>3</sup> 4,617 | 4,54,315           | 1,000                  |
| <b>20.2</b>  | <b>Epidemic-related pneumonia and influenza deaths among people 65 years and over (per 100,000)</b> | <sup>6,a</sup> 19.1  | <sup>7</sup> 20.0  | <sup>8</sup> 15.7  | ---                | 15.9                   |
| <b>20.3*</b> | <b>Viral hepatitis cases (per 100,000)</b>  |                      |                    |                    |                    |                        |
|              | Hepatitis B (HBV) . . . . .   | <sup>9</sup> 63.5    | 37.7               | 30.9               | 28.7               | 40.0                   |
|              | Hepatitis A . . . . .   | <sup>9</sup> 33.0    | 27.2               | 28.2               | 30.9               | 16.0                   |
|              | Hepatitis C . . . . .   | <sup>9</sup> 18.3    | 5.6                | 4.4                | 4.1                | 13.7                   |
|              | Hepatitis B (number of cases)   |                      |                    |                    |                    |                        |
|              | a. Injecting drug users . . . . .   | <sup>9</sup> 44,348  | 10,576             | 15,136             | 12,817             | 7,932                  |
|              | b. Heterosexually active people . . . . .   | <sup>9</sup> 33,995  | 46,152             | 26,289             | 23,114             | 22,663                 |
|              | c. Homosexual males . . . . .   | <sup>9</sup> 13,598  | 6,730              | 9,560              | 8,838              | 4,568                  |
|              | d. Children of Asians/Pacific Islanders . . . . .   | <sup>9</sup> 10,817  | 6,730              | 5,576              | 4,759              | 1,500                  |
|              | e. Occupationally exposed workers . . . . .   | <sup>9</sup> 3,090   | 1,923              | 727                | 506                | 623                    |
|              | f. Infants (chronic infections) . . . . .   | <sup>9,a</sup> 3,863 | 2,464              | 1,992              | 1,975              | 1,111                  |
|              | g. Alaska Natives (number of new carriers) . . . . .  | <sup>9</sup> 15      | 15                 | 1                  | 0                  | 1                      |
|              | Hepatitis B (cases per 100,000)   |                      |                    |                    |                    |                        |
|              | h. Blacks . . . . .   | <sup>10</sup> 52.8   | ...                | 57.0               | 52.3               | 40                     |
|              | Hepatitis A (cases per 100,000)   |                      |                    |                    |                    |                        |
|              | i. Hispanics . . . . .  | <sup>10</sup> 53.8   | ...                | 50.6               | 61.9               | 27                     |
|              | j. American Indians/Alaska Natives . . . . .  | <sup>10</sup> 256.0  | ...                | 192.7              | 363.7              | 128                    |
|              | Hepatitis C (cases per 100,000)   |                      |                    |                    |                    |                        |
|              | k. Hispanics . . . . .  | <sup>10</sup> 17.2   | ...                | 5.2                | 3.8                | 13                     |
| <b>20.4</b>  | <b>Tuberculosis (per 100,000)</b>   | <sup>19</sup> 19.1   | 10.5               | 9.8                | 9.4                | 3.5                    |
|              | a. Asians/Pacific Islanders . . . . .   | <sup>13</sup> 6.3    | 46.6               | 44.5               | 45.3               | 15.0                   |
|              | b. Blacks . . . . .   | <sup>12</sup> 8.3    | 31.7               | 29.1               | 26.8               | 10.0                   |
|              | c. Hispanics . . . . .  | <sup>11</sup> 8.3    | 22.4               | 20.6               | 19.5               | 5.0                    |
|              | d. American Indians/Alaska Natives . . . . .  | <sup>11</sup> 8.1    | 16.3               | 14.6               | 17.4               | 5.0                    |
| <b>20.5</b>  | <b>Surgical wound and nosocomial infections</b>   |                      |                    |                    |                    |                        |
|              | Device-associated nosocomial infection rates (per 1,000 device-days)                                |                      |                    |                    |                    |                        |
|              | Bloodstream Infections  |                      |                    |                    |                    |                        |
|              | Medical/coronary ICUs . . . . .   | <sup>11</sup> 6.9    | ---                | ---                | ---                | 6.2                    |
|              | Surgical/medical-surgical ICUs . . . . .  | <sup>11</sup> 5.3    | ---                | ---                | ---                | 4.8                    |
|              | Pediatric ICUs . . . . .  | <sup>11</sup> 11.4   | ---                | ---                | ---                | 10.3                   |
|              | Urinary Tract Infections  |                      |                    |                    |                    |                        |
|              | Medical/coronary ICUs . . . . .   | <sup>11</sup> 10.7   | ---                | ---                | ---                | 9.6                    |
|              | Surgical/medical-surgical ICUs . . . . .  | <sup>11</sup> 7.6    | ---                | ---                | ---                | 6.8                    |
|              | Pediatric ICUs . . . . .  | <sup>11</sup> 5.8    | ---                | ---                | ---                | 5.2                    |
|              | Pneumonia   |                      |                    |                    |                    |                        |
|              | Medical/coronary ICUs . . . . .   | <sup>11</sup> 12.8   | ---                | ---                | ---                | 11.5                   |
|              | Surgical/medical-surgical ICUs . . . . .  | <sup>11</sup> 17.6   | ---                | ---                | ---                | 15.8                   |
|              | Pediatric ICUs . . . . .  | <sup>11</sup> 4.7    | ---                | ---                | ---                | 4.2                    |
|              | Surgical wound infection rates (per 100 operations)   |                      |                    |                    |                    |                        |
|              | Low-risk patients . . . . .   | <sup>11</sup> 1.1    | ---                | ---                | ---                | 1.0                    |
|              | Medium-low-risk patients . . . . .  | <sup>11</sup> 3.2    | ---                | ---                | ---                | 2.9                    |
|              | Medium-high-risk patients . . . . .   | <sup>11</sup> 6.3    | ---                | ---                | ---                | 5.7                    |
|              | High-risk patients . . . . .  | <sup>11</sup> 14.4   | ---                | ---                | ---                | 13.0                   |
| <b>20.6</b>  | <b>Illness among international travelers (number of cases)</b>                                      |                      |                    |                    |                    |                        |
|              | Typhoid fever . . . . .   | <sup>8</sup> 280     | <sup>12</sup> 351  | ---                | ---                | 140                    |
|              | Hepatitis A . . . . .   | <sup>8a</sup> 4,475  | 3,814              | 4,581              | <sup>5</sup> 5,681 | 1,119                  |
|              | Malaria . . . . .   | <sup>8</sup> 932     | 910                | 1,275              | <sup>12</sup> 946  | 750                    |

**Table 20. Immunization and infectious diseases objective status—Con.**

|              | <i>Objective</i>   | <i>Baseline</i>         | <i>1992</i>             | <i>1993</i>        | <i>1994</i>            | <i>Target<br/>2000</i> |
|--------------|--|-------------------------|-------------------------|--------------------|------------------------|------------------------|
| <b>20.7</b>  | <b>Bacterial meningitis (per 100,000)</b> . . . . .  | <sup>13</sup> 6.5       | ---                     | ---                | ---                    | 4.7                    |
|              | a. Alaska Natives . . . . .  | <sup>8</sup> 33         | <sup>12</sup> 17        | ---                | ---                    | 8                      |
| <b>20.8</b>  | <b>Infectious diarrhea among children in child care centers</b>  |                         |                         |                    |                        |                        |
|              | Children 0–5 years . . . . .   | <sup>12</sup> 32%       | ---                     | ---                | ---                    | 24%                    |
|              | Children 0–3 years . . . . .   | <sup>12</sup> 38%       | ---                     | ---                | ---                    | 28%                    |
| <b>20.9</b>  | <b>Ear infections among children 4 years and under (restricted activity days per 100 children)</b> . . . . . | <sup>8</sup> 135.4      | 155.2                   | 196.3              | 137.0                  | 105.0                  |
| <b>20.10</b> | <b>Pneumonia-related illness (restricted activity days per 100 people)</b>                                   |                         |                         |                    |                        |                        |
|              | People 65 years and over . . . . .   | <sup>8</sup> 19.1       | 63.5                    | 45.1               | 71.3                   | 15.1                   |
|              | Children 4 years and under . . . . .   | <sup>8</sup> 29.4       | <sup>14</sup> 19.4      | <sup>14</sup> 22.5 | 39.5                   | 24.0                   |
| <b>20.11</b> | <b>Immunization (percent immunized)</b>  |                         |                         |                    |                        |                        |
|              | Basic immunization series among children   |                         |                         |                    |                        |                        |
|              | Children 2 years and under . . . . .   | <sup>15,16</sup> 54–64% | ---                     | ---                | ---                    | 90%                    |
|              | Children 19–35 months  |                         |                         |                    |                        |                        |
|              | Diphtheria-tetanus-pertussis (3 or more doses) . . . . .   | ...                     | <sup>2</sup> 88%        | <sup>3</sup> 90%   | <sup>17</sup> 94%      | ...                    |
|              | Polio (3 or more doses) . . . . .  | ...                     | <sup>2</sup> 79%        | <sup>3</sup> 79%   | <sup>17</sup> 86%      | ...                    |
|              | Measles-containing . . . . .   | ...                     | <sup>2</sup> 84%        | <sup>3</sup> 90%   | <sup>17</sup> 89%      | ...                    |
|              | Haemophilus influenzae B (3 or more doses) . . . . .   | ...                     | <sup>2</sup> 55%        | <sup>3</sup> 75%   | <sup>17</sup> 91%      | ...                    |
|              | Hepatitis B (3 or more doses) . . . . .  | ...                     | <sup>2</sup> 16%        | <sup>3</sup> 34%   | <sup>17</sup> 51%      | ...                    |
|              | 4DTP/3Polio/1MMR . . . . .   | ...                     | <sup>2</sup> 67%        | <sup>3</sup> 68%   | <sup>17</sup> 75%      | ...                    |
|              | Children in licensed child care facilities . . . . .   | <sup>16,18</sup> 94–95% | <sup>16,19</sup> 94–96% | ---                | ---                    | 95%                    |
|              | Children in kindergarten through post-secondary education institutions. . . . .                              | <sup>16,18</sup> 97–98% | <sup>16,19</sup> 96–98% | ---                | ---                    | 95%                    |
|              | Hepatitis B immunizations  |                         |                         |                    |                        |                        |
|              | Infants of antigen-positive mothers . . . . .  | <sup>12</sup> 40%       | 71%                     | 76%                | 78%                    | 90%                    |
|              | Occupationally exposed workers . . . . .   | <sup>20</sup> 37%       | 50%                     | ---                | 67%                    | 90%                    |
|              | Injecting drug users in drug treatment programs . . . . .  | ---                     | ---                     | ---                | ---                    | 50%                    |
|              | Men who have sex with men . . . . .  | <sup>21</sup> 3%        | ...                     | ...                | ---                    | 50%                    |
|              | Pneumococcal pneumonia and influenza immunizations   |                         |                         |                    |                        |                        |
|              | Institutionalized chronically ill people or older people . . . . .   | ---                     | ---                     | ---                | ---                    | 80%                    |
|              | Noninstitutionalized high-risk populations. . . . .  | ---                     | ---                     | ---                | ---                    | 60%                    |
|              | Pneumococcal pneumonia immunizations (people 65 years and over)  |                         |                         |                    |                        |                        |
|              | Total population . . . . .   | <sup>20</sup> 14%       | <sup>12</sup> 21%       | 28%                | 30%                    | 60%                    |
|              | a. Blacks . . . . .  | <sup>12</sup> 14%       | ---                     | 14%                | 15%                    | 60%                    |
|              | b. Hispanics . . . . .   | <sup>12,a</sup> 14%     | ---                     | 12%                | 14%                    | 60%                    |
|              | Influenza immunizations (people 65 years and over)   |                         |                         |                    |                        |                        |
|              | Total population . . . . .   | <sup>20</sup> 30%       | <sup>12</sup> 42%       | 52%                | 35%                    | 60%                    |
|              | a. Blacks . . . . .  | <sup>12</sup> 27%       | ---                     | 32%                | 39%                    | 60%                    |
|              | b. Hispanics . . . . .   | <sup>12</sup> 34%       | ---                     | 47%                | 38%                    | 60%                    |
| <b>20.12</b> | <b>Postexposure rabies treatments (number)</b> . . . . .   | <sup>8</sup> 18,000     | 24,700                  | 25,000–43,000      | 22,000–43,000          | 9,000                  |
| <b>20.13</b> | <b>Immunization laws (number of States)</b> . . . . .  | <sup>20,22</sup> 10–49  | <sup>22</sup> 34–50     | ---                | <sup>17,22</sup> 42–50 | 50                     |
| <b>20.14</b> | <b>Provision of immunizations by clinicians</b> . . . . .  | ---                     | ---                     | ---                | ---                    | 90%                    |
|              | Percent of clinicians routinely providing service to 81–100% of patients                                     |                         |                         |                    |                        |                        |
|              | Children:  |                         |                         |                    |                        |                        |
|              | DTP vaccination  |                         |                         |                    |                        |                        |
|              | Pediatricians . . . . .  | <sup>10</sup> 86%       | ...                     | ---                | ---                    | 90%                    |
|              | Nurse practitioners . . . . .  | <sup>10</sup> 76%       | ...                     | ---                | ---                    | 90%                    |
|              | Family physicians . . . . .  | <sup>10</sup> 89%       | ...                     | ---                | ---                    | 90%                    |
|              | Oral polio vaccination   |                         |                         |                    |                        |                        |
|              | Pediatricians . . . . .  | <sup>10</sup> 87%       | ...                     | ---                | ---                    | 90%                    |
|              | Nurse practitioners . . . . .  | <sup>10</sup> 76%       | ...                     | ---                | ---                    | 90%                    |
|              | Family physicians . . . . .  | <sup>10</sup> 89%       | ...                     | ---                | ---                    | 90%                    |

