Vital and Health Statistics

Educational Differences in Health Status and Health Care

Series 10: Data From the National Health Survey No. 179

Includes estimates by years of education for limitation of activity, restrictedactivity days, assessed health status, physician contacts, hospital discharges and days, incidence of acute conditions, and prevalence of chronic conditions. Level of education is cross-classified by age, sex, race, poverty status, Hispanic origin, geographic region, place of residence, major activity, marital status, and employment status. All estimates are shown as unadjusted and age adjusted and are based on data collected in household interviews by the U.S. Bureau of the Census for the National Health Interview Survey during 1989.

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Under the legislation establishing the National Health Interview Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the U.S. Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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Symbols

- --- Data not available
- . . . Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Z Quantity more than zero but less than 500 where numbers are rounded to thousands
- * Figure does not meet standard of reliability or precision
- # Figure suppressed to comply with confidentiality requirements

Educational Differences in Health Status and Health Care

by Peter Ries, Division of Health Interview Statistics

Introduction

Each year, the report "Current Estimates From the National Health Interview Survey" presents national estimates for basic health characteristics of the civilian noninstitutionalized population of the United States. These estimates are shown according to age, sex, race, family income, geographic region, and place of residence. From time to time, special reports have been published that focused on one or another of these sociodemographic characteristics and presented in greater detail the relationship of the characteristic to the basic health characteristics. Recent reports of this nature include "Health Characteristics by Occupation and Industry of Longest Employment" (1) and "Health of Black and White Americans, 1985-87" (2). No such presentation of National Health Interview Survey (NHIS) health estimates has yet appeared with level of education as the characteristic of this type of expanded focus.

The primary purpose of this report is to present estimates of basic health characteristics by detailed years of education, with the health characteristics including limitation of activity due to chronic conditions, restrictedactivity days, respondent-assessed health status, physician contacts, short-stay hospital discharges and days, incidence of acute conditions, and prevalence of chronic conditions. Not only is the variable years of education shown in great detail, it is also shown cross-tabulated with other sociodemographic characteristics, including age, sex, race, family income, poverty status, Hispanic origin, geographic region, place of residence, major activity, marital status, and employment status. All of the estimates are shown as unadjusted and age-adjusted rates or percents.

As noted above, the annual edition of Current estimates shows estimates of basic health characteristics by family income. Income is an important characteristic because it is an indicator of socioeconomic status and access

to medical care services, both of which are important determinants of health status and use of medical care services. In recent years, however, there has been a large increase in the proportion of NHIS respondents who do not report family income. In 1989 family income was not obtained for about one in six persons included in the survey. In contrast, level of education was not reported for only about 1 in 100 persons, and education also is strongly associated with socioeconomic status and access to medical care services. For this and other reasons, it may be timely to compare education and income as control variables in the presentation and analysis of NHIS health estimates. Thus, each section in the text of this report that summarizes the overall pattern of the relationship between level of education and a particular health characteristic includes a brief comparison between the use of education and the use of income as a control variable.

All of the estimates presented in this report relate to morbidity and health care utilization. For the relationship of level of education to mortality, see "National Trends in Educational Differentials in Mortality" (3).

Although published reports are the primary vehicle for disseminating estimates from NHIS, data also are available in the form of standardized microdata tapes that include the regular characteristics of each year's survey from 1969 through 1988. Questions pertaining to the cost and availability of these tapes should be directed to the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. Public use tapes also are available for special topics included in NHIS from 1973 through 1988. Information on tapes relating to special topics is available from the National Center for Health Statistics, Division of Health Interview Statistics, Systems and Programming Branch, 6525 Belcrest Road, Hyattsville, Maryland 20782.

Highlights

The following summary highlights some of the associations between years of education and health characteristics for which estimates are shown in this report. The estimates do not include data on military personnel, persons living in institutions (including nursing homes), or those who died during the reference periods used in the survey.

Because older persons tend to have less education and poorer health than younger persons have, some of the differences between health estimates for persons with few and those with many years of education are due to age. The effects of age can be controlled for by the statistical technique of age adjusting: The age-adjusted estimate for an education group shows the value a health statistic would have if the education group had the same age composition as the total population. In this section, ageadjusted rates are shown in parentheses for health measures related to education.

Health status—For all of the measures of health status included in this report, low levels of education were highly associated with poor health and relatively higher levels of education were associated with good to excellent health. This may be seen by considering the ranges of the estimates of the following health characteristics by years of education.

- Limitation of activity due to chronic conditions About 37.5 percent of persons with less than 4 years of education were limited in activity, but only about 7.7 percent of those with 16 years of education were so limited. (The corresponding age-adjusted percents are 28.0 and 9.4, respectively.)
- Restricted-activity days The number of days per person per year that people stayed in bed, missed work or school, or cut down on their usual activities because of illness, injury, or impairment was 31.8 for those with less than 4 years of education and 9.9 for persons with 16 years of education. (The corresponding ageadjusted rates are 20.5 and 11.0, respectively.)
- Assessed health status Respondents assessed their health or that of family members as excellent, very good, good, fair, or poor. About 32.7 percent of persons with less than 4 years of education but only about 3.0 percent of those with 17 or more years of education were assessed to be in fair or poor health. (The corresponding age-adjusted percents are 22.6 and 4.0, respectively.)

Utilization of health services -- The pattern of fewer years of education being associated with poorer health was also found for rates of short-stay hospitalization. However, there was no consistent pattern between years of education and the rate of physician contacts.

- Short-stay hospital discharges—The number of discharges per 100 persons per year ranged from 20.4 for persons with less than 4 years of education to 6.7 for those with 17 or more years of education. (The corresponding age-adjusted rates are 14.8 and 8.2, respectively.)
- Short-stay hospital days—Persons with 4–7 years of education averaged 178.3 days in hospitals per 100 persons per year, but for persons with 16 years of education, the corresponding estimate was 39.6 days per 100 persons per year. (The corresponding age-adjusted rates are 109.1 and 48.6, respectively.)
- *Physician contacts* Although the highest estimate of the number of physician contacts per person per year was for persons with little education (a rate of 6.5 for those with 4–7 years of education) and the lowest rate was for persons with more education (5.1 for persons with 16 years of education), the level of the estimates was not even approximately monotonic as years of education increased. For instance, although the rates were low for those with 12 and with 16 years of education (5.0 and 5.1, respectively), they were higher for those with 8–11 and with 13–15 years of education (5.8 and 5.6, respectively).

Incidence and prevalence of conditions—For most sociodemographic groups, there tends to be an inverse relationship between the incidence of acute conditions and the prevalence of chronic conditions; that is, groups with a high incidence of acute conditions tend to have a low prevalence of chronic conditions. This also tends to occur in relation to levels of education. Overall there was a tendency for lower levels of education to be associated with relatively low estimates for the incidence of acute conditions and relatively high estimates for the prevalence of chronic conditions, and the opposite pattern held for higher levels of education.

Educational differences independent of income – Education and income are highly correlated, but within income groups, educational differences in the major health characteristics remain. Among persons in the same income category, persons with lower education have less favorable health status and greater use of medical care services.

Source and limitations of data

The information from the National Health Interview Survey presented in this report is based on data collected in a continuing nationwide survey by household interview. Each week a probability sample of the civilian noninstitutionalized population of the United States is interviewed by personnel of the U.S. Bureau of the Census. Information is obtained about the health and other characteristics of each member of the household. The 1989 interviewed sample was composed of 47,485 households containing 122,310 persons. The total noninterview rate was 5.1 percent: 3.0 percent was the result of respondent refusal, and the remainder was the result of failure to locate an eligible respondent at home after repeated calls. Because the estimates presented in this report are based on a sample of the population, they are subject to sampling errors. The parameters and formulas needed to calculate them are given in appendix I. The major concepts for which estimates are shown are defined in appendix II. Appendix III consists of a copy of the questionnaire and flashcards used in the interview. A more detailed description of the survey design, the methods used in estimation, the procedures for calculating standard errors, and general qualifications of the data are presented in appendix I to "Current Estimates from the National Health Interview Survey, 1989" (4).

Presentation of the results

Tables 1-16 show detailed estimates of rates or percents for the following health characteristics: Percent of persons limited in activity due to chronic conditions (table 1), number of restricted-activity days per person per year (table 3), number of bed days per person per year (table 5), percent of persons assessed by respondents to be in fair or poor health (table 7), number of physician contacts per person per year (table 9), number of shortstay hospital discharges per 100 persons per year (table 11), number of short-stay hospital days per 100 persons per year (table 13), and number of acute conditions per 100 persons per year (table 15). The evennumbered table following each odd-numbered table identified above gives the age-adjusted rates or percents of the estimates shown in the previous table. Estimates of the prevalence of selected chronic conditions are shown in tables 17 (rates) and 18 (frequencies) by age and years of education. The population estimates used to calculate the rates and percents are shown in table 19.

The estimates for each health characteristic are shown according to years of completed education cross-tabulated with the following sociodemographic characteristics: Age, sex, race, family income, Hispanic origin, poverty status, geographic region, and place of residence. These characteristics are shown for persons of all ages. The following sociodemographic characteristics are shown crosstabulated by years of education only for persons 18 years of age and over: Major activity, marital status, and employment status.

Age adjusting was done using the four age groups shown in table A. As may be noted, the lower levels of education include a disproportionate number of older persons compared with the higher levels of education. For persons with 7 or fewer years of education, about one of three persons was 65 years of age or over. The corresponding estimate for persons with 12 years of education is about 1 of 10 persons, and that for persons with 17 or more years of education is about 1 of 20 persons. Because relatively high proportions of morbidity and health service utilization occur among older persons, age adjusting of rates and percents can be expected to alter the estimates for persons with low levels of education more than the estimates for persons with high levels of education. The standard population used in age adjusting was the civilian noninstitutionalized population of the United States in 1989 (table 19).

Before summarizing the main results associated with each of the health characteristics, two issues will be considered: (a) the definition of years of education and (b) comparing education and income as alternative control variables for health estimates.

Definition of years of education

The following questions are asked about each person 5 years of age and over in households interviewed in NHIS: (a) What is the highest grade or year of regular school _____ has ever attended? and (b) Did _____ finish the _____ (grade or year)? The responses are edited to produce two measures of education. The first is the number of years of education completed by each individual 5 years of age and over. The second attributes to each member of a family the years of education of the individual in the family 14 years of age and over who has completed the most years of education. Using this definition, any children in a family will be classified as having the educational level of the adult with the highest educational level. In general, all members of the family will be classified in terms of the same level of education.

Table A. Percent distribution of persons by age, according to years of education: United States, 1989

Age	All years ¹	Less than 4 years	47 years	8–11 years	12 years	13–15 years	16 years	17 years or more
				Percent di	stribution			
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 18 years	26.3	18.8	17.7	19.9	25.3	29.6	29.1	34.2
18-44 years	42.8	23.7	23.0	31.5	44.4	49.4	49.4	41.4
45-64 years	18.9	24.9	24.9	29.9	20.0	14.3	15.2	18.6
65 years and over	12.0	32.5	34.4	24.8	10.3	6.6	6.2	5.8

¹Includes unknown education.

Although both measures are based on educational attainment, they show different aspects of education, the first being a measure of individual attainment and the second a measure of family attainment. The measure chosen will depend on the analysis undertaken. In analyses of health status and use of medical care services, education may be an important predictor: It may indicate the level of health awareness and knowledge, or it may indicate the financial resources available for health care. For persons who make their own health-related decisions, including most adults, individual educational attainment will usually be the best indicator of health knowledge and awareness and financial resources for medical care. For persons who do not make their own health-related decisions, including most children, individual educational attainment usually will not be the best indicator for analyses of health status and use of medical care services. Instead, the education of the person who makes their healthrelated decisions for them will be a better indicator.

In NHIS, it is not possible to determine precisely who that decisionmaker is, but it is possible to determine which adult member of the family has the highest level of education. If it is assumed that the person with the most education makes the health-related decisions for children in the family or that the person who does make those decisions has the same or a similar level of education usually reasonable assumptions—then the educational level of the best educated adult is a good indicator of educational level to use in analyzing health status and use of medical care services by children.

For these reasons, a measure that combines these two concepts of years of education is used in this report. Persons 21 years of age and under are classified in terms of the family concept defined above. Persons 22 years of age and over are classified in terms of their own level of education, rather than in terms of the possibly higher educational level of another member of the family.

Using the example of assessed health status, figure 1 shows estimates of the percent of persons assessed in fair or poor health by each of these three measures of education. As may be noted, the estimates for persons classified as having 8 or more years of education are similar for all three measures. The major differences for the three measures are for the two levels indicating relatively few years of education.

The largest range in the estimates is for the "individual" measurement of years of education. Furthermore, this curve has the desirable property (at least for this health characteristic) of monotonically decreasing as the level of education increases. However, use of this measure means excluding children under 18 years of age. Not to do so would involve classifying children and youths 5–17 years of age in terms of their own educational level. This would be very misleading whether education is thought of as primarily a measure of health awareness and knowledge or as an indirect measure of ability to afford health care services.



Figure 1. Percent of persons assessed in fair or poor health, by years of education, for individual, family, and combined measures of years of education: United States, 1989

The range of estimates for fair or poor health is narrowest for the family measure of years of education. Furthermore, the estimates of the percents of persons assessed in fair or poor health do not decrease monotonically with increasing levels of education for the family measure.

The combined measure has a fairly wide range of estimates associated with its various levels. This is desirable, because a control variable with little variation is of little interest. It decreases monotonically as education increases and is thus less likely to substantially distort the result of statistical analyses based on the assumption of linear relationships. Finally, it does not exclude any persons based on their age. For these reasons, it is the measure of educational level used to present the estimates shown in this report.

Education and income as socioeconomic measures

As noted earlier, each year's issue of Current estimates shows basic health characteristics by family income. This is a relatively standard measure of both socioeconomic status and the ability to afford health care services. However, a problem has emerged in analyzing NHIS data by income during the recent past: A high level of nonresponse. In 1972 about 5.9 percent of persons did not report family income. The corresponding estimate for 1989 is 16.2 percent. Although the causes of the increase in nonreporting of income are not well understood, two factors may have contributed: (a) over this period, respondents were asked to report income in increasingly specific income ranges, and some may not have known or wanted to report their income so specifically; (b) there has been a general decline in public responsiveness to surveys, especially questions on sensitive matters such as income.

During this same period the percent of persons for whom education was not reported has remained relatively constant, the estimate falling from 1.2 percent in 1972 to 0.9 percent in 1989. In short, using income in presenting or analyzing NHIS health estimates results in excluding about 1 out of 6 persons, but using education excludes only about 1 out of 100 persons.

Aside from the magnitude of the unknown data for income and education, further considerations are involved in comparing these two variables. The first is the question of any biases associated with using one or the other variable. Figure 2 shows by years of education the percents of persons excluded from the analysis when family income is used. There is a wide range of percents of excluded persons, from 21.1 percent for persons with 4-7 years of education to 11.4 percent for persons with 17 or more years of education. In more general terms, excluding persons with unknown income tends to exclude about twice the proportion of persons with low levels of education as of persons with higher levels of education. Excluding such large proportions of persons with a characteristic known to be related to health can have a seriously biasing effect on some analyses.

Regarding differential exclusion of persons by family income when persons with unknown years of education are excluded, the estimates by family income are based on such a small proportion of the population (0.2 percent) and the sampling errors are so large that meaningful



Figure 2. Percent of persons with unknown family income, by years of education: United States, 1989

comparisons based on 1 year of data are unreliable. Substantively, this means that any income bias produced by excluding persons with unknown years of education is so small that it is negligible.

There are, of course, many considerations involved in choosing the best way of showing the relationship between socioeconomic status and a health characteristic. It is not the purpose of this report to attempt to resolve this issue. However, because education and income are among the more common measures used and because of the declining response rate associated with family income, described previously, the following discussion of the relationship between levels of education and estimates of health characteristics includes brief comparisons between education and income as socioeconomic measures for each health characteristic.

Limitation of activity due to chronic conditions

Limitation of activity due to chronic conditions refers to a long-term inability or reduction in ability to perform the major activities of persons within a specific age range. The major activities for the age ranges are play for children under 5 years of age, going to school for children 5-17 years of age, working at a job or business or keeping house for those 18-64 years of age, and the capacity for independent living for persons 65 years of age and over.