**Table 20. Immunization and infectious diseases objective status—Con.**

| <i>Objective</i>  | <i>Baseline</i>    | <i>1992</i>         | <i>1993</i>       | <i>1994</i>      | <i>Target<br/>2000</i> |
|---|--------------------|---------------------|-------------------|------------------|------------------------|
| Tetanus-diphtheria booster (under 18 years)   |                    |                     |                   |                  |                        |
| Pediatricians . . . . .   | <sup>10</sup> 79%  | ...                 | ---               | ---              | 90%                    |
| Nurse practitioners . . . . .   | <sup>10</sup> 71%  | ...                 | ---               | ---              | 90%                    |
| Family physicians . . . . .   | <sup>10</sup> 70%  | ...                 | ---               | ---              | 90%                    |
| Hib vaccination   |                    |                     |                   |                  |                        |
| Pediatricians . . . . .   | <sup>10</sup> 85%  | ...                 | ---               | ---              | 90%                    |
| Nurse practitioners . . . . .   | <sup>10</sup> 68%  | ...                 | ---               | ---              | 90%                    |
| Family physicians . . . . .   | <sup>10</sup> 74%  | ...                 | ---               | ---              | 90%                    |
| Adults:   |                    |                     |                   |                  |                        |
| Tetanus-diphtheria booster (18 years and over)  |                    |                     |                   |                  |                        |
| Nurse practitioners . . . . .   | <sup>10</sup> 38%  | ...                 | ---               | ---              | 90%                    |
| Obstetricians/gynecologists . . . . .   | <sup>10</sup> 4%   | ...                 | ---               | ---              | 90%                    |
| Internists . . . . .  | <sup>10</sup> 29%  | ...                 | ---               | ---              | 90%                    |
| Family physicians . . . . .   | <sup>10</sup> 28%  | ...                 | ---               | ---              | 90%                    |
| Influenza vaccination (65 years and over)   |                    |                     |                   |                  |                        |
| Nurse practitioners . . . . .   | <sup>10</sup> 42%  | ...                 | ---               | ---              | 90%                    |
| Obstetricians/gynecologists . . . . .   | <sup>10</sup> 6%   | ...                 | ---               | ---              | 90%                    |
| Internists . . . . .  | <sup>10</sup> 49%  | ...                 | ---               | ---              | 90%                    |
| Family physicians . . . . .   | <sup>10</sup> 31%  | ...                 | ---               | ---              | 90%                    |
| Pneumococcal vaccination (65 years and over)  |                    |                     |                   |                  |                        |
| Nurse practitioners . . . . .   | <sup>10</sup> 33%  | ...                 | ---               | ---              | 90%                    |
| Obstetricians/gynecologists . . . . .   | <sup>10</sup> 5%   | ...                 | ---               | ---              | 90%                    |
| Internists . . . . .  | <sup>10</sup> 40%  | ...                 | ---               | ---              | 90%                    |
| Family physicians . . . . .   | <sup>10</sup> 25%  | ...                 | ---               | ---              | 90%                    |
| <b>20.15 Financial barriers to immunization</b>   |                    |                     |                   |                  |                        |
| Employment-based insurance plans that provide coverage for immunizations                          |                    |                     |                   |                  |                        |
| Conventional insurance plans . . . . .  | <sup>20</sup> 45%  | 53%                 | ---               | ---              | 100%                   |
| Preferred provider organization plans . . . . .   | <sup>20</sup> 62%  | 65%                 | ---               | ---              | 100%                   |
| Health maintenance organization plans . . . . .   | <sup>20</sup> 98%  | 95%                 | ---               | ---              | 100%                   |
| <b>20.16 Public health department provision of immunizations</b>                                  |                    |                     |                   |                  |                        |
| Pneumococcal vaccine . . . . .  | <sup>23</sup> 37%  | ---                 | <sup>21</sup> 48% | ---              | 90%                    |
| Influenza vaccine . . . . .   | <sup>23</sup> 60%  | ---                 | <sup>21</sup> 91% | ---              | 90%                    |
| Tetanus/diphtheria vaccine . . . . .  | <sup>23</sup> 70%  | ---                 | ---               | ---              | 90%                    |
| Tetanus . . . . .   | ---                | ---                 | <sup>21</sup> 85% | ---              | 90%                    |
| Diphtheria . . . . .  | ---                | ---                 | <sup>21</sup> 77% | ---              | 90%                    |
| Hepatitis B vaccine . . . . .   | <sup>21</sup> 77%  | ...                 | ...               | ---              | 90%                    |
| <b>20.17 Local health programs to identify tuberculosis</b>                                       | <sup>21</sup> 86%  | ...                 | ...               | ---              | 90%                    |
| <b>20.18 Preventive therapy for tuberculosis (percent of infected persons completing therapy)</b> | <sup>9</sup> 66.3% | <sup>12</sup> 64.9% | 65.3%             | ---              | 85%                    |
| <b>20.19 Laboratory capability for influenza diagnosis</b>  |                    |                     |                   |                  |                        |
| Tertiary care hospital laboratories . . . . .   | <sup>2</sup> 52%   | ...                 | ...               | <sup>4</sup> 57% | 85%                    |
| Secondary care hospital laboratories . . . . .  | <sup>2</sup> 45%   | ...                 | ...               | <sup>4</sup> 46% | 50%                    |
| Health maintenance organization laboratories . . . . .  | <sup>2,a</sup> 68% | ...                 | ...               | <sup>4</sup> 56% | 50%                    |

--- Data not available.

... Category not applicable.

<sup>a</sup>Baseline has been revised.

<sup>1</sup>1988 data.

<sup>2</sup>1993 data.

<sup>3</sup>1994 data.

<sup>4</sup>1995 data.

<sup>5</sup>Provisional data.

<sup>6</sup>1979–80 influenza season though 1986–87 influenza season.

<sup>7</sup>1989–90 influenza season through 1991–92 influenza season.

<sup>8</sup>1990–91 influenza season through 1992–93 influenza season.

<sup>9</sup>1987 data.

<sup>10</sup>1992 data.

<sup>11</sup>1986–90 data.

<sup>12</sup>1991 data.

<sup>13</sup>1986 data.

<sup>14</sup>Numerator has standard error of more than 30%.

<sup>15</sup>1985 data.

<sup>16</sup>Range of antigen-specific immunization levels.

<sup>17</sup>1994–95 data.

<sup>18</sup>1987–88 school year.

<sup>19</sup>1991–92 school year.

<sup>20</sup>1989 data.

<sup>21</sup>1992–93 data.

<sup>22</sup>Range depending on antigen and whether laws cover preschool and/or kindergarten and above. Excludes States with laws covering hepatitis B vaccination.

<sup>23</sup>1990 data.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 20.1                    | National Notifiable Disease Surveillance System, CDC, EPO.  |
| 20.2                    | NCID, CDC.<br>National Vital Statistics System, CDC, NCHS.  |
| 20.3*, 20.3a–c,i–k      | National Notifiable Disease Surveillance System, CDC, EPO.<br>Sentinel Counties Surveillance of Acute Viral Hepatitis.  |
| 20.3d                   | McMahon BJ, Rhoades ER, Heyward WL, et al. A comprehensive programme to reduce the incidence of hepatitis B virus infection in children. <i>Pediatr. Infect. Dis.</i> (1993) 12: 542–4.   |
| 20.3e                   | National Notifiable Disease Surveillance System, CDC, EPO.<br>Sentinel Counties Surveillance of Acute Viral Hepatitis.<br>Viral Hepatitis Surveillance Program.   |
| 20.3f                   | National Notifiable Disease Surveillance System, CDC, EPO.<br>Margolis, HS. Estimates and reported cases of hepatitis B infection and its sequelae in Alaskan natives. <i>Lancet</i> (1987) 2: 1134–6.  |
| 20.3g                   | IHS Alaskan Registry.   |
| 20.3h                   | National Notifiable Disease Surveillance System, CDC, EPO.  |
| 20.4, 20.4a–d           | Tuberculosis Morbidity Data, CDC, NCHSTP, Division of Tuberculosis Elimination.   |
| 20.5                    | National Nosocomial Infection Surveillance System, CDC, NCID.   |
| 20.6                    | Malaria Surveillance System, CDC, NCID.<br>Typhoid Surveillance System, CDC, NCID.<br>National Notifiable Disease Surveillance System, CDC, EPO.<br>Viral Hepatitis Surveillance Program.   |
| 20.7                    | Bacterial Meningitis Surveillance System, CDC, NCID.  |
| 20.7a                   | Arctic Investigations Laboratory, CDC, NCID.  |
| 20.8                    | National Health Interview Survey, CDC, NCHS.  |
| 20.9                    | National Health Interview Survey, CDC, NCHS.  |
| 20.10                   | National Health Interview Survey, CDC, NCHS.  |
| 20.11                   | Basic immunization series among children:<br>Children 2 years and under: United States Immunization Survey, CDC, NCHSTP.<br>Children 19–35 months: 1993 and 1994 Updates: National Health Interview Survey, CDC, NCHS.<br>1994–95 Update: National Immunization Survey, CDC, NIP.<br>Immunizations among children in licensed child care facilities and in schools:<br>State Immunization Survey, CDC, NCPS.<br>Hepatitis B immunizations among infants of antigen-positive women:<br>Perinatal Hepatitis Screening Grant Program, CDC, NCID.<br>Hepatitis B immunizations among occupationally exposed workers:<br>Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA; Updates: CDC, NCID.<br>Hepatitis B immunizations among men who have sex with men:<br>Young Men's Survey, San Francisco Department of Public Health. <i>MMWR</i> Vol. 45 No.10: March 15, 1996.<br>Pneumococcal and influenza immunizations among noninstitutionalized people:<br>National Health Interview Survey, CDC, NCHS. |
| 20.11a,b                | National Health Interview Survey, CDC, NCHS.  |
| 20.12                   | Rabies Vaccine and Immune Globulin Manufacturers Sales Data, CDC, NCID.   |
| 20.13                   | Survey of Immunization Laws, CDC, NCHSTP.   |
| 20.14                   | Primary Care Provider Surveys, OASH, ODPHP.   |
| 20.15                   | Health Insurance Association of America Employer Survey, Health Insurance Association of America.   |
| 20.16                   | Baseline: Immunization Grant Program Profiles, CDC, NCPS.<br>Update: National Profile of Local Health Departments, National Association of County and City Health Officials.  |

| <i>Objective number</i> | <i>Data source</i>  |
|-------------------------|---|
| 20.17                   | National Profile of Local Health Departments, National Association of County and City Health Officials. |
| 20.18                   | Tuberculosis Program Management Report Data on Completion of Preventive Therapy, CDC, NCHSTP.           |
| 20.19                   | Survey of Laboratories using Rapid Viral Diagnosis of Influenza, CDC, NCID.                             |

\*Duplicate objective. See full text of objective following this table.



# Immunization and Infectious Diseases Objectives

**20.1:** Reduce indigenous cases of vaccine-preventable diseases as follows:

| Disease                                     | 2000 target |
|---|-------------|
| Diphtheria among people aged 25 and younger | 0           |
| Tetanus among people aged 25 and younger    | 0           |
| Polio (wild-type virus)                     | 0           |
| Measles (indigenous)                        | 0           |
| Rubella                                     | 0           |
| Congenital Rubella Syndrome                 | 0           |
| Mumps                                       | 500         |
| Pertussis                                   | 1,000       |

**20.2:** Reduce epidemic-related pneumonia and influenza deaths among people aged 65 and older to no more than 15.9 per 100,000 people.

*NOTE: Epidemic-related pneumonia and influenza deaths are those that occur above and beyond the normal yearly fluctuations of mortality. Because of the extreme variability in epidemic-related deaths from year to year, they will be measured using a 3-year average.*

**20.3\*:** Reduce viral hepatitis as follows:  
 Hepatitis B (HBV): 40 per 100,000 people  
 Hepatitis A: 16.0 per 100,000 people  
 Hepatitis C: 13.7 cases per 100,000 people

**20.3a:** Reduce hepatitis B (HBV) among injecting drug users to no more than 7,932 cases.

**20.3b\*:** Reduce hepatitis B (HBV) among heterosexually active people to no more than 22,663 cases.

Duplicate objective: 19.7

**20.3c\*:** Reduce hepatitis B (HBV) among homosexual men to no more than 4,568 cases.

Duplicate objective: 19.7

**20.3d:** Reduce hepatitis B (HBV) among children of Asian and Pacific Islanders to no more than 1,500 cases.

**20.3e\*:** Reduce hepatitis B (HBV) among occupationally exposed workers to no more than 623 cases.

Duplicate objective: 10.5

**20.3f:** Reduce hepatitis B (HBV) among infants to no more than 1,111 chronic infections.

**20.3g:** Reduce hepatitis B (HBV) among Alaska Natives to no more than 1 new carrier.

**20.3h:** Reduce hepatitis B (HBV) among blacks to no more than 40 cases.

**20.3i:** Reduce hepatitis A among Hispanics to no more than 27 cases.

**20.3j:** Reduce hepatitis A among American Indians and Alaska Natives to no more than 128 cases.

**20.3k:** Reduce hepatitis C among Hispanics to no more than 13 cases.

**20.4:** Reduce tuberculosis to an incidence of no more than 3.5 cases per 100,000 people.

**20.4a:** Reduce tuberculosis among Asians and Pacific Islanders to an incidence of no more than 15 cases per 100,000.

**20.4b:** Reduce tuberculosis among blacks to an incidence of no more than 10 cases per 100,000.

**20.4c:** Reduce tuberculosis among Hispanics to an incidence of no more than 5 cases per 100,000.

**20.4d:** Reduce tuberculosis among American Indians and Alaska Natives to an incidence of no more than 5 cases per 100,000.

**20.5:** Reduce by at least 10 percent the incidence of surgical wound infections and nosocomial infections in intensive care patients.

**20.6:** Reduce selected illness among international travelers, as follows:

Typhoid fever: 140 cases  
 Hepatitis A: 1,119 cases  
 Malaria: 750 cases

**20.7:** Reduce bacterial meningitis to no more than 4.7 cases per 100,000 people.

**20.7a:** Reduce bacterial meningitis among Alaska Natives to no more than 8 cases per 100,000 people.

**20.8:** Reduce infectious diarrhea by at least 25 percent among children in licensed child care centers and children in programs that provide an Individualized Education Program (IEP) or Individualized Health Plan (IHP).

**20.9:** Reduce acute middle ear infections among children aged 4 and younger, as measured by days of restricted activity or school absenteeism, to no more than 105 days per 100 children.

**20.10:** Reduce pneumonia-related days of restricted activity as follows:

15.1 days per 100 people aged 65 and older.  
 24 days per 100 children aged 4 and younger.

**20.11:** Increase immunization levels as follows:

Basic immunization series among children under age 2: at least 90 percent.

Basic immunization series among children in licensed child care facilities and kindergarten through post-secondary education institutions: at least 95 percent.

Hepatitis B immunization among high-risk populations, including infants of hepatitis B surface antigen-positive mothers to at least 90 percent; occupationally exposed workers to at least 90 percent; injecting drug users in drug treatment programs to at least 50 percent; and men who have sex with men to at least 50 percent.

Pneumococcal pneumonia and influenza immunization among institutionalized chronically ill or older people: at least 80 percent.

Pneumococcal pneumonia and influenza immunization among noninstitutionalized, high-risk populations, as defined by the Immunization Practices Advisory Committee: at least 60 percent.

Duplicate objective for occupationally exposed workers: 10.9

**20.11a:** Increase pneumococcal pneumonia and influenza immunization among blacks aged 65 years and older to 60 percent.

**20.11b:** Increase pneumococcal pneumonia and influenza immunization among Hispanics aged 65 years and older to 60 percent.

**20.12:** Reduce postexposure rabies treatments to no more than 9,000 per year.

**20.13:** Expand immunization laws for schools, preschools, and day care settings to all States for all antigens.

**20.14:** Increase to at least 90 percent the proportion of primary care providers who provide information and counseling about immunizations and offer immunizations as appropriate for their patients.

**20.15:** Improve the financing and delivery of immunizations for children and adults so that virtually no American has a financial barrier to receiving recommended immunizations.

**20.16:** Increase to at least 90 percent the proportion of public health departments that provide adult immunization for influenza, pneumococcal disease, hepatitis B, tetanus, and diphtheria.

**20.17:** Increase to at least 90 percent the proportion of local health departments that have ongoing programs for actively identifying cases of tuberculosis and latent infection in populations at high risk for tuberculosis.

*NOTE: Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

**20.18:** Increase to at least 85 percent the proportion of people found to have tuberculosis infection who completed courses of preventive therapy.

**20.19:** Increase to at least 85 percent the proportion of tertiary care hospital laboratories and to at least 50 percent the proportion of secondary care hospital and health maintenance organization laboratories possessing technologies for rapid viral diagnosis of influenza.

\*Duplicate objective.

# Priority Area 21 Clinical Preventive Services

## Background

Clinical preventive services are those disease prevention and health promotion services such as immunizations, screening for early detection of disease or risk factors, and patient counseling that are delivered to individuals in a health care setting. The U.S. Clinical Preventive Services Task Force, a panel of prevention experts convened by the U.S. Public Health Service, first reviewed the full range of scientific literature on clinical preventive services and developed scientifically sound recommendations for specific services based on age, sex, and other risk factors in 1989 (1) and updated the recommendations in 1996 (2).

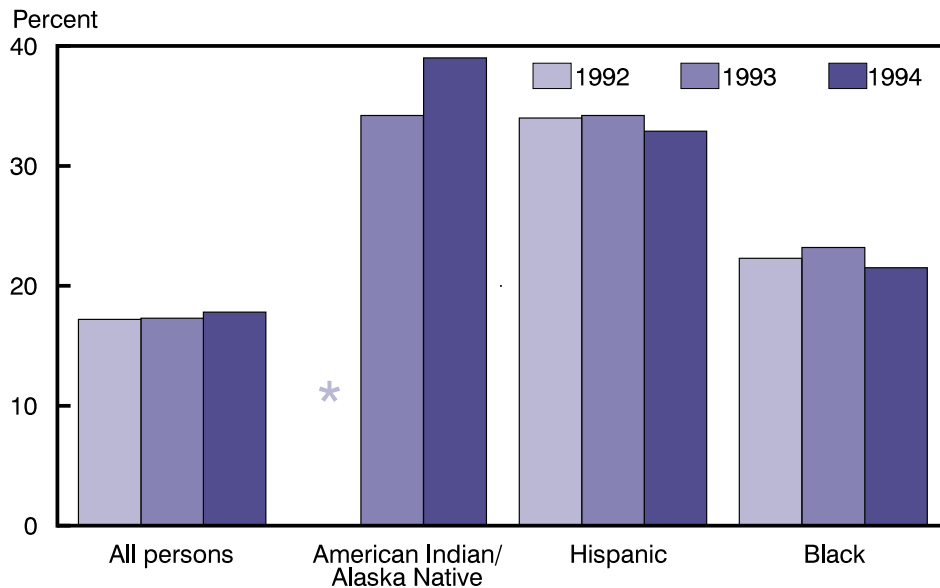
Preventive services for specific diseases and health-related behaviors are addressed in other priority areas of *Healthy People 2000*. For example, receipt of Pap smears, clinical breast exams, and mammography are addressed in the cancer priority area. The objectives in this priority area support those objectives by considering clinical preventive services as a complete package and addressing barriers that impede access to and receipt of these services.

## Midcourse Modifications

Midcourse modifications to the Clinical Preventive Services Priority Area included the addition of new subobjectives to highlight disparities between minorities and the total population for objectives 21.3 and 21.4. Objectives 21.3d and 21.3e target the proportion of people who have a usual source of primary care among American Indians/Alaska Natives and Asians/Pacific Islanders. Objectives 21.4a–c address financial barriers for medical care among American Indians/Alaska Natives, Hispanics, and blacks. Objective 21.8a was added to target the proportion of enrollees in schools of nursing who are from minority populations.

The baseline measures for objective 21.3 were changed to use 1991 data in

**Figure 22. Proportion of persons under 65 years of age without health care coverage: United States, 1992–94, objective 21.4**



|   | 1992 | 1993 | 1994 |
|---|------|------|------|
| All persons . . . . .                   | 17.2 | 17.3 | 17.8 |
| American Indian/Alaska Native . . . . . | ---  | 34.2 | 39.0 |
| Hispanic . . . . .                      | 34.0 | 34.2 | 32.9 |
| Black . . . . .                         | 22.3 | 23.2 | 21.5 |

--- Data not available.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

order to have the same data source, the National Health Interview Survey (NHIS), for both baseline and tracking data. Objective 21.2 was modified to consider receipt of individual clinical preventive service rather than receipt of a complete set of recommended services. Subobjectives are no longer specified for this objective; however, special population groups are considered where there was at least a 10 percent difference between the measure for that group compared with the total population based on baseline data.

## Data Summary

### Highlights

The average number of years of healthy life (21.1) decreased for the third consecutive year for the total population. Contributing to this decline was the first drop in life expectancy at birth since 1980 (3). Data on the proportion of adults who received recommended clinical preventive

services in 1994 show improvements for many specific services compared with 1991 and 1992 baseline data. For example, the proportion of adults who received a tetanus booster in the last 10 years improved from 52 percent in 1991 to 56 percent in 1994. Pneumococcal and influenza vaccinations among older adults improved to an even greater extent. More women received Pap tests in the previous 3 years and mammograms in the previous 2 years in 1994 compared with 1992. The proportion of the adult population with a specific source of primary care has increased from 80 percent in 1991 to 84 percent in 1994 (21.3). Hispanic and black adults as well as other subgroups of the population are less likely to have a specific source of primary care, but improvements have occurred for these groups as well. The proportion of adults under 65 years old without health care coverage increased from 15.7 percent in 1989 to almost 18 percent in 1994 (21.4). The proportion of people without health care coverage is used as a proxy

measure of financial barriers to receiving recommended clinical preventive services.

## Summary of Progress

Data are available for five of the eight Clinical Preventive Services objectives to assess trends toward meeting the year 2000 targets. For two objectives (21.3 and 21.8), data show progress toward achieving the year 2000 targets. Trends are moving away from targets for two objectives (21.1 and 21.4). Trends are mixed for objective 21.2. Data beyond baseline are not available for three objectives (21.5, 21.6, and 21.7).

## Data Issues

### Years of Healthy Life

The concept of increasing years of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track an objective in three priority areas (8.1, 17.1, and 21.1). See the appendix for a discussion of years of healthy life.

## Definitions

Questions to establish receipt of clinical preventive services among adults are obtained through periodic supplements to the NHIS. The supplements provide limited information on the counseling recommendations, and recommendations for high-risk groups are not addressed. Respondents were asked if they had been asked about at least one behavior that indicates the need for counseling at their last routine checkup. If the response was positive, this was used as an indicator that the person had received at least one recommended counseling service.

## Comparability of Data Sources

Data on the proportion of people who have a specific source of ongoing primary care are obtained from the NHIS (objective 21.3). In 1991 and 1992, information on source of primary care was received from one adult randomly selected from among household members. Beginning in 1993, a knowledgeable adult respondent provided information for all members of the household.

Data on the proportion of people under 65 years of age who do not have

health care coverage are from the NHIS (21.4). The 1989 baseline data and tracking data from 1992 and 1993 updates are not directly comparable because of questionnaire changes.

## Proxy Measures

The proportion of the U.S. population under 65 years of age that does not have health care coverage (private insurance, Medicare, Medicaid, or a military plan) is used to measure progress for objective 21.4, financial barriers to receiving recommended clinical preventive services. However, this only provides a partial measure for the objective since many health insurance plans do not provide full coverage for preventive health care. In 1988, only 41 percent of employer-sponsored health insurance plans covered adult physical examinations, 56 percent covered well baby care, and 69 percent covered preventive diagnostic tests (4).

## References

1. U.S. Preventive Services Task Force. Guide to clinical preventive services: An assessment of the effectiveness of 169 interventions. Report of the U.S. Preventive Services Task Force. Baltimore, Maryland: Williams and Wilkins. 1989.
2. U.S. Preventive Services Task Force. Guide to clinical preventive services, 2nd ed. Baltimore, Maryland: Williams and Wilkins. 1996.
3. National Center for Health Statistics. Advance report of final mortality statistics, 1993. Monthly vital statistics report; vol 44 no suppl. Hyattsville, Maryland. February. 1996.
4. Health Insurance Association of America. Research bulletin: A profile of employer-sponsored group health insurance. Washington: The Association. 1989.

**Table 21. Clinical preventive services objective status**

|              | <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i>       | <i>1993</i> | <i>1994</i> | <i>Target 2000</i> |
|--------------|--|-------------------|-------------------|-------------|-------------|--------------------|
| <b>21.1*</b> | <b>Years of healthy life</b> . . . . .   | <sup>1</sup> 64.0 | 63.7              | 63.5        | ---         | 65                 |
|              | a. Blacks . . . . .  | <sup>1</sup> 56.0 | 55.6              | 55.2        | ---         | 60                 |
|              | b. Hispanics <sup>2</sup> . . . . .  | <sup>1</sup> 64.8 | <sup>3</sup> 64.0 | 63.2        | ---         | 65                 |
|              | c. People 65 years and over <sup>4</sup> . . . . .                               | <sup>1</sup> 11.9 | 11.9              | 11.9        | ---         | 14                 |
| <b>21.2</b>  | <b>Receipt of recommended services</b>   |                   |                   |             |             |                    |
|              | Children 19–35 months  |                   |                   |             |             |                    |
|              | Basic immunization series . . . . .  | ---               | ---               | ---         | ---         | 0.90%              |
|              | DTP (3 or more doses) . . . . .  | <sup>5</sup> 83%  | ...               | 88%         | 90%         | ...                |
|              | Polio (3 or more doses) . . . . .  | <sup>5</sup> 72%  | ...               | 79%         | 79%         | ...                |
|              | Measles/Mumps/Rubella (1 dose) . . . . .   | <sup>5</sup> 83%  | ...               | 84%         | 90%         | ...                |
|              | Haemophilus influenza B (3 or more doses) . . . . .                              | <sup>5</sup> 28%  | ...               | 55%         | 75%         | ...                |
|              | Hepatitis B (3 or more doses) . . . . .  | <sup>6</sup> 16%  | ...               | ...         | 34%         | ...                |
|              | 4DTP/3Polio/1MMR . . . . .   | <sup>5</sup> 55%  | ...               | 67%         | 68%         | ...                |
|              | Adults 18 years and over   |                   |                   |             |             |                    |
|              | Routine check-up <sup>7</sup> . . . . .  | <sup>8</sup> 74%  | ---               | 78%         | 70%         | 91%                |
|              | Adults 65 years and over . . . . .   | <sup>8</sup> 67%  | ---               | 73%         | 62%         | ...                |
|              | Cholesterol checked in last 5 years . . . . .                                    | <sup>6</sup> 60%  | ...               | ...         | ---         | 75%                |
|              | Cholesterol ever checked . . . . .   | <sup>8</sup> 63%  | ---               | 71%         | ---         | ...                |
|              | People with low-income . . . . .   | <sup>8</sup> 46%  | ---               | 55%         | ---         | ...                |
|              | Blacks . . . . .   | <sup>8</sup> 56%  | ---               | 72%         | ---         | ...                |
|              | Hispanics . . . . .  | <sup>8</sup> 51%  | ---               | 62%         | ---         | ...                |
|              | American Indians/Alaska Natives . . . . .  | <sup>8</sup> 46%  | ---               | 60%         | ---         | ...                |
|              | Cholesterol checked in last 2 years . . . . .                                    | <sup>8</sup> 50%  | ---               | 54%         | ---         | ...                |
|              | People with low income . . . . .   | <sup>8</sup> 37%  | ---               | 41%         | ---         | ...                |
|              | Hispanics . . . . .  | <sup>8</sup> 42%  | ---               | 47%         | ---         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>8</sup> 45%  | ---               | 44%         | ---         | ...                |
|              | American Indians/Alaska Natives . . . . .  | <sup>8</sup> 38%  | ---               | 49%         | ---         | ...                |
|              | Tetanus booster in last 10 years . . . . .                                       | <sup>8</sup> 52%  | ---               | 57%         | 56%         | 62%                |
|              | Adults 65 years and over . . . . .   | <sup>8</sup> 29%  | ---               | 34%         | 32%         | ...                |
|              | Hispanics . . . . .  | <sup>8</sup> 45%  | ---               | 48%         | 51%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>8</sup> 40%  | ---               | 45%         | 43%         | ...                |
|              | People with disabilities . . . . .   | <sup>8</sup> 47%  | ---               | 51%         | 52%         | ...                |
|              | Pneumococcal vaccine in lifetime (people 65 years and over) . . . . .            | <sup>8</sup> 21%  | ---               | 28%         | 30%         | 60%                |
|              | People with low income . . . . .   | <sup>8</sup> 17%  | ---               | 18%         | 19%         | ...                |
|              | Blacks . . . . .   | <sup>8</sup> 14%  | ---               | 14%         | 15%         | ...                |
|              | Hispanics . . . . .  | <sup>8</sup> 12%  | ---               | 13%         | 14%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>8</sup> 15%  | ---               | 21%         | 14%         | ...                |
|              | Influenza vaccine in last 12 months (people 65 years and over) . . . . .         | <sup>8</sup> 42%  | ---               | 52%         | 55%         | 60%                |
|              | People with low income . . . . .   | <sup>8</sup> 36%  | ---               | 41%         | 44%         | ...                |
|              | Blacks . . . . .   | <sup>8</sup> 27%  | ---               | 33%         | 39%         | ...                |
|              | Hispanics . . . . .  | <sup>8</sup> 34%  | ---               | 47%         | 38%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>8</sup> 29%  | ---               | 54%         | 43%         | ...                |
|              | Pap test in last 3 years (women 18 years and over) . . . . .                     | <sup>5</sup> 74%  | ...               | 78%         | 77%         | 85%                |
|              | Women 65 years and over . . . . .  | <sup>5</sup> 51%  | ...               | 58%         | 57%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>5</sup> 62%  | ...               | 69%         | 66%         | ...                |
|              | American Indians/Alaska Natives . . . . .  | <sup>5</sup> 64%  | ...               | 78%         | 73%         | ...                |
|              | Women with disabilities . . . . .  | <sup>5</sup> 65%  | ...               | 69%         | 69%         | ...                |
|              | Breast exam and mammogram in past 2 years (women 50 years and over) . . . . .    | <sup>5</sup> 51%  | ...               | 55%         | 56%         | 60%                |
|              | Women 65 years and over . . . . .  | <sup>5</sup> 43%  | ...               | 49%         | 49%         | ...                |
|              | Women with low income . . . . .  | <sup>5</sup> 30%  | ...               | 39%         | 38%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>5</sup> 38%  | ...               | 53%         | 46%         | ...                |
|              | American Indians/Alaska Natives . . . . .  | <sup>5</sup> 31%  | ...               | 38%         | 53%         | ...                |
|              | Women with disabilities . . . . .  | <sup>5</sup> 44%  | ...               | 51%         | 50%         | ...                |
|              | Asked at least one screening question at routine check-up <sup>9</sup> . . . . . | <sup>8</sup> 56%  | ---               | 63%         | 56%         | 80%                |
|              | Women 65 years and over . . . . .  | <sup>8</sup> 42%  | ---               | 48%         | 38%         | ...                |
|              | Asians/Pacific Islanders . . . . .   | <sup>8</sup> 51%  | ---               | 60%         | 48%         | ...                |