Figure 3 shows a sharp decline in the percent of persons limited in activity as years of education increase, especially for persons with 12 or fewer years of education. Table 1 shows that overall about 14.1 percent of persons were limited in activity in 1989, the estimates ranging from 37.5 percent for persons with less than 4 years of education to 7.7 percent for those with 16 years of education. The percent limited among persons with less than 12 years of education (26.5) was about 2.8 times as large as was the percent limited among persons with 13 or more years of education (9.3). This relationship between level of education and level of limitation holds for all of the comparisons of estimates for the 40 groups defined by the sociodemographic categories shown in table 1. The inverse relationship is particularly strong in relation to race, with the estimate of the proportion functionally limited among black persons being 3.6 times greater for those with less than 12 years of education (27.7 percent) than for those with 13 or more years of education (7.8 percent). Age adjusting the estimates (table 2 and figure 3) tends to reduce the magnitude of the differences in activity limitation between persons with lower and those with higher levels of education. The ratio of the estimates is reduced from the 2.8 noted above for the unadjusted percents to 1.8 for the age-adjusted percents (20.5 percent for those with less than 12 years of education and 11.1 percent for those with 13 or more years of education). However, the estimates are still larger for the lower than for the higher educational levels for all of the 33 age-adjusted comparisons of sociodemographic groups shown in table 2.



Figure 3. Unadjusted and age-adjusted percents of persons limited in activity due to chronic conditions, by years of education and family income: United States, 1989

Figure 3 shows that the range of estimates for persons limited in activity is greater for educational level than it is for level of family income. However, it may be noted that age adjusting the estimates of persons with limitation for both education and income tends to reduce the differences for corresponding levels, so that there is little difference between the age-adjusted estimates for education and for income.

Restricted-activity days

Four types of restricted activity resulting from illness, injury, or impairment are included in the measure restricted-activity days: Days lost from work for currently employed persons 18 years of age and over; schooldays missed by youths 5–17 years of age; days spent in bed (which may overlap either of the prior types); and other



Figure 4. Unadjusted and age-adjusted numbers of restricted-activity days per person per year, by years of education and family income: United States, 1989

days on which a person cuts down on his or her usual activities.

Figure 4 shows that, in general, as years of education increase, the incidence rate of restricted-activity days decreases. The range of these estimates is from a high of 31.8 days per person per year for less than 4 years of education to a low of 9.9 days per person per year for 16 years of education (table 3). Of the 40 comparisons based on sociodemographic characteristics by years of education shown in the table, the estimates of restricted-activity days are higher for persons with less than 12 years of education than they are for persons with 13 or more years of education in all but two comparisons (persons under 18 years of age and unemployed persons). The overall ratio of the rate for persons with less than 12 years of education (24.2) to the rate for those with 13 or more years of education (11.7) is about 2.1. Among the sociodemographic characteristics, the largest ratio between the estimated rates (2.5) is for persons living in the Midwest Region (24.6 and 9.7 days of restricted activity per person per year for the lower and higher educational levels, respectively).

Age adjusting the rates of restricted-activity days reduces the range of the rates from the lower to the higher educational levels (figure 4). The reduction in the range of estimates is from 21.9 days per person per year for the unadjusted rates to only 9.5 days per person per year for the age-adjusted rates shown in table 4. Of the 33 sociodemographic comparisons shown in this table, 3 are not in the expected direction; that is, in these cases persons with less than 12 years of education have lower rates than persons with 13 or more years of education have. These exceptions are for persons with an annual family income of \$5,000-\$9,999; persons whose major activity is not working, keeping house, or going to school (designated as "other"); and unemployed persons.

Figure 4 indicates that age adjusting greatly reduces the range of the rates associated with educational levels but has little effect on the range of the rates associated with different levels of family income (the unadjusted range of rates being 17.4 and the corresponding ageadjusted range being 18.0 days per person per year).

Bed days

A bed day is defined as a day on which a person stayed in bed for more than half the day because of illness, injury, or impairment. As noted in the previous section, bed days are a subset of the more inclusive category of restricted-activity days. Estimates for bed days are shown separately here because they are a more behaviorally oriented measure than are the other types of restrictedactivity days and, unlike work- or school-loss days, they apply to all age groups of the population.

Figure 5 and table 5 show that the number of bed days per person per year ranges from 17.3 for persons with less than 4 years of education to 3.9 for persons with 16 years of education. The rate for the entire population is 6.5 bed days per person per year. For all but 1 (unemployed persons) of the 40 categories defined by the sociodemographic variables shown in table 5, the estimates of bed days per person per year are higher for persons with less than 12 years of education than they are for persons with 13 or more years of education. The ratio of the rates



Figure 5. Unadjusted and age-adjusted numbers of bed days per person per year, by years of education and family income: United States, 1989

is 2.3 for the population as a whole (11.1 for the lower educational level and 4.8 for the higher). The ratios are particularly large for persons living in the Midwest (2.8), persons 45-64 years of age (2.7), and those living outside of metropolitan statistical areas, or MSA's (2.6).

Age adjusting the rates (table 6) reduces their range by about half for the various levels of education (from 13.4 bed days per person per year for the unadjusted rates to 6.9 bed days for the age-adjusted rates). Again, most of the change occurs because of the reduction in the rates by age adjusting for those with fewer years of education (figure 5). The estimated rates are higher for those with less than 12 years of education than they are for persons with 13 years of education or more for all but 2 of the 33 sociodemographic comparisons shown in table 6 (persons with an annual family income of \$5,000-\$9,999 and unemployed persons).

Figure 5 shows that as in the case of restrictedactivity days, the estimates of bed days per person per year are similar for persons with 8 or more years of education and for those with an annual family income of 10,000 or more in the case of both the unadjusted and the ageadjusted rates. Age adjusting has little effect on the rates of low-income groups, but it does significantly reduce the bed-day rate for persons with little education. The only major differences in estimated age-adjusted rates of bed days for the corresponding levels of education and income are for persons with 4–7 years of education (8.9) and persons with an annual family income of \$5,000–\$9,999 (12.3).

Respondent-assessed health status

Estimates of levels of assessed health status are derived from respondents' answers to the following question: "Would you say _______ 's health in general is excellent, very good, good, fair, or poor?" Clearly the responses reflect lay judgment, and clinical evidence is at best only indirectly involved in the respondents' choice of one of the five possible answers.

The estimates of the percent of persons assessed in fair or poor health range from 32.7 percent for persons with fewer than 4 years of education to 3.0 percent for those with 17 or more years of education (figure 6 and table 7). The overall proportion of persons assessed in fair or poor health for all educational levels is 9.7 percent. For the 40 comparisons of the sociodemographic categories shown in table 7, the estimates for persons with less than 12 years of education are far larger than those for persons with 13 or more years of education in all cases. Overall, the estimate of the percent of persons assessed in fair or poor health is about 5.5 times larger for those with less than 12 years of education (23.3 percent) than it is for persons with 13 or more years of education (4.2 percent). Of all the health characteristics discussed in this report, this one shows the largest difference for this type of comparison. The ratios of the estimated percents for the sociodemographic subgroups are particularly large for persons living in the Midwest (6.5), those living outside of MSA's (6.4), non-Hispanic persons (6.1), persons living in



Figure 6. Unadjusted and age-adjusted percents of persons assessed in fair or poor health, by years of education and family income: United States, 1989

the Northeast (6.1), and those in families with an annual family income of \$50,000 or more (6.1).

Age adjusting reduces the ratios of the percents of persons assessed in fair or poor health from 5.5 for the unadjusted percents to 3.5 for the adjusted percents (18.3 and 5.3 percent, respectively, for the lower and higher educational levels). The highest ratio of age-adjusted percents (4.2) is for persons whose major activity is going to school (18.0 percent for those with less than 12 years of education and 4.3 for those with 13 or more years). The range of the age-adjusted estimates is from 22.6 percent for those with less than 4 years of education to 4.0 percent for persons with 17 or more years of education. This reduction of the range for all persons holds also for the sociodemographic subgroups, However, the reduction in the range of difference does not affect the general pattern, the percents of persons assessed in fair or poor health being higher for those with less than 12 years of education than it is for persons with 13 or more years of education for all of the 33 subgroups.

Comparing the estimates with regard to levels of education and income, figure 6 indicates that for the unadjusted percents, the estimates differ greatly only for persons with fewer years of education and lower annual family income, with the overall range in estimates being greater for levels of education than it is for levels of income. Age adjusting reduces the estimates for persons with less education while it increases the estimates for persons with low family income. The overall effect is to make the levels of the age-adjusted estimates similar for education and income throughout the range of corresponding education and family income levels.

Physician contacts

A physician contact is defined as a consultation with a physician in person or by telephone for diagnosis, treatment, or advice. A contact is included if the medical service is provided by either the physician or by a medical person working under the supervision of a physician. Telephone contacts for advice or consultation are included in this measure.