**Table 21. Clinical preventive services objective status—Con.**

|             | <i>Objective</i>  | <i>Baseline</i>           | <i>1992</i> | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|-------------|---|---------------------------|-------------|-------------|-------------|------------------------|
| <b>21.3</b> | <b>Access to primary care (percent with source of care)</b>                                       |                           |             |             |             |                        |
|             | People 18 years and over . . . . .  | <sup>8</sup> 80%          | 78%         | 83%         | 84%         | 95%                    |
| a.          | Hispanics . . . . .   | <sup>8</sup> 63%          | 64%         | 71%         | 71%         | 95%                    |
|             | Mexican-Americans . . . . .   | <sup>8</sup> 57%          | 62%         | 69%         | 69%         | 95%                    |
| b.          | Blacks . . . . .  | <sup>8</sup> 78%          | 75%         | 79%         | 82%         | 95%                    |
| c.          | Low-income people . . . . .   | <sup>8</sup> 71%          | 71%         | 72%         | 73%         | 95%                    |
| d.          | American Indians/Alaska Natives . . . . .   | <sup>8</sup> 70%          | 85%         | 82%         | 81%         | 95%                    |
| e.          | Asians/Pacific Islanders . . . . .  | <sup>8</sup> 70%          | 71%         | 74%         | 78%         | 95%                    |
| <b>21.4</b> | <b>Financial barriers to receipt of clinical preventive services</b>                              |                           |             |             |             |                        |
|             | Proportion without health care coverage (age-adjusted)  |                           |             |             |             |                        |
|             | People under 65 years . . . . .   | <sup>10</sup> 16%         | 17.2%       | 17.3%       | 17.8%       | 0%                     |
| a.          | American Indians/Alaska Natives . . . . .   | <sup>10</sup> 36.1%       | ---         | 34.2%       | 39.0%       | 0%                     |
| b.          | Hispanics . . . . .   | <sup>10</sup> 31.3%       | 34.0%       | 34.2%       | 32.9%       | 0%                     |
|             | Mexican-Americans . . . . .   | <sup>10</sup> 38.1%       | 37.8%       | 39.5%       | 37.2%       | 0%                     |
|             | Puerto Ricans . . . . .   | <sup>10</sup> 21.4%       | 18.3%       | 21.0%       | 17.4%       | 0%                     |
|             | Cubans . . . . .  | <sup>10</sup> 20.7%       | 20.1%       | 16.9%       | 27.4%       | 0%                     |
| c.          | Blacks . . . . .  | <sup>10</sup> 22.0%       | 22.3%       | 23.2%       | 21.5%       | 0%                     |
| <b>21.5</b> | <b>Clinical preventive services from publicly funded programs (proportion of eligible people)</b> |                           |             |             |             |                        |
|             | Federal programs  |                           |             |             |             |                        |
|             | Screening . . . . .   | <sup>11</sup> 10–<br>100% | ...         | ---         | ---         | 90%                    |
|             | Counseling . . . . .  | <sup>11</sup> 40–<br>100% | ...         | ---         | ---         | 90%                    |
|             | Immunizations . . . . .   | <sup>11</sup> 10–<br>96%  | ...         | ---         | ---         | 90%                    |
| <b>21.6</b> | <b>Provision of recommended services by primary care providers</b>                                | ---                       | ---         | ---         | ---         | 50%                    |
|             | Percent of clinicians routinely providing service to 81–100% of patients                          |                           |             |             |             |                        |
|             | Children:   |                           |             |             |             |                        |
|             | Hemoglobin/hematocrit   |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 78%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 77%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 52%          | ...         | ---         | ---         | 50%                    |
|             | Eye exam (for strabismus and amblyopia)   |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 64%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 67%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 53%          | ...         | ---         | ---         | 50%                    |
|             | Blood pressure  |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 78%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 71%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 42%          | ...         | ---         | ---         | 50%                    |
|             | Height and weight   |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 96%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 88%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 89%          | ...         | ---         | ---         | 50%                    |
|             | DTP vaccination   |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 86%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 76%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 89%          | ...         | ---         | ---         | 50%                    |
|             | Oral polio vaccination  |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 87%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 76%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 89%          | ...         | ---         | ---         | 50%                    |
|             | Tetanus-diphtheria booster  |                           |             |             |             |                        |
|             | Pediatricians . . . . .   | <sup>5</sup> 79%          | ...         | ---         | ---         | 50%                    |
|             | Nurse practitioners . . . . .   | <sup>5</sup> 71%          | ...         | ---         | ---         | 50%                    |
|             | Family physicians . . . . .   | <sup>5</sup> 70%          | ...         | ---         | ---         | 50%                    |

**Table 21. Clinical preventive services objective status—Con.**

| <i>Objective</i>   | <i>Baseline</i>   | <i>1992</i> | <i>1993</i> | <i>1994</i> | <i>Target<br/>2000</i> |
|--|-------------------|-------------|-------------|-------------|------------------------|
| Hib vaccination  |                   |             |             |             |                        |
| Pediatricians . . . . .  | <sup>5</sup> 85%  | ...         | ---         | ---         | 50%                    |
| Nurse practitioners . . . . .  | <sup>5</sup> 68%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 74%  | ...         | ---         | ---         | 50%                    |
| Adults:  |                   |             |             |             |                        |
| Tetanus-diphtheria booster (18 years and over)   |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 38%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 4%   | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 29%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 28%  | ...         | ---         | ---         | 50%                    |
| Influenza vaccination (65 years and over)  |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 42%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 6%   | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 49%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 31%  | ...         | ---         | ---         | 50%                    |
| Pneumococcal vaccination (65 years and over)   |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 33%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 5%   | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 40%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 25%  | ...         | ---         | ---         | 50%                    |
| Blood pressure   |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 82%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 88%  | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 92%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 89%  | ...         | ---         | ---         | 50%                    |
| Cholesterol level  |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 45%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 36%  | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 80%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 61%  | ...         | ---         | ---         | 50%                    |
| Breast exam (by clinician)   |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 78%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 92%  | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 76%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 62%  | ...         | ---         | ---         | 50%                    |
| Pap smear  |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 77%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 92%  | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 67%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 62%  | ...         | ---         | ---         | 50%                    |
| Mammogram  |                   |             |             |             |                        |
| Nurse practitioners . . . . .  | <sup>5</sup> 63%  | ...         | ---         | ---         | 50%                    |
| Obstetricians/gynecologists . . . . .  | <sup>5</sup> 85%  | ...         | ---         | ---         | 50%                    |
| Internists . . . . .   | <sup>5</sup> 67%  | ...         | ---         | ---         | 50%                    |
| Family physicians . . . . .  | <sup>5</sup> 53%  | ...         | ---         | ---         | 50%                    |
| <b>21.7 Local health department assurance of access to essential clinical preventive service</b>                                       |                   |             |             |             |                        |
| Proportion of people served . . . . .  | ---               | ---         | ---         | ---         | 90%                    |
| Proportion of local health departments that:   |                   |             |             |             |                        |
| Assess the extent to which screening, immunization,<br>and counseling services are provided to the local population . . . . .          | <sup>12</sup> 76% | ...         | ...         | ---         | ...                    |
| Collect data to document the number of providers of clinical preventive<br>services in their jurisdiction . . . . .                    | <sup>12</sup> 45% | ...         | ...         | ---         | ...                    |
| Evaluate to determine whether a gap exists between available clinical<br>preventive services and the need for those services . . . . . | <sup>12</sup> 57% | ...         | ...         | ---         | ...                    |
| (Of those that assess gaps) provide clinical preventive services to fill<br>gaps . . . . .   | <sup>12</sup> 83% | ...         | ...         | ---         | ...                    |

**Table 21. Clinical preventive services objective status—Con.**

|             | <i>Objective</i>   | <i>Baseline</i>    | <i>1992</i>        | <i>1993</i>        | <i>1994</i>        | <i>Target<br/>2000</i> |
|-------------|--|--------------------|--------------------|--------------------|--------------------|------------------------|
| <b>21.8</b> | <b>Racial/ethnic minority representation in the health professions</b> |                    |                    |                    |                    |                        |
|             | Degrees awarded to—  |                    |                    |                    |                    |                        |
|             | Blacks . . . . .   | <sup>1</sup> 35.0% | <sup>1</sup> 45.7% | <sup>1</sup> 55.9% | <sup>1</sup> 65.9% | 8.0%                   |
|             | Hispanics . . . . .  | <sup>1</sup> 33.0% | <sup>1</sup> 44.8% | <sup>1</sup> 54.8% | <sup>1</sup> 64.3% | 6.4%                   |
|             | American Indians/Alaska Natives . . . . .                              | <sup>1</sup> 30.3% | <sup>1</sup> 40.5% | <sup>1</sup> 50.4% | <sup>1</sup> 60.4% | 0.6%                   |
|             | a. Enrolled in schools of nursing                                      |                    |                    |                    |                    |                        |
|             | Blacks . . . . .   | <sup>1</sup> 49.1% | ...                | <sup>1</sup> 58.6% | <sup>1</sup> 68.7% | 10.0%                  |
|             | Hispanics . . . . .  | <sup>1</sup> 43.1% | ...                | <sup>1</sup> 53.0% | <sup>1</sup> 63.0% | 4.0%                   |
|             | Asians/Pacific Islanders . . . . .                                     | <sup>1</sup> 42.9% | ...                | <sup>1</sup> 53.2% | <sup>1</sup> 63.3% | 5.0%                   |
|             | American Indians/Alaska Natives . . . . .                              | <sup>1</sup> 40.7% | ...                | <sup>1</sup> 50.6% | <sup>1</sup> 60.7% | 1.0%                   |

--- Data not available.

... Category not applicable.

<sup>1</sup>1990 data.

<sup>2</sup>Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic origin data were not of sufficient quality. See Appendix.

<sup>3</sup>Estimate derived from 1991–93 health status data and 1992 mortality data.

<sup>4</sup>Years of healthy life remaining at age 65.

<sup>5</sup>1992 data.

<sup>6</sup>1993 data.

<sup>7</sup>In the last 3 years for people 18–64 and in the last year for people 65 years and over.

<sup>8</sup>1991 data.

<sup>9</sup>For people 18–64 years, a screening question on at least one of: diet, physical activity, tobacco use, alcohol use, drug use, sexually transmitted diseases, contraceptive use at a routine check-up in the last 3 years. For people 65 years and over, a screening question on at least one of: diet, physical activity, tobacco use, alcohol use at a routine check-up in the past year.

<sup>10</sup>1989 data.

<sup>11</sup>1991–92 data.

<sup>12</sup>1992–93 data.

<sup>13</sup>1985–86 data.

<sup>14</sup>Academic year 1991–92.

<sup>15</sup>Academic year 1992–93.

<sup>16</sup>Academic year 1993–94.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 21.1*, 21.1a–c          | National Health Interview Survey, CDC, NCHS; National Vital Statistics System, CDC, NCHS.                |
| 21.2                    | National Health Interview Survey, CDC, NCHS.   |
| 21.3, 21.3a–e           | National Health Interview Survey, CDC, NCHS.   |
| 21.4, 21.4a–c           | National Health Interview Survey, CDC, NCHS.   |
| 21.5                    | Bureau of Primary Health Care Survey, HRSA, OPEL; Survey of Federal Programs, HRSA, OPEL.                |
| 21.6                    | Primary Care Provider Surveys, OASH, ODPHP.  |
| 21.7                    | National Profile of Local Health Departments, National Association of County and City Health Officials.  |
| 21.8                    | Minorities and Women in the Health Fields, HRSA, BHPR; National League for Nursing, Nursing Data Source. |

\*Duplicate objective. See full text of objective following this table.



# Clinical Preventive Services Objectives

**21.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life (also referred to as quality-adjusted life years) is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure.*

Duplicate objectives: 8.1 and 17.1

**21.1a\*:** Increase years of healthy life among blacks to at least 60 years.

Duplicate objectives: 8.1 and 17.1a

**21.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 8.1b and 17.1b

**21.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 years remaining.

Duplicate objectives: 8.1c and 17.1c

**21.2:** Increase the proportion of people who have received selected clinical preventive screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

|   |             |
|---|-------------|
| Receipt of selected clinical preventive and counseling services | 2000 target |
|---|-------------|

|                           |    |
|---------------------------|----|
| Basic Immunization Series | 90 |
|---------------------------|----|

|                  |    |
|------------------|----|
| Routine check-up | 91 |
|------------------|----|

|                                     |    |
|-------------------------------------|----|
| Cholesterol checked in last 5 years | 75 |
|-------------------------------------|----|

|                          |    |
|--------------------------|----|
| Cholesterol ever checked | 75 |
|--------------------------|----|

|                                     |    |
|-------------------------------------|----|
| Cholesterol checked in last 2 years | 75 |
|-------------------------------------|----|

|                                  |    |
|----------------------------------|----|
| Tetanus booster in last 10 years | 62 |
|----------------------------------|----|

|   |    |
|---|----|
| Pneumococcal vaccine in lifetime (aged 65 and over) | 60 |
|---|----|

|   |    |
|---|----|
| Influenza vaccine in last year (aged 65 and over) | 60 |
|---|----|

|                          |    |
|--------------------------|----|
| Pap test in last 3 years | 85 |
|--------------------------|----|

|   |    |
|---|----|
| Breast exam and mammogram in past 2 years | 60 |
|---|----|

|                     |    |
|---------------------|----|
| Counseling services | 80 |
|---------------------|----|

**21.3:** Increase to at least 95 percent the proportion of people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3a:** Increase to at least 95 percent the proportion of Hispanics and the proportion of Mexican-Americans who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3b:** Increase to at least 95 percent the proportion of blacks who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3c:** Increase to at least 95 percent the proportion of low-income people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3d:** Increase to at least 95 percent the proportion of American Indians and Alaska Natives who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3e:** Increase to at least 95 percent the proportion of Asians and Pacific Islanders who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.4:** Improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

**21.4a:** Decrease to 0 percent the proportion of American Indians and Alaska Natives under 65 years without health care coverage.

**21.4b:** Decrease to 0 percent the proportion of Hispanics under 65 years, and Mexican-Americans, Puerto Ricans, and Cubans under 65 years without health care coverage.

**21.4c:** Decrease to 0 percent the proportion of blacks under 65 years without health care coverage.

**21.5:** Ensure that at least 90 percent of people for whom primary care services are provided directly by publicly funded programs are offered, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

*NOTE: Publicly funded programs that provide primary care services directly include federally funded programs such as the Maternal and Child Health Program, Community and Migrant Health Centers, and the Indian Health Service as well as primary care service settings funded by State and local governments. This objective does not include services covered indirectly through the Medicare and Medicaid programs.*

**21.6:** Increase to at least 50 percent the proportion of primary care providers who provide their patients with the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

**21.7:** Increase to at least 90 percent the proportion of people who are served by a local health department that assesses and assures access to essential clinical preventive services.

*NOTE: Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

**21.8:** Increase the proportion of all degrees in the health professions and allied and associated health profession fields awarded to members of underrepresented racial and ethnic minority groups as follows:

| Degrees awarded to:                 | 2000 target (percent) |
|-------------------------------------|-----------------------|
| Blacks                              | 8.0                   |
| Hispanics                           | 6.4                   |
| American Indians and Alaska Natives | 0.6                   |

**21.8a:** Increase the proportion of individuals from underrepresented racial and ethnic minority groups enrolled in U.S. schools of nursing.

|  | 2000                |
|--|---------------------|
| Proportion enrolled<br>in fall academic year | target<br>(percent) |
| Blacks                                       | 10                  |
| Hispanics                                    | 4                   |
| Asians and Pacific<br>Islanders              | 5                   |
| American Indians and<br>Alaska Natives       | 1                   |

\*Duplicate objective.

# Priority Area 22 Surveillance and Data Systems

## Background

The ability to assess health status, health disparities, or service needs or to evaluate the implementation and effectiveness of preventive interventions and community health programs requires information. Public health surveillance is the systematic collection, analysis, and use of health information. This activity is essential to understanding the health status of a population and to planning effective prevention programs. The Institute of Medicine identifies surveillance as one of the core functions of public health (1). It is critical in health agencies at all jurisdictional levels: Federal, State, and local. Achievement of the year 2000 objectives depends in part on our ability to monitor and compare progress toward the objectives at all levels of government.

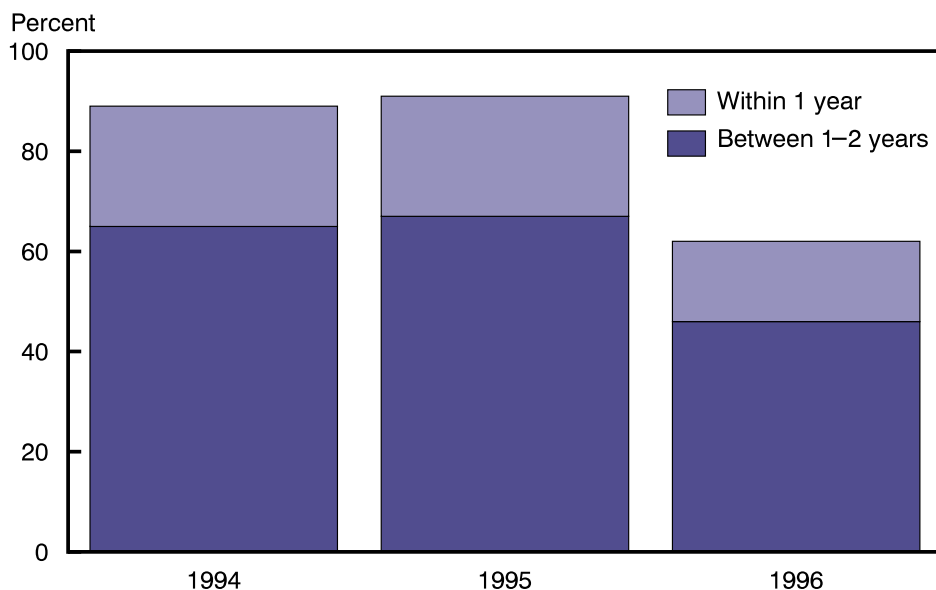
We must also be able to measure the health status of special populations. Morbidity, mortality, health behaviors, and access to and use of health services vary markedly by age, race, sex, and socioeconomic status. There are over 300 *Healthy People 2000* subobjectives that are targeted toward racial and ethnic minorities, elderly people, people with chronic disabilities, people with less than a high school education, and people with low incomes.

Some important health issues could not be addressed in the year 2000 objectives because of the unavailability of national data to accurately characterize the problems. The lack of data at the State and local levels is of even greater concern. Thus, several objectives in Priority Area 22 are directed toward enhancing data systems in States and communities. Similarly, there are objectives that address the identification of and response to data gaps related to minorities and other special populations.

## Midcourse Modifications

Revisions have been made to two subobjectives in this priority area. The intent of subobjective 22.2a, to

**Figure 23. Timeliness of release of national surveillance and survey data for the national health objectives: United States, 1994–96, objective 22.7**



|                                 | 1994 | 1995 | 1996 |
|---------------------------------|------|------|------|
| Within 1 year . . . . .         | 65   | 67   | 46   |
| Between 1 and 2 years . . . . . | 24   | 24   | 16   |

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Promotion Statistics.

“identify, and create where necessary, State-level data for at least two thirds of the objectives in at least 35 States,” has been clarified to “identify, and create where necessary, State-level data for at least two thirds of the objectives in State year 2000 plans” and changes the target to all 50 States. The revision to subobjective 22.5a, to “implement in at least 25 States periodic analysis and publication of data needed to measure State progress toward the national health objectives for each racial or ethnic group that makes up at least 10 percent of the State population,” adds the words “or State-specific” after the word “national.” These revisions have been made to clarify the objectives referring to States, because many States have *Healthy People 2000* plans that include objectives that are specific to the State, but may not necessarily be national objectives.

## Data Summary and Issues

The first part of objective 22.1, development of Health Status Indicators

(HSI’s), has been achieved. The consensus set of 18 indicators was published in July 1991 (2). National data for the HSI’s were first published in October 1992 (3). National trends in the HSI data are shown in appendix table IV. Table V presents the indicators for the major race/ethnic groups for the most recent data year. A detailed discussion of HSI differentials by race and Hispanic origin was published in September 1995 (4). The achievement of the second part of this objective, to establish use of the HSI’s in at least 40 States, is being measured by tracking their use by State and local health departments. All States are monitoring some of the Health Status Indicators. Nine States have published the HSI data for county, region, or health department district (an update of *Statistics and Surveillance* number 8) (5). A future Public Health Foundation Survey will determine the number of States that have produced reports or publications based on the HSI’s and have published HSI data by race or ethnicity; data from this survey will also update the number

of States that have published data for local areas.

Objective 22.2 is close to being achieved with 98 percent of objectives with ongoing data sources. There are seven objectives for which there are no baseline data and no plans to collect monitoring data. The Centers for Disease Control and Prevention (CDC) has expanded its role in supporting State assessment activities related to the year 2000 objectives. In 1994, 17 of the 41 States and the District of Columbia with *Healthy People 2000* plans had included surveillance and data systems objectives in their plans.

Objective 22.3 has three parts: developing, disseminating, and incorporating into PHS data collection systems the procedures for collecting comparable data for each of the year 2000 national health objectives among Federal, State, and local agencies. The baseline shows the percent of objectives that are tracked with vital statistics data, which are collected by local jurisdictions. Comparable procedures for monitoring population-based nutrition objectives were included in 1992. Objectives monitored with the Youth Risk Behavior Survey, the Notifiable Disease Surveillance System, the Fatal Accident Reporting System, and several other national systems that depend on State data were included in 1994. Objectives monitored with the National Health Interview Survey were also counted if the State Behavioral Risk Factor Surveillance System included questions that were similar in wording and conceptual approach (some objectives, for example, physical activity and current smoking, are being monitored by the States but not with methods comparable with national methods). The denominator for the proportion of objectives with comparable data has historically been the total number of objectives, which underrepresents Federal-State-local objective measurement comparability.

The first step in the development and dissemination of comparable data collection procedures involves systematically documenting the methods that are currently being used and accepted (as well as changes in measurement methods as time progresses). Currently, tables are being compiled that list each objective, how each objective is being measured at the Federal level, and the relevant data issues involved, if any. Objectives

out-of-scope for the purposes of tracking objective 22.3 include most Services and Protection objectives, which do not involve traditional data collection comparability issues, although they may involve what is considered appropriate protocol. These objectives include patient education and counseling, employer- and community-based prevention programs, development and implementation of quality standards, conformance with national guidelines, and enactment of national laws. The 1994 estimate of 21 percent is an underestimate of the actual proportion of all objectives with comparable data collection procedures. The documentation of the operational definitions of each objective will allow the determination of the appropriate denominator for measuring this objective, portraying more accurately the extent of Federal-State-local comparability.

Objective 22.4 addresses the development and implementation of a national process to identify significant gaps in the Nation's disease prevention and health promotion data. There are two parts to this objective: the identification of data gaps in broad areas of public health, where insufficient data exist to develop objectives, and the identification of data gaps connected with special populations. First steps to identify significant gaps in broad areas of the Nation's disease prevention and health promotion data have been taken. In 1993, the National Committee on Vital and Health Statistics Subcommittee on State and Community Health Statistics recommended the development of a coordinated Federal, State, and community health statistics system that should include the following data sets in order to carry out the functions of assessment and policy development: vital statistics, in-patient hospitalization utilization, ambulatory care, long-term care, incidence and prevalence of disease and disability, health care resources, health care costs and expenditures, demographic profiles of populations served, access to basic health care and preventive services, health risk behaviors and attitudes, and environmental health risks.

The process of the *Healthy People 2000* midcourse review has brought the Nation closer to achieving the latter part of this objective, although there is much more that needs to be done as the decade progresses. During the midcourse

review, considerable attention was given to major population groups that are at highest risk for premature death, disease, or disability, and 120 new subobjectives were proposed by the lead PHS agencies; 111 new subobjectives were eventually added (see the section on the midcourse review in the Introduction). Data gaps still exist for all possible population groups that might be at higher health risk than the general population, and additional steps will be taken to identify these gaps.

Progress toward objective 22.5, the number of States that periodically analyze and publish data needed to measure progress toward the national health objectives, is currently being assessed by the number of States that publish data from major databases including vital statistics, the Behavioral Risk Factor Surveillance System, hospital discharge system data, and the Youth Risk Behavior Survey. A national database (the Health Care Cost and Utilization Project) has been developed to build comparable hospital discharge data sets among States; currently, 1988–93 data are available from 17 States (6). The number of States with at least one racial/ethnic group that comprises at least 10 percent of their population that publish vital statistics data for each of these groups is also being tracked. There are 27 States whose populations included at least 10 percent racial/ethnic minorities. Twenty-three of those States were publishing data for their major racial/ethnic groups in 1993.

Data to measure objective 22.6, to expand in all States systems for the transfer of year 2000 data among Federal, State, and local agencies, are now available for three data systems. The National Electronic Telecommunications System for Surveillance (NETSS) is operating in all States. In 1995, the Public Health Laboratory Information System (PHLIS) became available in all States as well. DATA2000, containing tracking data for all the national *Healthy People 2000* objectives, became available in April 1995 to State and local health department personnel through the CDC WONDER/PC system, a system actively used by all State Health Departments (see appendix).

Achieving the timely release of national surveillance and survey data to measure progress toward the national health objectives (22.7) is measured by

percent of objectives with data released within 1 year and between 1 and 2 years of data collection. The actual measurement of this objective involves counting the objectives that have updates for a particular year. For this year's *Healthy People 2000 Review, 1995–96*, data collected in 1994 or later are counted as being released within 1 year. Data for 1993 are counted as being released between 1 and 2 years of data collection. This year, however, the *Review* has been published later than usual because of a delay in the data processing of two important data sets (the National Health Interview Survey and the National Hospital Discharge Survey). Therefore, the proportion of data shown for “data released within 1 year” is an overestimate of the actual count.

## References

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2. Centers for Disease Control and Prevention. Consensus set of health indicators for the general assessment of community health status, United States. *MMWR* 40(27):449–51. 1991.
3. Klein RJ, Hawk SA. Health status indicators: Definitions and national data. Statistical notes; vol 1 no 3. Hyattsville, Maryland: National Center for Health Statistics. 1992.
4. Plepys C, Klein R. Health status indicators: Differentials by race and Hispanic origin. Statistical notes; no 10. Hyattsville, Maryland: National Center for Health Statistics. 1995.
5. National Center for Health Statistics. Statistics and Surveillance; no 8. Hyattsville, Maryland: National Center for Health Statistics. 1996.
6. For information on the Healthcare Cost and Utilization Project (HCUP–3), contact the Agency for Health Care Policy and Research at (301) 594–1400.