Figure 7 and table 9 show that the physician contact rate does not change consistently with increasing levels of education. The rate per person per year is highest (6.5) for persons with 4-7 years of education and lowest (5.0) for persons with 12 years of education. No regular pattern in the rates is discernible for the other levels of education. Table 9 shows that the rate of physician contacts per person per year is lower for persons with 12 years of education (5.0) than it is for the lower level of education (6.0 for those with fewer than 12 years of education) or the higher level of education (5.5 for persons with 13 or more years of education). There is no regular pattern regarding the comparison of the estimates for the lower and higher educational levels by sociodemographic subgroups. For major activity, the estimates of physician contacts are higher for all of the subgroups for those with 13 or more years of education, but for sex and race, the estimates are high for all of the subgroups for those with less than 12 years of education. Overall, the estimates are



Figure 7. Unadjusted and age-adjusted numbers of physician contacts per person per year, by years of education and family income: United States, 1989



Figure 8. Unadjusted and age-adjusted numbers of short-stay hospital discharges per 100 persons per year, by years of education and family income: United States, 1989

higher for 21 of the 40 sociodemographic comparisons for persons with 13 or more years of education and higher for 18 of the subgroups for those with less than 12 years of education. The two groups were equal in two cases.

However, table 10 shows a dramatic change in these comparisons when the estimates are age adjusted. The age-adjusted estimate of physician contacts for persons with 13 or more years of education (5.9) is higher than the estimate for those with less than 12 years of education (5.1). This pattern holds for 31 of the 33 sociodemographic subgroups. Figure 7 shows the impact of age adjusting on the rates of physician contacts for persons with less than 12 years of education. The reduction results from the relatively high proportion of persons 65 years of age and over (who have very high physician contact rates) with fewer years of education.

Short-stay hospital discharges

The estimates discussed in this section refer only to discharges from short-stay hospitals, where the normal length of stay is less than 30 days. Because hospitalizations of institutionalized and military people and of persons who died during the reference period are not included, these estimates do not include all of the hospital discharges in the United States during the reference period.

Figure 8 and table 11 show a relatively steady decline

in the number of short-stay hospital discharges per 100 persons per year as the level of education increases. The incidence rates range from a high of 20.4 per 100 persons per year for less than 4 years of education to a low of 6.7 per 100 persons per year for 17 or more years of education. This pattern holds for all of the sociodemographic categories included in table 13, and the differences are usually quite large. Because the rate of hospitalization is strongly associated with age, age adjusting these estimates (table 12) tends to reduce the magnitude of the difference. However, for only 1 of the 33 sociodemographic categories included in the table (persons whose major activity is not working, keeping house, or going to school) does the estimate of the incidence rate for less than 12 years of education fail to exceed that of the rate for 13 or more years of education.

Concerning the relationship of the estimates of shortstay hospital discharges by education and by income, figure 8 shows that the pattern is similar for each of the variables, the major difference being that the range of the unadjusted estimates is larger by education than it is by family income. Age adjusting the estimates for each of the variables tends to have little influence on estimates by family income. However, age adjusting does greatly reduce the estimates for the lower educational levels (fewer than 12 years of education) but not those for 12 or more years of education.



Figure 9. Unadjusted and age-adjusted numbers of short-stay hospital days per 100 persons per year, by years of education and family income: United States, 1989

Short-stay hospital days

The measure called hospital days is really based on the number of nights a person spent as a patient admitted to a short-stay hospital. Thus it excludes days (or nights) on which a person used the services of the hospital emergency room or clinic but was not formally admitted. It should also be noted that because these estimates are based on a 6-month reference period and because interviews were conducted throughout 1989, many of the days included occurred in the second half of 1988.

Table 13 and figure 9 show that the estimates of the number of short-stay hospital days per 100 persons per year range from 178.3 for persons with 4–7 years of education to 39.6 for those with 16 years of education. Persons with less than 12 years of education had about 3.1 times more hospital days than persons with 13 or more years of education had (140.7 and 45.9 days per 100 persons per year, respectively). This relationship is particularly strong for persons living in the Northeast (with a ratio of 3.9) and persons in families with an annual family income of less than \$5,000 (with a ratio of 3.6).

Age adjusting the estimated rates greatly reduces their range across levels of education (table 14). The rates range from 109.1 for persons with 4–7 years of education to 48.6 for those with 16 years of education. The ratio of the rate for persons with less than 12 years of education (103.7) to the rate for persons with 13 or more years of education (55.7) is reduced by a third from the ratio for the unadjusted rates (from 3.1 to 1.9). However, the pattern of the relationship still holds for all of the 33 sociodemographic subgroups shown in the table of ageadjusted rates. Figure 9 shows that the range of unadjusted estimates of short-stay hospital days is much wider by level of education than it is by level of family income. However, age adjusting has relatively little effect on the estimates for family income, whereas it greatly reduces the range for education. This results in making the range of ageadjusted rates wider for income than it is for education.

Incidence of acute conditions

An acute condition is one that usually lasts less than 3 months. The NHIS estimate of acute conditions includes only those conditions for which a physician was contacted or which involved at least 1 day of restricted activity.

Figure 10 and table 15 show that the number of acute conditions per 100 persons per year rises from a rate of 75.0 for persons with less than 4 years of education to a rate of 216.1 for persons with 13–15 years of education and then varies little for the higher levels of education. The incidence of acute conditions is higher for those with 13 or more years of education than for those with less than 12 years of education for all but 1 of the 40 sociodemographic comparisons shown in table 15 (unemployed persons).

Age adjusting the incidence rates of acute conditions (table 16) has little effect on any of the rates or any of the sociodemographic comparisons, except to somewhat reduce the magnitude of the differences between lower and higher levels of education.

Figure 10 shows that there is little variation in the incidence rates of acute conditions for the various levels of family income, and the rates are only slightly affected



Figure 10. Unadjusted and age-adjusted numbers of acute conditions per 100 persons per year, by years of education and family income: United States, 1989

when they are age adjusted. The range of estimates is much greater for educational level than it is for family income. As in the case of family income, age adjusting the rates of acute conditions by years of education only marginally affects the levels of the estimates.

Prevalence of chronic conditions

Respondents in NHIS are read a list of chronic conditions and asked to indicate whether they or family members for whom they are the respondents have any of the conditions. To reduce respondent burden, the full NHIS sample is divided into six subsamples for these questions, each household in a subsample being read only one of the six lists into which all of the chronic conditions are divided. Although reducing respondent burden, this procedure greatly increases the sampling variation of estimates of the prevalence of particular chronic conditions. For this reason, estimates of the prevalence of chronic conditions presented in tables 17 (rates) and 18 (frequencies) of this report are shown only for two age groups (under 65 and 65 years of age and over) and two educational levels (less than 12 years and 12 or more years of education).

Table B shows the prevalence rates by these age and educational groups for the four conditions affecting more than 100 persons per 1,000. For three of the four conditions (arthritis, deformity or orthopedic impairment, and hypertension), the prevalence rate is higher for persons with less education than for those with more education for both age groups. In the case of chronic sinusitis, however, the prevalence rate is higher among persons with more education for those under 65 years of age but higher among persons with less education for those 65 years of age and over.

For most of the conditions included in table 17, the prevalence rates are higher for persons with less education. The only conditions for which the prevalence rates are higher for persons with 12 or more years of education than for those with less than 12 years of education within both age groups are psoriasis, dermatitis, disease of the female genital organs, and deviated nasal septum.

Estimates of the prevalence of chronic conditions by family income are not shown in this report. Those wishing to obtain such estimates may consult the 1989 issue of Current Estimates (4).

Table B. Number of selected chronic conditions per 1,000 persons, by age, years of education, and type of condition: United States, 1989

		All ages		υ	Inder 65 years o	f age	65 years of age and over			
Type of chronic condition	All	Less than	12 years	Ali	Less than	12 years	All	Less than	12 years	
	years	12 years	or more	years	12 years	or more	years	12 years	or more	
Chronic sinusitis	138.3	137.4	138.6	136.3	121.6	140.2	153.4	179.9	132.9	
	127.3	241.9	99.0	78.8	138.8	67.4	483.0	518.7	452.6	
	114.9	138.6	109.6	109.5	124.4	106.9	155.2	176.6	140.3	
	113.6	201.8	92.4	77.2	128.8	67.5	380.6	397.9	370.3	

References

- 1. Cooper SD, Buffler PA, Cooper CJ. Health characteristics by occupation and industry of longest employment. National Center for Health Statistics. Vital Health Stat 10(168). 1989.
- 2. Ries P. Health of black and white Americans, 1985-87. National Center for Health Statistics. Vital Health Stat 10(171). 1989.
- 3. Feldman JJ et al. National trends in educational differentials in mortality. Am J Epidemiol 129(5):919-33. 1989.
- 4. Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1989. National Center for Health Statistics. Vital Health Stat 10(176). 1990.
- 5. World Health Organization. Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, based on the recommendations of the Ninth Revision Conference, 1975. Geneva: World Health Organization. 1977.
- 6. U.S. Bureau of the Census. National Health Interview Survey Interviewer's Manual. HIS-100. U.S. Department of Commerce acting as a collecting agent for the U.S. Public Health Service. 1989.

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Table 1. Percent of persons limited in activity due to chronic conditions, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
						Percent				
Total ²	14.1	37.5	31.7	24.2	12.8	10.7	7.7	8.0	26.5	9.3
Age										
Under 18 years	5.3	*3.1	4.4	7.5	6.0	5.6	3.3	3.4	6.7	4.5
18–44 years	9.0	26.5	14.6	14.5	9.0	8.3	5.9	6.0	15.2	7.1 4 9
18–24 years	6.1	*18.0	10.5	8.3	6.4 8.2	5.2 7.5	4.5	4.8	13.7	- .5 6.0
25-34 years	12.3	30.1	22.1	21.8	12.3	11.9	• 8.6	7.4	22.4	9.7
45-64 years	22.2	46.4	42.1	33.6	19.2	18.8	13.0	13.2	36.1	15.7
4554 years	17.1	41.3	35.1	27.3	15.3	15.4	10.0	10.6	29.6	12.6
55-64 years	27.9	49.4	46.7	38.5	23.8	24.0	17.1	17.6	41.0	20.3
65 years and over	38.3	56.0	49.0	40.9	33.7	04.0	23.2	00.1		02.0
Sex										
Male	13.7	40.8	29.7	23.4	12.6	10.5	8.1	8.0 8 1	25.9 27 1	9.2
Female	14.4	34.3	33.0	24.9	13.0	10.9	7.0	0.1	27.1	0.1
Race										
White	14.2	35.1	30.6	25.0	13.2	11.1	8.1	8.3	26.6 27.7	9.6
	14.9	55.2 20 5	39.4	22.0	74	0.0 6.8	43	5.2	17.7	5.4
Otner	0.0	20.0	22.0	14.0	7.4	0.0	1.0	•		
Family income							****	*04.4	05.0	14.9
Less than \$5,000	25.1	42.0	44.2	31.4	19.4	13.5	*14.3	*24.1	35.2	20.3
\$5,000-\$9,999	27.7	46.0	37.0	27 9	17.3	17.8	18.8	14.6	28.3	17.7
\$15,000-\$14,999	15.7	31.6	23.7	23.3	13.9	12.6	9,8	13.6	23.8	12.1
\$25.000-\$34.999.	11.0	31.5	22.5	19.2	10.1	9.4	8.2	10.1	20.2	9.2
\$35,000-\$49,999	8.7	*42.1	22.2	13.2	9.4	8.6	5.8	6.8	15.1	7.3
\$50,000 or more	7.6	*55.9	25.4	15.8	9.1	7.4	6.3	6.2	18.2	6.6
Hispanic origin										
Hispanic	10.6	20.3	11.4	13.5	8.6	8.3	6.6	5.5	13.8	7.4
Non-Hispanic	14.4	50.6	41.9	25.8	13.2	10.9	7.8	8.2	29.4	9.4
Poverty status										
In poverty	20.7	32.1	28.5	25.3	16.2	13.7	12.8	17.6	26.8	13.8
Not in poverty.	12.5	43.3	32.2	23.7	12.0	10.2	7.4	7.7	20.0	0.0
Geographic region										
Northeast	13.1	37.6	31.9	24.0	12.4	9.4	7.2	6.7	25.9	8.0
Midwest	13.7	48.2	37.5	26.4	12.9	10.0	7.0	8.0	20.3	9.3
South	15.2	49.9	37.0 16.7	23.6	12.8	11.8	9.8	9.1	20.7	10.6
West	10.0	10.0								
Place of residence	10.0	01.0	00.4	02.5	10.6	10.5	75	7 0	24.9	9.0
MSA	13.3	31.3	26.1	23.5	13.6	10.5	8.2	9.4	24.7	9.8
Not central city	12.5	33.1	30.1	23.6	12.0	10.4	7.1	7.1	25.2	8.6
Not MSA	16.6	58.0	42.4	26.1	13.6	11.4	8.7	8.6	30.9	10.2
All persons 18 years of age and over	17.2	45.5	37.5	28.4	15. 1	12.9	9.5	10.4	31.3	11.4
Major activity?										
Major activity	89	16.7	13.0	13.1	8.5	8.7	6.4	7.9	13.2	7.8
Keeping house	26.6	40.7	42.2	34.1	23.1	20.9	15.2	17.0	36.2	18.8
Going to school	7.7	*23.7	*20.3	11.3	7.5	7.2	6.3	7.1	13.6	7.0
Other	47.8	70.5	60.5	52.5	42.8	42.7	35.6	34.9	56.3	39.1
Marital status ³										
Married, living with spouse	15.5	36.8	33.2	25.9	14.2	12.1	8.9	9.2	27.9	10.5
Never married.	11.9	55.4	27.6	18.9	11.0	9.1 22 4	7.4 17 7	9.2 20.0	23.7 42.0	8.6 20.8
Otner	29.3	54.4	40.0	0.00	23.0	22.4	17.7	20.0	-T&+V	20.0
Employment status ³										
Currently employed	8.9	16.9	13.1	13.3	8.6	8.7	6.6	7.5	13.4	120
Unemployed	15.8 34.1	57 1	51.4	41.9	29.6	25.7	21.4	23.8	45.3	24.2
	÷	÷								

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 2. Age-adjusted percent of persons limited in activity due to chronic conditions, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
					Age-ad	justed perce	ent			
Total ²	14.1	28.0	21.3	19.5	13.2	12.7	9.4	10.0	20.5	11.1
Sex										
Male Female	14.3 13.9	29.7 26.3	20.9 21.8	20.0 19.0	13.7 12.7	12.7 12.7	9.7 9.1	9.6 10.7	21.0 19.9	11.0 11.3
Race										
White	13.9 17.3 10.7	27.3 43.3 19.3	20.6 26.2 22.6	19.3 21.9 13.7	13.1 15.1 9.3	12.8 12.4 11.1	9.7 8.6 8.6	10.1 9.7 8.8	20.0 23.4 16.7	11.3 11.2 9.4
Family income										
Less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$34,999 \$50,000 or more	28.2 25.6 19.9 15.3 12.4 10.6 9.1	32.8 37.2 22.9 22.7 25.1 *29.9 *40.1	34.5 28.1 22.8 14.8 14.8 15.2 13.1	33.4 27.1 22.4 18.3 15.8 12.0 11.9	25.5 23.1 17.4 14.2 11.1 10.9 9.6	22.5 22.7 19.2 14.7 12.4 11.2 8.7	*15.9 25.8 17.6 11.0 11.2 7.8 7.6	*28.0 19.4 13.5 14.8 11.3 8.8 8.5	33.5 28.3 22.5 18.0 16.2 13.1 13.3	22.5 22.9 18.4 13.9 11.9 9.6 8.2
Hispanic origin										
Hispanic	14.2 14.1	18.2 38.6	14.6 28.4	17.4 19.8	12.0 13.2	13.4 12.7	9.0 9.4	8.4 10.1	16.6 21.6	11.0 11.2
Poverty status										
In poverty	26.3 12.7	28.7 30.3	26.6 17.9	29.8 17.0	24.0 12.1	22.6 12.1	18.1 9.2	26.7 9.6	29.1 17.8	22.5 10.6
Geographic region										
Northeast Midwest South West	12.4 13.8 15.3 14.1	31.2 35.6 36.4 18.5	21.1 23.3 25.5 16.3	17.7 19.8 20.4 19.4	11.8 13.2 13.6 14.0	11.2 12.4 13.1 13.5	8.8 9.1 8.7 11.4	8.3 10.6 10.3 10.8	18.8 20.6 22.5 18.4	9.7 11.0 11.2 12.3
Place of residence										
MSA	13.6 14.8 12.8 15.8	25.0 25.1 24.9 41.8	19.6 19.4 20.0 28.3	19.3 20.8 18.2 19.8	12.8 14.0 12.2 14.2	12.4 12.8 12.2 13.7	9.3 10.1 8.8 10.2	10.1 11.3 9.3 9.7	19.8 20.9 18.9 22.2	10.9 11.7 10.5 12.0
All persons 18 years of age and over	17.2	36.9	27.4	23.8	15.7	15.2	11.6	12.3	25.4	13.5
Major activity ³										
Working Keeping house Going to school Other	10.5 22.4 18.0 48.2	17.0 28.3 *28.1 75.2	13.2 31.9 *23.6 59.9	13.4 28.2 15.8 53.2	9.8 20.3 14.6 43.2	11.1 19.5 20.6 45.4	7.8 14.1 6.2 36.3	10.2 14.5 24.0 34.7	13.6 29.0 20.8 56.9	10.0 17.3 20.2 41.4
Marital status ³										
Married, living with spouse	15.4 20.1 23.0	25.5 57.0 35.5	23.6 30.2 35.7	21.8 26.0 30.1	14.5 16.7 19.9	13.9 19.6 20.5	10.5 14.8 15.7	10.7 16.4 18.0	22.5 29.7 31.6	12.1 17.1 18.8
Employment status ³										
Currently employed	10.7 18.4 28.1	16.7 *23.2 48.3	12.9 *19.5 40.8	13.7 27.2 35.7	10.2 15.4 25.3	11.2 15.5 23.6	8.4 15.6 17.6	9.6 *14.3 18.8	13.7 25.0 37.9	10.0 15.1 21.2