**Table 22. Surveillance and data systems objective status**

|              | <i>Objective</i>  | <i>Baseline</i>   | <i>1992</i>     | <i>1993</i>      | <i>1994</i>        | <i>Target<br/>2000</i> |
|--------------|---|-------------------|-----------------|------------------|--------------------|------------------------|
| <b>22.1</b>  | <b>Health status indicators</b>   |                   |                 |                  |                    |                        |
|              | Develop (indicators selected) . . . . .   | <sup>1</sup> 100% | ...             | ...              | ...                | 100%                   |
|              | Establish use (number of States) . . . . .  | ...               | ---             | ---              | ---                | 40                     |
|              | Monitoring some indicators . . . . .  | ...               | <sup>2</sup> 48 | <sup>3</sup> 51  | <sup>3</sup> 51    | 40                     |
|              | Providing HSI data to local health departments . . . . .  | ...               | <sup>2</sup> 36 | ---              | ---                | 40                     |
| <b>22.2</b>  | <b>National data sources</b> . . . . .  | <sup>4</sup> 77%  | ---             | 93%              | <sup>5,6</sup> 98% | 100%                   |
|              | a. State level data for at least two-thirds of State objectives (number of States) <sup>7</sup> . . . . . | <sup>3,5</sup> 42 | ...             | ...              | ...                | 50                     |
| <b>22.3</b>  | <b>Comparable data collection procedures</b>  |                   |                 |                  |                    |                        |
|              | Federal, State, and local agencies . . . . .  | <sup>4</sup> 12%  | 14%             | ---              | 21%                | 100%                   |
| <b>22.4*</b> | <b>Identify gaps in health data</b>   |                   |                 |                  |                    |                        |
|              | Establish mechanisms to meet needs <sup>8</sup> . . . . .   | ...               | ...             | ...              | ...                | ...                    |
| <b>22.5</b>  | <b>Periodic analysis and publication of data (number of States)</b> . . . . .                             | <sup>9</sup> 20   | ---             | ---              | ---                | 50                     |
|              | Vital statistics <sup>3</sup> . . . . .   | ...               | <sup>9</sup> 51 | ...              | ...                | 50                     |
|              | Behavioral Risk Factor Surveillance System data <sup>3</sup> . . . . .                                    | ...               | <sup>9</sup> 40 | 50               | 51                 | 50                     |
|              | Hospital discharge data <sup>10</sup> . . . . .   | ...               | <sup>9</sup> 22 | ---              | <sup>5</sup> 37    | 50                     |
|              | Youth Risk Behavior Survey data . . . . .   | ...               | <sup>9</sup> 24 | 43               | <sup>5</sup> 40    | 50                     |
|              | a. Analysis for racial and ethnic groups (number of States) <sup>3,11</sup> . . . . .                     | <sup>2</sup> 19   | ...             | 23               | ---                | 25                     |
| <b>22.6</b>  | <b>Number of States with data transfer systems</b> . . . . .  | <sup>9</sup> 30   | ---             | ---              | ---                | 50                     |
|              | National Electronic Telecommunications System for Surveillance (NETSS) <sup>3</sup> . . . . .             | ...               | 51              | ...              | ...                | 50                     |
|              | Public Health Laboratory Information System (PHLIS) . . . . .   | ...               | 37              | <sup>3</sup> 44  | <sup>3</sup> 51    | 50                     |
|              | DATA2000 on CDC WONDER/PC <sup>3</sup> . . . . .  | ...               | ...             | ...              | <sup>5</sup> 51    | 50                     |
| <b>22.7</b>  | <b>Timely release of national data (percent of objectives)</b>  |                   |                 |                  |                    |                        |
|              | Data released within 1 year of collection . . . . .   | <sup>12</sup> 65% | ---             | <sup>5</sup> 67% | <sup>13</sup> 46%  | 100%                   |
|              | Data released between 1 and 2 years of collection . . . . .   | <sup>12</sup> 24% | ---             | <sup>5</sup> 24% | <sup>13</sup> 16%  | ...                    |

--- Data not available.

... Category not applicable.

<sup>1</sup>1991 data.

<sup>2</sup>1992 data.

<sup>3</sup>Includes the District of Columbia.

<sup>4</sup>1990 data.

<sup>5</sup>1995 data.

<sup>6</sup>There are no baselines and no plans for data collection for 7 of 319 objectives.

<sup>7</sup>States that have adopted *Healthy People 2000* plans.

<sup>8</sup>See text for a discussion of this objective.

<sup>9</sup>1989 data.

<sup>10</sup>States that collect hospital discharge data. The number of States with legislative mandates to collect hospital discharge data was 39 in 1993 and in 1995.

<sup>11</sup>Twenty-seven States have at least one racial/ethnic group comprising at least 10% of their population; data show number of States that published vital statistics data for these racial/ethnic groups.

<sup>12</sup>1994 data.

<sup>13</sup>1996 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

| <i>Objective number</i> | <i>Data source</i>   |
|-------------------------|--|
| 22.3                    | CDC, NCHS.   |
| 22.4                    | Subcommittee on State and Community Health Statistics, NCVHS; CDC, NCHS; OPHS, ODPHP.  |
| 22.5                    | 1990 data: Public Health Foundation.<br>1989 baselines and updates: Vital statistics: CDC, NCHS; BRFSS: CDC, NCCDPHP;<br>Hospital discharge data: National Association of Health Data Organizations; YRBS: CDC, NCCDPHP. |
| 22.5a                   | CDC, NCHS.   |
| 22.6                    | 1990 data: Public Health Foundation.<br>1992 baselines and updates: NETSS: CDC, EPO.<br>PHLIS: CDC, NCID.<br>CDC WONDER: CDC, IRMO and CDC, NCHS.  |
| 22.7                    | CDC, NCHS.   |

\*Duplicate objective. See full text of objective following this table.

# Surveillance and Data Systems Objectives

**22.1:** Develop a set of health status indicators appropriate for Federal, State, and local health agencies, and establish use of the set in at least 40 States.

**22.2:** Identify, and create where necessary, national data sources to measure progress toward each of the year 2000 national health objectives.

**22.2a:** Identify, and create where necessary, State-level data for at least two-thirds of the objectives in State year 2000 plans in all 50 States.

**22.3:** Develop and disseminate among Federal, State, and local agencies procedures for collecting comparable data for each of the year 2000 national health objectives and incorporate these into Public Health Service data collection systems.

**22.4\*:** Develop and implement a national process to identify significant gaps in the Nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs.

*NOTE: Disease prevention and health promotion data include disease status, risk factors, and services receipt data. Public health problems include such issue areas as HIV infection, domestic violence, mental health, environmental health, occupational health, and disabling conditions.*

Duplicate objective: 17.22

**22.5:** Implement in all States periodic analysis and publication of data needed to measure progress toward objectives for at least 10 of the priority areas of the national health objectives.

*NOTE: Periodic is at least once every 4 years. Objectives include, at a minimum, one from each objectives category: health status, risk reduction, and services and protection.*

**22.5a:** Implement in 25 States periodic analysis and publication of data needed to measure State progress toward the national or

State-specific health objectives for each racial or ethnic group that makes up at least 10 percent of the State population.

**22.6:** Expand in all States systems for the transfer of health information related to the national health objectives among Federal, State, and local agencies.

*NOTE: Information related to the national health objectives includes State and national level baseline data, disease prevention and health promotion evaluation results, and data generated to measure progress.*

**22.7:** Achieve timely release of national surveillance and survey data needed by health professionals and agencies to measure progress toward the national health objectives.

*NOTE: Timely release (publication of provisional or final data or public-use data tapes) should be based on the use of the data, but is at least within one year of the end of data collection.*





# *Appendix*

# Appendix

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## Contents

|   |     |
|---|-----|
| Special Population Subobjectives                      | 198 |
| Age Adjustment  | 198 |
| Data Source Comparability                             | 198 |
| Cause-of-Death Terminology and Codes                  | 198 |
| Hispanic Vital Statistics                             | 198 |
| Years of Healthy Life                                 | 198 |
| Census Poverty Threshold                              | 199 |
| Age-related Objectives                                | 199 |
| Additional Sources of Monitoring Data and Information | 199 |
| References  | 199 |

## Appendix Tables

|  |     |
|--|-----|
| I. Priority area lead agencies   | 200 |
| II. <i>Healthy People 2000</i> data source acronyms                          | 201 |
| III. Mortality objective cause-of-death categories                           | 202 |
| IV. Health Status Indicators: United States, 1992–94                         | 204 |
| V. Health Status Indicators by race and Hispanic origin: United States, 1993 | 206 |
| VI. Age-related objectives: United States, 1987–93                           | 208 |
| VII. Published issues of <i>Healthy People 2000</i> Statistical Notes        | 208 |

# Appendix

## Special Population Subobjectives

Special population subobjectives address disparities and differing trends in health measures for subpopulation groups as compared with the total U.S. population. The guidelines for drafting the subobjectives suggested the identification of a data source to track progress before a subobjective for a minority or special population could be set. A lack of data sources prevented the establishment of subobjectives for some population groups even when disparities were suspected.

Many subpopulations are small and geographically clustered and cannot be adequately measured through national surveys using standard sampling techniques. Developing techniques to assess the health of minorities and other special subpopulations is a significant challenge during this decade. However, the addition of 111 special population subobjectives during the midcourse review indicates that some improvements in data availability have been made.

## Age Adjustment

Most of the baselines and monitoring data for the population-based *Healthy People 2000* mortality objectives are derived from the National Vital Statistics System (NVSS) and are age adjusted to the 1940 population (see [Appendix table III](#)). Exceptions are objectives 4.1, 9.3 (except 9.3d), 10.1, and 10.16. Data for 4.1 and 9.3 (except 9.3d) are crude rates from the National Highway and Traffic Safety Administration's Fatal Accident Reporting System (FARS). Data for 10.1 are crude rates from the Department of Labor's Annual Survey of Occupational Injuries and Illnesses and Census of Fatal Occupational Injuries. Baseline data for 10.16, a new objective, are crude rates from the National Traumatic Occupational Fatality Surveillance System, CDC. Update data are crude rates from the Census of Fatal Occupational Injuries.

## Data Source Comparability

For some objectives the baseline data source differs from the source used

to monitor progress. Comparability between different data sources or even within the same data source for different years is not assured. Comparability can be compromised by changes in survey questions, survey systems, survey methodology, operational definitions, and analytic techniques. Some of the most important comparability issues related to specific objectives are discussed in the Data Issues section of the priority area chapters. Other issues related to tracking the objectives are addressed in *Healthy People 2000 Statistical Notes* Number 4, Issues Related to Monitoring the Year 2000 Objectives (1). The data source for each *Healthy People 2000* objective is shown at the end of the summary data table in each priority area chapter.

## Cause-of-Death Terminology and Codes

Twenty-six objectives (excluding duplicates) in *Healthy People 2000* are tracked using mortality data. For most of these objectives, the cause-of-death terminology used in *Healthy People 2000* is different from that used in *Health, United States; Vital Statistics of the United States, Mortality*, and other National Center for Health Statistics (NCHS) publications; in some cases, the *Ninth Revision International Classification of Diseases (ICD-9)* codes are different as well (2) ([Appendix table III](#)).

For five objectives, the terminology and the codes are different from those used for similar cause-of-death categories in NCHS publications. One example, objective 7.1, concerns reduction of "homicides." Progress toward this objective is measured using ICD-9 codes E960-E969. NCHS generally uses "Homicide and legal intervention" (ICD-9 numbers E960-E978), which includes "legal intervention" or police action. For 14 objectives, only the terminology differs; the defining ICD-9 identifying codes are the same. For example, objective 15.2 calls for reduction in mortality from "stroke"; NCHS tabulation lists use the term "Cerebrovascular diseases" (both use ICD-9 numbers 430-438). Only one objective, suicide, has the same title and the same code structure in both uses. The remaining six mortality objectives have no comparable category in NCHS publications. With the exception of heart disease, the differences between

mortality rates defined by the *Healthy People 2000* ICD-9 categories and those defined by NCHS rubrics are relatively small, if not trivial.

## Hispanic Vital Statistics

Mortality data for 1987-89 for people of Hispanic origin (4.2c, 4.3b, 7.1d, 9.1d, 9.3g, 9.6g, 16.4b, 17.9c, and 17.9d) are based on deaths to residents of selected States that had data that were at least 90 percent complete on a place-of-occurrence basis and considered to be sufficiently comparable. Beginning with data for 1990, the criterion was changed to include States with data that were at least 80 percent complete. The number of States in the mortality reporting area increased from 18 States and the District of Columbia in 1987 to 49 States and the District of Columbia in 1993.

Hispanic origin data for prenatal care in the first trimester (14.11c) are based on States that reported Hispanic parentage on the birth certificate. The number of States in the natality reporting area increased from 23 States and the District of Columbia in 1987 to all 50 States and the District of Columbia in 1993. The reporting area for infant mortality data from the national linked file of live births and infant deaths for Puerto Ricans (14.1c, f, and j) increased from 23 States and the District of Columbia in 1984 to 49 States and the District of Columbia in 1991.

A listing of the States included in the reporting areas for each year and more information can be found in another publication (3). With the exception of the Nation's Capital, the territories are excluded.

## Years of Healthy Life

Increasing years of healthy life is one of the three *Healthy People 2000* goals and is included as three specific objectives (8.1, 17.1, 21.1). The *Healthy People 2000* years of healthy life (HP2000-YHL) measure, which will be used to monitor progress until the year 2000, combines mortality data from the National Vital Statistics System with self-reported health status data from the National Health Interview Survey. The methodology for the HP2000-YHL measure, developed by NCHS and outside consultants, is published in

## Census Poverty Threshold

Data for subobjectives targeting family income below the poverty level are based on definitions originally developed by the Social Security Administration. They include a set of money income thresholds that vary by family size and composition. Families or individuals with income below their appropriate thresholds are classified as below the poverty level. These thresholds are updated annually by the U.S. Bureau of the Census. The weighted-average poverty threshold for a family of four was \$14,335 in 1992, \$14,764 in 1993, and \$15,141 in 1994 (5).

## Age-related Objectives

Embraced as broad national goals in 1990 for improving the health of Americans at the five major life stages (6), *Healthy People 2000* also includes targets for reducing deaths among people under age 65, and for reducing the proportion of people 65 years and over who have difficulty performing two or more activities of daily living. *Healthy People 2000* contains four age-related objectives, listed below. [Appendix table VI](#) shows the latest data for these objectives.

- Reduce the death rate for children by 15 percent to no more than 28 per 100,000 children aged 1 through 14, and for infants by approximately 30 percent to no more than 7 per 1,000 live births.
- Reduce the death rate for adolescents and young adults by 15 percent to no more than 85 per 100,000 people aged 15–24.
- Reduce the death rate for adults by 20 percent to no more than 340 per 100,000 people aged 25–64.
- Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities (a reduction of about 19 percent), thereby preserving independence.