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 3. Number of days of restricted activity per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4—7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Nur	mber of da	ys of restric	ted activity	per person	per year		
Total ²	15.2	31.8	28.8	22.3	14.3	13.3	9.9	10.2	24.2	11.7
Age										
Under 18 years	10.2 12.0 9.9 12.3	*5.0 11.3 *5.0 *6.9 18 7	5.3 13.3 11.7 9.3 18.4	11.2 16.4 11.5 16.9 20.3	10.4 12.8 11.2 12.9 14.0	11.0 12.2 9.3 13.9 12.8	9.1 8.1 6.3 8.1 9 1	9.5 8.4 5.9 8.2 9.3	9.8 15.7 11.2 15.3 19.9	10.1 10.3 8.2 10.9 10.8
45-64 years 45-54 years 45-64 years 55-64 years 55-64 years 55-64 years 65 years and over 65 years	18.9 16.5 21.7 31.5	40.1 22.9 50.4 55.7	35.2 28.1 39.9 46.5	28.8 26.3 30.8 32.4	16.0 16.1 15.9 26.7	16.3 14.6 18.7 25.6	12.1 10.3 14.4 23.1	10.8 8.7 14.4 25.9	30.8 26.4 34.1 37.7	13.6 11.8 16.4 25.0
Sex										
Male	13.2 17.0	27.8 35.7	26.7 30.8	19.0 25.2	12.8 15.5	11.2 15.3	9.2 10.7	8.9 11.9	21.2 26.9	10.1 13.4
Race										
White	15.0 17.1 11.4	28.9 48.5 19.2	28.7 31.8 17.8	22.7 21.1 17.1	14.2 14.6 13.8	13.3 14.4 10.7	10.1 9.9 6.4	10.6 9.3 6.8	24.2 25.1 17.7	11.8 12.7 8.0
Family income										
Less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$49,999 \$50,000 or more	25.7 26.9 20.9 15.2 13.2 10.5 9.5	27.2 37.6 26.1 28.8 29.4 *18.9 *2.2	43.1 30.3 26.4 22.1 27.0 21.2 24.7	29.4 26.9 22.8 18.6 19.2 15.2 12.5	22.0 24.9 19.7 13.7 12.3 10.2 10.3	17.9 24.9 19.4 14.9 12.4 10.5 9.6	*24.1 25.3 14.2 12.0 12.3 8.0 8.4	*23.0 20.8 *9.5 12.4 10.5 10.8 9.0	32.1 28.7 23.8 19.8 20.6 16.0 14.1	18.8 24.5 17.5 13.9 12.1 9.8 9.0
Hispanic origin										
Hispanic	13.2 15.4	20.8 40.0	12.3 37.3	16.1 23.3	11.7 14.5	12.7 13.4	8.5 10.0	10.6 10.3	15.5 26.2	11.3 11.7
Poverty status										
In poverty	21.6 13.6	25.3 34.2	25.3 29.2	23.5 20.6	20.0 13.1	17.8 12.7	19.9 9.6	*16.6 10.1	24.1 22.6	17.9 11.2
Geographic region										
Northeast Midwest South West	13.7 13.6 16.7 15.8	38.2 *25.3 37.6 23.0	26.2 35.8 32.4 19.9	20.4 22.9 23.4 21.3	12.9 13.3 15.1 15.7	11.7 11.4 14.1 15.5	10.9 7.9 9.7 11.6	8.7 8.2 11.2 12.5	22.2 24.6 26.3 21.2	10.6 9.7 12.2 13.8
Place of residence										
MSA	15.0 16.3 14.1 15.8	29.2 30.0 28.1 40.1	28.0 25.4 31.1 31.3	22.2 22.3 22.2 22.6	14.4 14.9 14.1 13.9	13.3 14.5 12.6 13.4	10.1 11.5 9.4 8.9	10.2 11.9 9.3 10.3	23.8 23.6 24.0 25.2	11.7 13.1 10.9 11.7
All persons 18 years of age and over	16.9	38.0	33.8	25.1	15.6	14.3	10.3	10.7	27.6	12.4
Major activity ³										
Working	10.5 22.7 9.6 42.8	*6.8 41.5 *2.4 59.8	13.7 32.5 *16.5 57.2	14.4 27.6 15.6 43.7	10.4 20.2 8.6 40.0	10.4 19.4 11.2 43.1	8.4 12.0 6.7 28.2	8.9 17.6 7.4 26.0	14.0 29.5 14.6 48.6	9.5 17.1 9.5 35.5
Marital status ³										
Married, living with spouse	15.3 11.6 28.8	33.2 23.6 54.0	29.0 24.7 45.9	22.2 14.2 36.4	14.4 12.2 24.2	13.4 11.0 23.7	10.3 7.2 17.3	9.6 9.8 18.8	24.1 16.8 39.8	11.6 9.7 21.2
Employment status ³										
Currently employed	10.3 15.8 30.5	8.5 *_ 50.4	13.2 *15.8 45.7	14.0 12.8 35.4	10.6 14.3 26.7	10.3 19.4 26.1	8.0 14.0 19.4	8.4 22.3 19.9	13.6 12.9 39.0	9.2 18.7 23.2

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 4. Age-adjusted number of days of restricted activity per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	47 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
		•	Age-adjus	sted numbe	er of days o	f restricted	activity per	person per ye	ar	
Total ²	15.2	20.5	19.4	19.4	14.5	14.3	11.0	11.3	19.7	12.7
Sex										
Male Female	13.6 16.7	17.5 23.8	18.3 20.6	16.8 21.7	13.4 15.4	12.0 16.2	10.2 11.8	9.9 13.3	17.5 21.9	11.0 14.5
Race										
White	14.9 19.0 13.5	19.4 27.3 18.0	14.9 21.3 15.8	19.3 21.4 16.3	14.9 17.0 15.2	14.1 17.1 11.7	14.9 14.8 8.6	14.9 10.7 9.9	14.9 22.2 16.9	14.9 15.5 10.1
Family income										
Less than \$5,000. \$5,000-\$9,999 \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$34,999. \$50,000 or more .	28.6 26.2 19.8 15.0 13.9 11.5 10.6	17.2 26.5 18.3 17.1 29.1 *8.5 *1.9	28.5 23.0 20.0 15.6 17.7 13.1 10.4	30.9 24.6 19.7 16.8 16.5 15.3 10.2	26.9 26.3 20.1 13.8 12.6 11.2 11.0	26.7 28.5 20.0 16.0 13.7 10.8 11.2	*19.6 33.1 12.5 12.4 14.4 9.5 8.8	*16.2 21.2 *8.5 13.4 11.4 12.5 10.8	29.4 24.6 19.6 16.8 17.4 15.3 10.8	24.3 28.5 17.4 14.7 13.6 10.9 10.2
Hispanic origin										
Hispanic	16.5 15.2	17.8 22.8	14.4 22.9	19.7 19.6	15.0 14.6	19.9 14.3	9.0 11.1	12.8 11.3	17.8 20.5	15.0 12.7
Poverty status										
In poverty	26.3 13.7	21.0 20.6	22.6 18.0	27.1 17.1	26.0 13.3	24.3 13.6	25.0 10.6	*16.4 11.1	25.4 17.6	24.1 12.2
Geographic region										
Northeast Midwest South West	13.2 13.7 16.8 16.2	20.3 *11.1 21.4 20.9	17.5 19.4 21.8 18.8	16.7 18.8 21.1 19.3	12.6 13.6 15.8 15.9	12.7 12.4 15.1 16.3	11.9 8.6 10.8 12.6	10.1 9.1 12.8 13.0	17.1 19.1 21.7 19.0	11.8 10.7 13.4 14.5
Place of residence										
MSA	15.2 16.4 14.4 15.4	20.0 21.4 18.3 25.1	19.5 19.0 19.8 20.4	19.5 20.6 18.7 19.2	14.6 15.2 14.3 14.1	14.3 15.8 13.4 14.3	11.3 13.0 10.3 9.2	11.4 13.6 10.0 10.8	19.7 20.6 19.0 19.9	12.7 14.5 11.7 12.4
All persons 18 years of age and over	17.0	26.0	24.4	22.3	15.9	15.5	11.6	11.9	23.2	13.6
Major activity ³										
Working	11.0 20.7 15.5 44.9	*5.9 29.7 *5.8 42.4	14.6 24.5 *12.1 42.9	14.1 24.6 34.8 44.4	10.6 19.2 7.9 44.3	10.8 19.0 10.2 56.9	9.1 11.8 5.9 26.9	10.8 16.4 8.7 30.4	13.9 25.2 29.4 44.5	10.4 16.6 9.2 46.0
Marital status ³										
Married, living with spouse	15.4 14.9 24.7	22.6 25.0 35.7	21.0 25.4 30.1	20.4 16.5 30.0	14.7 14.9 22.6	14.2 13.7 22.7	11.4 9.5 16.5	11.0 10.9 17.0	21.0 19.5 30.8	12.6 11.7 20.1
Employment status ³										
Currently employed	10.9 16.5 27.0	6.9 *_ 34.9	13.0 *16.7 34.3	13.7 14.6 32.2	11.1 14.2 25.0	10.9 16.7 25.9	8.5 31.5 17.1	10.0 19.8 16.6	13.4 14.8 33.1	10.0 19.0 22.1

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 5. Number of days in bed due to illness, injury, or impairment per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Ali years ¹	Less than 4 years	4—7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
				Numbe	r of days in	bed per pe	rson per ye	ear		
Total ²	6.5	17.3	14.0	9.8	5.9	5.6	3.9	4.2	11.1	4.8
Age										
Under 18 years	5.0	*2.8	*3.3	6.2	5.0	5.4	4.4	3.9	5.5	4.8
18–44 years	4.7	*6.9	4.6	6.8	4.9	4.9	2.8	3.5	6.5 5 3	4.0
25-34 years	4.1	*5.4	*5.2	6.8	4.6	5.5	2.6	3.5	6.5	4.2
35–44 years	5.3	*11.6	*4.9	7.7	5.8	5.2	3.3	3,7	7.5	4.3
45-64 years	7.7	20.4	16.2	12.4	6.3	6.2	4.5	3.5	13.7	5.0
45–54 years	7.0	*14.7	13.7	11.9	6.6 5 0	5.9	4.2	3.0	12.4	4.6
65 years and over	8.5 14.2	23.8 30.8	24.3	12.8	11.2	10.1	9.3	13.5	17.8	10.6
, Pox										
Sex	55	163	12.4	80	53	45	37	34	94	4.0
Female	7.4	18.3	15.7	11.4	6.4	6.6	4.2	5.2	12.6	5.7
Bace										
White	6.3	14.8	14.1	10.1	5.7	5.5	3.9	4.2	11.1	4.7
Black	8.0	29.6	14.4	8.9	7.1	6.5	5.0	5.0	11.5	5.9
Other	5.2	*9.8	*10.8	7.6	5.3	6.0	*2.3	*3.4	8.8	3.9
Family income										
Less than \$5,000	11.5	14.9	19.2	12.5	10.7	7.1	*10.1	*12.5	14.2	7.7
\$5,000-\$9,999	12.5	24.6	15.0	12.3	10.1	11.3	*12.7	*15.9	14.1	11.9
\$10,000-\$14,999	9.6	13.5	12.9	83	9.4 5.6	7.0	~4.0 3.5	-5.2	86	5.3
\$25,000-\$34,999	5.1	*18.8	13.9	6.9	4.5	5.2	4.7	3.2	8.3	4.8
\$35,000-\$49,999	4.1	*2.2	*9.5	5.0	3.8	4.6	3.4	4.4	5.4	4.2
\$50,000 or more	3.9	*2.2	*15.0	4.7	4.3	4.1	3.3	3.5	6.2	3.6
Hispanic origin										
Hispanic	7.0	12.2	6.4	9.5	6.3	5.8	*3.5	*5.1	8.8	5.2
Non-Hispanic	6.4	20.9	18.1	9.9	5.8	5.6	4.0	4.2	11.7	4.8
Poverty status										
In poverty	10.2 5.6	15.5 18.8	12.6 13.2	11.1 8.6	9.1 5.3	7.6 5.4	9.3 3.7	*9.8 4.1	11.9 9.8	7.9 4.6
Geographic region										
Northeast	5.6	26.2	13.8	8.1	5.2	4.6	4.3	3.2	9.9	4.1
Midwest	5.5	*6.5	16.5	9.8	5.1	4.4	2.9	3.4	10.6	3.8
South	7.3	20.7	14.5	10.7	6.5	6.0	3.7	4.5	12.2	5.0
west	7.1	11.3	12.0	9.9	0.0	0.9	4.9	5.7	10.0	0.1
Place of residence										
MSA	6.4	15.9	13.4	9.6	5.9	5.7	4.0	4.2	10.8	4.9
	7.4 5.7	19.2	12.8	10.4	5.5	0.4 5.2	4.4	3.0	9.9	5.5 4.5
Not MSA	6.8	21.8	16.1	10.3	5.6	5.3	3.5	4.1	12.1	4.6
All persons 18 years of age and over	7.0	20.6	16.4	10.7	6.1	5.7	3.7	4.4	12.4	4.8
Major activity ³										
Marking		*9.6		5.0	36	4.0	28	35	5.0	35
	3.8	3.6 16.2	4.4	5.2 10.2	7.7	6.8	2.0	7.3	11.4	5.9
Going to school	4.3	*0.8	*4.3	*9.8	3.6	4.8	*2.8	3.9	8.1	4.2
Other	21.3	37.5	31.3	21.8	19.0	18.3	13.9	11.8	25.7	15.8
Marital status ³										
Married, living with spouse	6.2	15.2	13.3	9.4	5.5	5.4	4.0	3.8	10.5	4.6
Never married	4.6 12 5	15.2	10.0 24 0	5.6 15 9	4.9 10 1	4.2 9.0	2.3 5.3	4.0 8.6	7.2 18.9	3.6 8.0
- · · · · · · · · · · · · · · · · · · ·	12.0	55.1	£4.U	13.5	.0.1	3.0	0.0	0.0	.0.0	0.0
Employment status ³								.		~ .
Currently employed	3.6	*3.3	4.1 *o o	4.7 5 6	3.6 7 6	3.8	2.7 *4 2	3.4 *5 Q	4.5 6 1	3.4 6.9
Not in labor force	13.9	27.9	23.2	16.2	11.6	11.2	8.2	8.8	18.8	10.0