## Additional Sources of Monitoring Data and Information

Access to *Healthy People 2000* monitoring data and information about the data is not confined to the *Healthy People 2000 Review*. All tracking data are contained in the DATA2000 Monitoring System, an electronic database that contains the national baseline and monitoring data for each *Healthy People 2000* objective and special population subobjective. DATA2000 is a component of the CDC WONDER system, the Centers for Disease Control and Prevention's on-line public health information system. It contains the full text of each of the 805 objectives and subobjectives, all tracking data available from baseline to latest update, information on the data such as definitions and clarifications, and the data sources that are being used to track progress. Plans to include information on Public Health Service lead agency contacts for each *Healthy People 2000* priority area and major data source contacts are underway. Monitoring data for States as well as national data are available for the Health Status Indicators (HSI's) under "priority area 23." (Trends in the national HSI data and the latest HSI data by race/ethnicity are presented in [appendix tables IV and V](#).) State data for many of the national *Healthy People 2000* objectives will also be incorporated into DATA2000. Age-related objectives are tracked under "priority area 24." DATA2000 can now be accessed through the CDC WONDER/PC database and on the Internet's World Wide Web (<http://wonder.cdc.gov>).

A valuable resource for public health professionals wishing to measure and track data comparable to the national *Healthy People 2000* objectives is presented as a series of publications entitled *Healthy People 2000 Statistical Notes*. This series contains information on the Health Status Indicators, monitoring issues, definitions, and other issues related to tracking the *Healthy People 2000* objectives. For a list of these publications, see [appendix table VII](#).

The National Center for Health Statistics also presents an annual course entitled "Measuring the Healthy People 2000 Objectives" through the Applied Statistics Training Institute (ASTI). This course, presented free of charge to health professionals and others working in areas of public health in Government agencies and private organizations, addresses specific measurement issues related to monitoring progress toward selected *Healthy People 2000* objectives and Health Status Indicators. The more complex objectives that present unusual problems or require the use of complex algorithms are discussed (for example, years of healthy life; light, moderate, vigorous physical activity; overweight prevalence; and air quality). Data comparability, the *International Classification of Disease* (ICD) codes for mortality data, computation of age-adjusted death rates, and a hands-on PC demonstration of the CDC WONDER/PC system, including DATA2000, are also included. For more information on ASTI, contact Sheldon Starr at the National Center for Health Statistics, (301) 436-7063, extension 128.

## References

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**Table I. Priority area lead agencies**

| <i>Priority area</i>                         | <i>Lead agency</i>   |
|--|--|
| 1 Physical activity and fitness              | President's Council on Physical Fitness and Sports   |
| 2 Nutrition                                  | National Institutes of Health<br>Food and Drug Administration                                      |
| 3 Tobacco                                    | Centers for Disease Control and Prevention   |
| 4 Substance abuse: alcohol and other drugs   | Substance Abuse and Mental Health Services<br>Administration                                       |
| 5 Family planning                            | Office of Population Affairs   |
| 6 Mental health and mental disorders         | Substance Abuse and Mental Health Services<br>Administration and the National Institutes of Health |
| 7 Violent and abusive behavior               | Centers for Disease Control and Prevention   |
| 8 Educational and community-based programs   | Centers for Disease Control and Prevention<br>Health Resources and Services Administration         |
| 9 Unintentional injuries                     | Centers for Disease Control and Prevention   |
| 10 Occupational safety and health            | Centers for Disease Control and Prevention   |
| 11 Environmental health                      | National Institutes of Health<br>Centers for Disease Control and Prevention                        |
| 12 Food and drug safety                      | Food and Drug Administration   |
| 13 Oral health                               | National Institutes of Health<br>Centers for Disease Control and Prevention                        |
| 14 Maternal and infant health                | Health Resources and Services Administration   |
| 15 Heart disease and stroke                  | National Institutes of Health  |
| 16 Cancer                                    | National Institutes of Health  |
| 17 Diabetes and chronic disabling conditions | National Institutes of Health<br>Centers for Disease Control and Prevention                        |
| 18 HIV infection                             | Centers for Disease Control and Prevention   |
| 19 Sexually transmitted diseases             | Centers for Disease Control and Prevention   |
| 20 Immunization and infectious diseases      | Centers for Disease Control and Prevention   |
| 21 Clinical preventive services              | Health Resources and Services Administration<br>Centers for Disease Control and Prevention         |
| 22 Surveillance and data systems             | Centers for Disease Control and Prevention   |

**Table II. *Healthy People 2000* data source acronyms**

| <i>Acronyms</i> | <i>Agency/organization</i>  |
|-----------------|---|
| ACS             | American Cancer Society   |
| AHA             | American Hospital Association                                       |
| AIRS            | Aerometric Information Retrieval System                             |
| ALA             | American Lung Association   |
| ATSDR           | Agency for Toxic Substances and Disease Registry                    |
| BHP             | Bureau of Health Professions  |
| BLS             | Bureau of Labor Statistics  |
| BRFSS           | Behavioral Risk Factor Surveillance System                          |
| CDC             | Centers for Disease Control and Prevention                          |
| CFSAN           | Center for Food Safety and Applied Nutrition                        |
| CPSC            | Consumer Product Safety Commission                                  |
| DOD             | Department of Defense   |
| DOL             | Department of Labor   |
| DOT             | Department of Transportation  |
| EPA             | Environmental Protection Agency                                     |
| EPO             | Epidemiology Program Office   |
| FDA             | Food and Drug Administration  |
| FEMA            | Federal Emergency Management Administration                         |
| GAO             | Government Accounting Office  |
| HAZDAT          | Hazardous Substance Release and Health Effects Database             |
| HCFA            | Health Care Financing Administration                                |
| HRSA            | Health Resources and Services Administration                        |
| IHS             | Indian Health Service   |
| IRMO            | Information Resources Management Office                             |
| NCCAN           | National Center for Child Abuse and Neglect                         |
| NCCDPHP         | National Center for Chronic Disease Prevention and Health Promotion |
| NCEH            | National Center for Environmental Health                            |
| NCHS            | National Center for Health Statistics                               |
| NCHSR           | National Center for Health Services Research                        |
| NCHSTP          | National Center for HIV, STD, and TB Prevention                     |
| NCID            | National Center for Infectious Disease                              |
| NCIPC           | National Center for Injury Prevention and Control                   |
| NCPS            | National Center for Prevention Services                             |
| NCVHS           | National Committee on Vital and Health Statistics                   |
| NHLBI           | National Heart, Lung, and Blood Institute                           |
| NHTSA           | National Highway Traffic and Safety Administration                  |
| NIAAA           | National Institute on Alcoholism and Alcohol Abuse                  |
| NICHD           | National Institute for Child Health and Human Development           |
| NIDA            | National Institute on Drug Abuse                                    |
| NIH             | National Institutes of Health                                       |
| NIMH            | National Institute of Mental Health                                 |
| NIOSH           | National Institute for Occupational Safety and Health               |
| NIP             | National Immunization Program                                       |
| NSBA            | National School Boards Association                                  |
| OAR             | Office of Air and Radiation   |
| OASD            | Office of the Assistant Secretary of Defense                        |
| OASH            | Office of the Assistant Secretary of Health                         |
| ODPHP           | Office of Disease Prevention and Health Promotion                   |
| OPA             | Office of Population Affairs  |
| OPEL            | Office of Planning, Evaluation, and Legislation                     |
| OPHS            | Office of Public Health and Science                                 |
| ORA             | Office of Research and Analysis                                     |
| OSHA            | Occupational Safety and Health Administration                       |
| OSWER           | Office of Solid Waste Enforcement and Remediation                   |
| PHF             | Public Health Foundation  |
| PHS             | Public Health Service   |
| SAMHSA          | Substance Abuse and Mental Health Services Administration           |
| USDA            | United States Department of Agriculture                             |
| YRBS            | Youth Risk Behavior Survey  |

**Table III. Mortality objective cause-of-death categories**

| Objective Number | Healthy People 2000   |   | Mortality tabulation lists   |                         |
|------------------|---|---|--|-------------------------|
|                  | Cause of death <sup>1</sup>                                 | ICD-9 identifying codes   | Cause of death   | ICD-9 identifying codes |
| 1.1              | Coronary heart disease                                      | 402, 410-414, 429.2   | Diseases of heart  | 390-398, 402, 404-429   |
| 2.1              | See 1.1   |   |  |                         |
| 2.2              | Cancer (all sites) of lymphatic hematopoietic tissues       | 140-208   | Malignant neoplasms, including neoplasms   | (Same as HP2000)        |
| 2.22             | Stroke  | 430-438   | Cerebrovascular diseases   | (Same as HP2000)        |
| 2.23             | Colorectal cancer   | 153.0-154.3, 154.8, 159.0   | Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus            | 153, 154                |
| 3.1              | See 1.1   |   |  |                         |
| 3.2              | Lung cancer   | 162.2-162.9   | Malignant neoplasms of trachea, bronchus and lung                                | 162                     |
| 3.3              | Chronic obstructive pulmonary disease and allied conditions | 490-496   | Chronic obstructive pulmonary diseases   | (Same as HP2000)        |
| 3.17             | Cancer of the oral cavity and pharynx                       | 140-149   | Malignant neoplasms of lip, oral cavity, and pharynx                             | (Same as HP2000)        |
| 3.18             | See 2.22  |   |  |                         |
| 4.1              | Alcohol-related motor vehicle crashes                       | E810-E819 <sup>2</sup>  | No comparable category   | ...                     |
| 4.2              | Cirrhosis   | 571   | Chronic liver disease and cirrhosis  | (Same as HP2000)        |
| 4.3              | Drug-related deaths   | 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5          | Drug-induced causes  | (Same as HP2000)        |
| 6.1              | Suicides  | E950-E959   | (Same as HP2000)   | (Same as HP2000)        |
| 7.1              | Homicides   | E960-E969   | Homicide and legal intervention  | E960-E978               |
| 7.2              | See 6.1   |   |  |                         |
| 7.3              | Firearm injuries  | E922.0-E922.3, E922.8-E922.9, E955.0-E955.4, E965.0-E965.4, E970, E985.0-E985.4 | No comparable category   | ...                     |
| 9.1              | Unintentional injuries                                      | E800-E949   | Accidents and adverse effects  | (Same as HP2000)        |
| 9.3, 9.3a-c      | Motor vehicle crashes                                       | E810-E819   | Motor vehicle traffic accidents  | (Same as HP2000)        |
| 9.3d,g           | Motor vehicle crashes                                       | E810-E825   | Motor vehicle accidents  | (Same as HP2000)        |
| 9.4              | Falls and fall-related injuries                             | E880-E888   | Accidental falls   | (Same as HP2000)        |
| 9.5              | Drowning  | E830, E832, E910  | Accidental drowning and submersion   | E910                    |
| 9.6              | Residential fires   | E890-E899   | Accidents caused by fire and flames  | (Same as HP2000)        |
| 9.23             | See 4.1   |   |  |                         |
| 10.1             | Work-related injuries <sup>3</sup>                          | E800-E999   | No comparable category   | ...                     |
| 10.16            | Work-related homicides                                      | E960-E969   | No comparable category   | ...                     |
| 10.17            | Occupational lung diseases <sup>3</sup>                     | 500-502, 504  | No comparable category   | ...                     |
| 13.7             | See 3.17  |   |  |                         |
| 14.3             | Maternal mortality  | 630-676   | Complications of pregnancy, childbirth, and the puerperium or maternal mortality | (Same as HP2000)        |
| 15.1             | See 1.1   |   |  |                         |

**Table III. Mortality objective cause-of-death categories—Con.**

| <i>Objective Number</i> | <i>Healthy People 2000</i>   |                                | <i>Mortality tabulation lists</i>   |                                |
|-------------------------|--|--------------------------------|-------------------------------------|--------------------------------|
|                         | <i>Cause of death<sup>1</sup></i>                                    | <i>ICD–9 identifying codes</i> | <i>Cause of death</i>               | <i>ICD–9 identifying codes</i> |
| 15.2                    | See 2.22   |                                |                                     |                                |
| 16.1                    | See 2.2  |                                |                                     |                                |
| 16.2                    | See 3.2  |                                |                                     |                                |
| 16.3                    | Breast cancer in women   | 174                            | Malignant neoplasm of female breast | (Same as HP2000)               |
| 16.4                    | Cancer of the uterine cervix   | 180                            | Malignant neoplasm of cervix uteri  | (Same as HP2000)               |
| 16.5                    | See 2.23   |                                |                                     |                                |
| 16.17                   | See 3.17   |                                |                                     |                                |
| 17.9                    | Diabetes-related deaths <sup>3</sup>                                 | 250                            | Diabetes mellitus                   | (Same as HP2000)               |
| 20.2                    | Epidemic-related pneumonia and influenza deaths for ages 65 and over | 480–487                        | No comparable category              | ...                            |

... Category not applicable.

<sup>1</sup>Unless otherwise specified, Healthy People 2000 uses underlying cause-of-death data.

<sup>2</sup>Includes only those deaths assigned to E810–E819 that were alcohol-related; see Priority Area 4, Substance Abuse: Alcohol and Other Drugs.

<sup>3</sup>Healthy People 2000 uses multiple-cause-of-death data.



**Table IV. Health Status Indicators: United States, 1992–94**

| <i>Health status indicators</i> |  | 1992              | 1993              | 1994               |
|---------------------------------|--|-------------------|-------------------|--------------------|
| 1                               | <b>Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age<sup>1</sup></b> . . . . .        | 8.5               | 8.4               | <sup>2</sup> 7.9   |
|                                 | White . . . . .  | 6.9               | 6.8               | ---                |
|                                 | Black . . . . .  | 16.8              | 16.5              | ---                |
|                                 | American Indian <sup>3</sup> . . . . .   | <sup>4</sup> 13.1 | <sup>5</sup> 11.3 | ---                |
|                                 | Chinese <sup>3</sup> . . . . .   | 44.3              | 54.6              | ---                |
|                                 | Japanese <sup>3</sup> . . . . .  | 66.9              | 75.3              | ---                |
|                                 | Filipino <sup>3</sup> . . . . .  | 46.0              | 55.1              | ---                |
|                                 | Hawaiian and part-Hawaiian <sup>3</sup> . . . . .  | <sup>6</sup> 11.1 | 79.0              | ---                |
|                                 | Other Asian or Pacific Islander <sup>3</sup> . . . . .   | 47.4              | 56.3              | ---                |
|                                 | Hispanic origin <sup>3,8,9</sup> . . . . .   | 47.5              | 57.1              | ---                |
| 2                               | <b>Total deaths per 100,000 population (ICD–9 nos. 0–E999)<sup>10</sup></b> . . . . .  | 504.5             | 513.3             | <sup>2</sup> 508.4 |
| 3                               | <b>Motor vehicle crash deaths per 100,000 population (ICD–9 nos. E810–E825)<sup>10</sup></b> . . . . .   | 15.8              | 16.0              | <sup>2</sup> 16.0  |
| 4                               | <b>Work-related injury deaths per 100,000 population<sup>11</sup></b> . . . . .  | 2.4               | 3.2               | 3.3                |
| 5                               | <b>Suicides per 100,000 population (ICD–9 nos. E950–E959)<sup>10</sup></b> . . . . .   | 11.1              | 11.3              | <sup>2</sup> 11.6  |
| 6                               | <b>Homicides per 100,000 population (ICD–9 nos. E960–E978)<sup>10</sup></b> . . . . .  | 10.5              | 10.7              | <sup>2</sup> 9.7   |
| 7                               | <b>Lung cancer deaths per 100,000 population (ICD–9 no. 162)<sup>10</sup></b> . . . . .  | 39.3              | 39.3              | ---                |
| 8                               | <b>Female breast cancer deaths per 100,000 women (ICD–9 no. 174)<sup>10</sup></b> . . . . .  | 21.9              | 21.5              | <sup>2</sup> 21.0  |
| 9                               | <b>Cardiovascular disease deaths per 100,000 population (ICD–9 nos. 390–448)<sup>10</sup></b> . . . . .  | 180.4             | 181.8             | ---                |
|                                 | Heart disease deaths per 100,000 population (ICD–9 nos. 390–398, 402, 404–429) <sup>10</sup> . . . . .   | 144.3             | 145.3             | <sup>2</sup> 140.0 |
|                                 | Stroke deaths per 100,000 population (ICD–9 nos. 430–438) <sup>10</sup> . . . . .  | 26.2              | 26.5              | <sup>2</sup> 26.7  |
| 10                              | <b>Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome<sup>12</sup></b> . . . . .  | 29.7              | 29.7              | 26.9               |
| 11                              | <b>Reported incidence (per 100,000 population) of measles</b> . . . . .  | 0.9               | 0.1               | 0.4                |
| 12                              | <b>Reported incidence (per 100,000 population) of tuberculosis</b> . . . . .   | 10.5              | 9.8               | 9.4                |
| 13                              | <b>Reported incidence (per 100,000 population) of primary and secondary syphilis</b> . . . . .   | 13.3              | 10.4              | 8.1                |
| 14                              | <b>Prevalence of low birthweight as measured by the percentage of live-born infants weighing under 2,500 grams at birth</b> . . . . .                                    | 7.1               | 7.2               | 7.3                |
| 15                              | <b>Births to adolescents (ages 10–17 years) as a percentage of total live births</b> . . . . .   | 4.9               | 5.1               | 5.3                |
| 16                              | <b>Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy</b> . . . . .         | 22.3              | 21.1              | 19.8               |
| 17                              | <b>Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level</b>                               |                   |                   |                    |
|                                 | Under 18 years . . . . .   | 22.3              | 22.7              | 21.8               |
|                                 | Under 15 years . . . . .   | 23.2              | 23.4              | 22.5               |
|                                 | 5–17 years <sup>13</sup> . . . . .   | 20.2              | 20.8              | 20.1               |
| 18                              | <b>Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year<sup>14</sup></b> . . . . . | 21.6              | 23.5              | 24.9               |

--- Data not available.

<sup>1</sup>Includes races not shown separately. Infant mortality rates for groups with fewer than 10,000 births are considered unreliable.

<sup>2</sup>Data are provisional.

<sup>3</sup>Linked file data source.

<sup>4</sup>Data are for 1990.

<sup>5</sup>Data are for 1991.

<sup>6</sup>Data are for 1986–88.

<sup>7</sup>Data are for 1989–91.

<sup>8</sup>Includes mothers of all races.

<sup>9</sup>Includes 48 States and the District of Columbia in 1990; 49 States and the District of Columbia in 1991.

<sup>10</sup>Age adjusted to the 1940 standard population.

<sup>11</sup>Data are for people 16 years of age and over.

<sup>12</sup>By date of diagnosis. Adjusted for delays in reporting; not adjusted for underreporting.

<sup>13</sup>Related children in families.

<sup>14</sup>Data based on 1990 county population estimates.

| <i>Indicator</i> | <i>Data source</i>  |
|------------------|---|
| 1-3,5-9,14-16    | National Vital Statistics System, CDC, NCHS.  |
| 4                | (1991) Annual Survey of Occupational Injuries and Illness, Department of Labor, Bureau of Labor Statistics.   |
| 4                | (1992-93) Census of Fatal Occupational Injuries, Department of Labor, Bureau of Labor Statistics.   |
| 10               | AIDS Surveillance System, CDC, NCID. Data are AIDS cases reported by year of diagnosis, adjusted for reporting delays. Based on cases reported to CDC through March 1996. |
| 11               | National Notifiable Disease Surveillance System, CDC, EPO.  |
| 12               | Tuberculosis Morbidity Data, CDC, NCPS.   |
| 13               | Sexually Transmitted Disease Surveillance System, CDC, NCPS.  |
| 17               | Current Population Survey, U.S. Bureau of the Census.   |
| 18               | National Air Quality and Emission Trends Report, Office of Air and Radiation, EPA.  |

**Table V. Health Status Indicators by race and Hispanic origin: United States, 1993**

| Health status indicators  | Race               |                    |                    |                                   |                            |                              |
|---|--------------------|--------------------|--------------------|-----------------------------------|----------------------------|------------------------------|
|   | Total <sup>1</sup> | White              | Black              | American Indian/<br>Alaska Native | Asian/<br>Pacific Islander | Hispanic Origin <sup>2</sup> |
| 1 Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age . . . . .                          | 8.4                | 6.8                | 16.5               | <sup>3</sup> 11.3                 | <sup>3</sup> 5.8           | <sup>3</sup> 47.1            |
| 2 Total deaths per 100,000 population (ICD-9 nos. 0-E999) <sup>5</sup> . . . . .  | 513.3              | 485.1              | 785.2              | 468.9                             | 295.9                      | <sup>6</sup> 385.2           |
| 3 Motor vehicle crash deaths per 100,000 population (ICD-9 nos. E810-E825) <sup>5</sup> . . . . .   | 16.0               | 16.1               | 16.3               | 32.3                              | 9.5                        | <sup>6</sup> 16.8            |
| 4 Work-related injury deaths per 100,000 population <sup>7</sup> . . . . .  | <sup>8</sup> 3.3   | <sup>8</sup> 3.2   | <sup>8</sup> 3.1   | 3.2                               | 2.9                        | 3.5                          |
| 5 Suicides per 100,000 population (ICD-9 nos. E950-E959) <sup>5</sup> . . . . .   | 11.3               | 12.0               | 7.2                | 12.1                              | 6.4                        | <sup>6</sup> 7.3             |
| 6 Homicides per 100,000 population (ICD-9 nos. E960-E978) <sup>5</sup> . . . . .  | 10.7               | 6.0                | 40.9               | 11.0                              | 6.4                        | <sup>6</sup> 17.0            |
| 7 Lung cancer deaths per 100,000 population (ICD-9 no. 162) <sup>5</sup> . . . . .  | 39.3               | 38.9               | 48.9               | 22.0                              | 18.5                       | <sup>6</sup> 14.5            |
| 8 Female breast cancer deaths per 100,000 women (ICD-9 no. 174) <sup>5</sup> . . . . .  | 21.5               | 21.2               | 27.1               | 9.4                               | 9.5                        | <sup>6</sup> 12.4            |
| 9 Cardiovascular disease deaths per 100,000 population (ICD-9 nos. 390-448) <sup>5</sup> . . . . .  | 181.8              | 173.9              | 269.6              | 136.0                             | 109.7                      | <sup>6</sup> 120.4           |
| Heart disease deaths per 100,000 population (ICD-9 nos. 390-398, 402, 404-429) <sup>5</sup> . . . . .   | 145.3              | 139.9              | 208.9              | 108.9                             | 79.0                       | <sup>6</sup> 94.8            |
| Stroke deaths per 100,000 population (ICD-9 nos. 430-438) <sup>5</sup> . . . . .  | 26.5               | 24.5               | 45.0               | 20.7                              | 24.5                       | <sup>6</sup> 19.5            |
| 10 Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome <sup>8,9</sup> . . . . .   | 26.9               | <sup>10</sup> 14.8 | <sup>10</sup> 93.3 | 12.1                              | 6.6                        | 44.9                         |
| 11 Reported incidence (per 100,000 population) of measles <sup>8</sup> . . . . .  | 0.4                | ---                | ---                | ---                               | ---                        | ---                          |
| 12 Reported incidence (per 100,000 population) of tuberculosis <sup>8</sup> . . . . .   | 9.4                | <sup>10</sup> 3.4  | <sup>10</sup> 26.8 | 17.4                              | 45.3                       | 19.5                         |
| 13 Reported incidence (per 100,000 population) of primary and secondary syphilis <sup>8</sup> . . . . .   | 8.1                | <sup>10</sup> 1.0  | <sup>10</sup> 59.5 | 2.0                               | 0.9                        | 3.5                          |
| 14 Prevalence of low birthweight as measured by the percentage of live born infants weighing under 2,500 grams at birth <sup>8</sup> . . . . .                            | 7.3                | 6.1                | 13.2               | 6.4                               | 6.8                        | 6.2                          |
| 15 Births to adolescents (ages 10-17 years) as a percentage of total live births <sup>8</sup> . . . . .   | 5.3                | 4.2                | 10.8               | 8.7                               | 2.2                        | 7.6                          |
| 16 Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy <sup>8</sup> . . . . . | 19.8               | 17.2               | 31.7               | 34.8                              | 20.3                       | 31.1                         |
| 17 Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level <sup>8</sup> . . . . .             |                    |                    |                    |                                   |                            |                              |
| Under 18 years . . . . .  | 21.8               | 16.9               | 43.8               | ---                               | ---                        | 41.5                         |
| Under 15 years . . . . .  | 22.5               | ---                | ---                | ---                               | ---                        | ---                          |
| 5-17 years <sup>11</sup> . . . . .  | 20.1               | ---                | ---                | ---                               | ---                        | ---                          |
| 18 Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year <sup>12</sup> . . . . .     | 24.9               | 23.6               | 29.6               | 20.0                              | 44.4                       | 45.2                         |

--- Data not available.

<sup>1</sup>Includes racial and ethnic groups not shown separately.

<sup>2</sup>Hispanic origin can be of any race.

<sup>3</sup>1991 Linked file data source data.

<sup>4</sup>Data are for 47 States and the District of Columbia.

<sup>5</sup>Age adjusted to the 1940 standard population

<sup>6</sup>Data are for 49 States and the District of Columbia.

<sup>7</sup>Data are for people 16 years of age and over.

<sup>8</sup>1994 data.

<sup>9</sup>By date of diagnosis. Adjusted for delays in reporting; not adjusted for underreporting.

<sup>10</sup>Data are for the non-Hispanic population

<sup>11</sup>Related children in families.

<sup>12</sup>1994 data based on 1990 county population estimates.

| <i>Indicator</i> | <i>Data source</i>  |
|------------------|---|
| 1-3,5-9,14-16    | National Vital Statistics System, CDC, NCHS.  |
| 4                | Census of Fatal Occupational Injuries, Department of Labor, Bureau of Labor Statistics.   |
| 10               | AIDS Surveillance System, CDC, NCID. Data are AIDS cases reported by year of diagnosis, adjusted for reporting delays. Based on cases reported to CDC through March 1996. |
| 11               | National Notifiable Disease Surveillance System, CDC, EPO.  |
| 12               | Tuberculosis Morbidity Data, CDC, NCPS.   |
| 13               | Sexually Transmitted Disease Surveillance System, CDC, NCPS.  |
| 17               | Current Population Survey, U.S. Bureau of the Census.   |
| 18               | National Air Quality and Emission Trends Report, Office of Air and Radiation, EPA.  |

**Table VI. Age-related objectives: United States, 1987–93**

| <i>Objectives</i>   | <i>Baseline<br/>1987</i> | <i>1991</i> | <i>1992</i> | <i>1993</i> | <i>Target<br/>2000</i> |
|---|--------------------------|-------------|-------------|-------------|------------------------|
| Infant mortality (per 1,000 live births) . . . . .  | 10.1                     | 8.9         | 8.5         | 8.4         | 7                      |
| Children 1–14 years (total deaths per 100,000) . . . . .  | 33.7                     | 30.7        | 28.8        | 29.8        | 28                     |
| Adolescents and young adults 15–24 years (total deaths per 100,000) . .   | 97.8                     | 100.1       | 95.6        | 98.5        | 85                     |
| Adults 25–64 years (total deaths per 100,000) . . . . .   | 426.9                    | 400.7       | 394.7       | 400.1       | 340                    |
| People 65 years and over (difficulty in performing two or more personal<br>care activities per 1,000) . . . . . | 111                      | ---         | ---         | ---         | 90                     |

--- Data not available.

<sup>1</sup>1984–85 data.

SOURCES: National Vital Statistics System, CDC, NCHS. For people 65 years and over: National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.

**Table VII. Published issues of *Healthy People 2000 Statistical Notes***

| <i>Number</i> | <i>Title</i>  | <i>Date of<br/>Issue</i> |
|---------------|---|--------------------------|
| 1             | Health Status Indicators for the Year 2000                          | Fall 1991                |
| 2             | Infant Mortality  | Winter 1991              |
| 3             | Health Status Indicators: Definitions and National Data             | Spring 1992              |
| 4             | Issues Related to Monitoring the Year 2000 Objectives               | Summer 1993              |
| 5             | Revisions to <i>Healthy People 2000</i> Baselines                   | July 1993                |
| 6             | Direct Standardization (Age-Adjusted Death Rates)                   | March 1995               |
| 7             | Years of Healthy Life   | April 1995               |
| 8             | Evaluating Public Health Data Systems: A Practical Approach         | June 1995                |
| 9             | Monitoring Air Quality in <i>Healthy People 2000</i>                | September 1995           |
| 10            | Health Status Indicators: Differentials by Race and Hispanic Origin | September 1995           |
| 11            | <i>Healthy People 2000</i> Midcourse revisions: A compendium        | In preparation 1996      |

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