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 6. Age-adjusted number of days in bed due to illness, injury, or impairment per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	47 years	8–11 years	12 years	13—15 years	16 years	17 years or more	Less than 12 years	13 years or more		
			Age	e-adjusted	number of	of days in bed per person per year						
Total ²	6.5	11.3	8.9	8.6	6.0	6.0	4.4	4.9	9.0	5.2		
Sex												
Male	5.7 7.3	10.1 12.5	7.8 10.2	7.1 10.0	5.6 6.4	4.9 6.9	4.2 4.6	4.1 5.9	7.7 10.3	4.5 6.0		
Race												
White	6.3 8.9 6.4	9.9 20.1 *8.9	9.1 9.3 *9.0	8.7 9.1 7.2	5.8 8.5 6.1	5.8 8.0 6.9	4.3 7.5 *2.2	4.8 6.0 *6.5	8.9 10.2 8.2	5.1 7.6 5.2		
Family income												
Less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$49,999 \$50,000 or more	12.5 12.3 9.1 6.2 5.4 4.6 4.4	8.3 17.4 10.6 7.0 *13.6 *1.2 *1.9	11.6 11.6 9.3 6.2 9.0 *5.6 *5.9	12.7 11.7 9.1 7.6 6.2 4.6 3.9	13.2 11.0 9.6 5.7 4.6 4.4 4.9	11.7 12.9 7.6 6.5 5.8 4.6 4.5	*11.2 *15.6 *4.2 3.7 5.5 3.9 3.2	*9.3 *15.6 *4.5 5.0 3.5 5.2 4.4	12.5 12.5 9.3 7.4 7.2 4.7 4.8	11.7 13.5 6.7 5.6 5.3 4.6 4.0		
Hispanic origin												
Hispanic	8.9 6.4	10.5 12.6	7.6 9.5	12.1 8.4	7.6 5.9	8.3 5.9	*3.6 4.4	*7.9 4.8	10.3 9.0	7.0 5.2		
Poverty status												
In poverty	12.4 5.7	12.5 10.7	10.7 8.2	12.6 7.4	12.0 5.4	10.5 5.7	12.4 4.1	*11.2 4.6	12.4 7.8	11.2 5.0		
Geographic region												
Northeast Midwest South West	5.5 5.5 7.4 7.3	13.7 *2.5 11.9 10.5	7.9 8.5 9.1 10.9	6.9 8.4 9.7 8.8	5.1 5.3 6.8 6.7	5.0 4.8 6.3 7.3	4.5 3.1 4.2 5.5	4.1 3.7 5.4 6.0	7.6 8.5 10.0 9.2	4.6 4.1 5.5 6.5		
Place of residence												
MSA Central city Not central city Not MSA	6.5 7.5 5.9 6.6	10.8 13.4 7.2 16.3	8.9 9.2 8.3 9.1	8.5 9.4 7.9 8.9	6.1 6.8 5.7 5.8	6.1 6.9 5.5 5.5	4.4 5.3 3.9 3.7	5.0 6.2 4.1 4.4	8.8 9.9 8.0 9.5	5.3 6.3 4.7 4.9		
All persons 18 years of age and over	7.1	14.3	10.9	9.4	6.3	6.1	4.4	5.2	10.2	5.4		
Major activity ³												
Working Keeping house Going to school Other	4.0 8.1 6.0 21.7	*3.2 11.8 *1.9 28.5	3.9 11.5 *4.1 18.2	5.0 9.3 *16.0 23.7	3.9 7.7 2.9 21.2	3.9 6.8 4.0 22.3	3.2 3.8 *1.7 13.5	4.5 6.2 5.3 9.5	4.7 10.0 12.4 23.8	3.9 5.9 4.2 18.3		
Marital status ³												
Married, living with spouse	6.3 5.7 10.5	10.4 15.9 20.8	9.1 10.5 13.8	8.6 5.7 12.7	5.7 6.4 9.6	5.8 3.5 8.7	4.5 2.4 4.9	4.6 3.5 8.3	8.9 8.2 13.8	5.1 3.2 7.6		
Employment status ³												
Currently employed	3.9 7.8 12.4	*2.9 *_ 19.9	3.8 *10.7 15.5	4.7 5.4 15.7	4.1 7.8 11.1	3.7 6.7 11.2	2.7 *20.6 7.2	4.4 *5.3 6.6	4.5 6.6 16.3	3.6 7.7 9.5		

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 7. Percent of persons assessed by respondents to be in fair or poor health, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
						Percent	16 17 years Less than 13 years or more 12 years or 3.2 3.0 23.3 or 1.2 0.9 5.4 or 2.0 1.9 14.6 the *1.4 *1.7 9.6 the 1.6 1.6 12.7 2.9 2.9 2.1 21.2 5.8 5.1 3.1 2.9 21.3 3.3 3.1 25.1 3.1 2.7 22.4 4.8 7.0 28.6 3.5 2.6 17.7 13.0 2.0 14.4 3.1 2.7 22.4 4.8 7.0 28.6 3.5 2.6 17.7 13.0 2.0 14.1 13.0 2.0 2.1 13.0 2.0 14.1 13.0 2.0 11.2 *8.5 24.8 3.4 3.5 16.6 2.0 2.1 13.0 2.0			
Total ²	9.7	32.7	29.9	20.8	8.6	5.3	3.2	3.0	23.3	4.2
Age										
Under 18 years	2.6 5.9 4.2 5.1 7.9 16.1 12.5 20.3 28.5	*2.4 17.1 *11.5 22.4 43.5 35.1 48.5 53.3	3.1 15.3 9.9 12.2 21.7 43.7 38.6 47.1 43.2	6.2 14.2 9.5 12.6 21.0 28.5 24.1 31.9 33.3	3.2 6.2 4.6 5.4 8.5 13.3 11.6 15.3 23.6	1.7 4.1 2.3 3.7 6.2 10.0 7.4 13.9 19.8	1.2 2.0 *1.4 2.9 5.8 4.3 7.7 15.7	0.9 1.9 *1.7 1.6 2.1 5.1 4.1 6.5 16.3	5.4 14.6 9.6 12.7 21.2 32.5 27.5 36.3 37.3	1.4 3.1 2.0 2.6 4.2 7.5 5.7 10.3 17.9
Sex										
Male	8.7 10.6	33.7 31.7	27.5 32.2	18.5 22.9	7.9 9.2	4.6 5.9	3.1 3.3	2.9 3.1	21.3 25.1	3.7 4.7
Race										
White	9.0 14.5 8.3	29.4 51.9 17.9	27.8 42.6 19.1	20.5 22.8 17.1	8.3 11.1 9.0	5.0 7.0 7.3	3.1 4.8 3.5	2.7 7.0 2.6	22.4 28.6 17.7	3.9 6.5 4.5
Family income										
Less than \$5,000 \$5,000-\$9,999 \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$49,999. \$50,000 or more	22.3 22.8 16.6 10.8 6.5 4.3 3.2	38.3 38.0 28.4 30.2 25.1 *21.5 *29.4	40.9 36.5 30.1 24.2 21.7 18.2 *19.1	30.1 27.2 22.8 18.8 15.3 12.0 12.0	17.8 17.0 12.6 9.1 6.1 4.8 4.7	7.9 12.3 9.3 6.6 4.2 3.5 2.8	*10.2 12.0 11.2 4.4 3.4 2.0 2.0	*12.8 *9.0 *8.5 6.6 3.5 2.1 1.8	33.2 30.3 24.8 20.3 16.6 13.0 13.4	8.4 11.9 9.6 6.1 3.9 2.7 2.2
Hispanic origin										
Hispanic	9.9 9.7	19.0 43.3	13.7 38.0	14.5 21.7	7.3 8.8	5.9 5.3	3.8 3.2	*4.2 2.9	14.9 25.2	5.1 4.1
Poverty status										
In poverty	18.4 7.8	28.9 37.6	28.4 30.4	24.2 19.3	14.1 7.5	8.4 4.8	10.1 2.9	*9.0 2.7	25.7 21.9	8.6 3.7
Geographic region										
Northeast	8.2 8.8 11.8 8.7	33.5 40.0 42.2 19.0	27.6 35.5 35.0 18.5	17.7 22.0 23.0 17.9	7.8 7.9 9.5 9.0	4.3 4.4 6.1 5.9	2.8 2.9 3.1 4.1	2.0 2.7 3.5 3.6	20.1 24.1 26.9 18.2	3.3 3.7 4.7 4.9
Place of residence										
MSA Central city	9.0 11.0 7.7 12.1	27.3 27.4 27.0 50.4	25.9 26.3 25.5 41.8	19.6 20.8 18.6 24.0	8.5 10.1 7.6 8.9	5.3 6.3 4.6 5.5	3.2 4.0 2.8 3.2	2.9 3.7 2.5 3.2	21.4 22.6 20.2 28.7	4.1 5.1 3.6 4.5
All persons 18 years of age and over	12.2	39.7	35.6	24.4	10.5	0.0	4.0	4.0	27.0	5.4
Major activity ³		(<i></i>	10.0	
Working	5.8 20.4 3.6 34.8	18.2 39.6 *8.5 56.4	17.9 39.1 *17.2 52.1	12.5 30.3 13.9 40.8	5.8 16.0 3.2 29.9	4.0 12.8 3.0 26.0	2.4 7.1 *1.6 17.9	2.4 7.1 *2.0 20.5	13.6 32.7 14.0 45.1	3.2 10.4 2.5 22.7
Marital status ³										
Married, living with spouse	11.2 7.2 21.2	37.8 30.2 48.6	33.3 24.8 43.2	23.1 16.2 31.3	9.9 7.1 16.7	6.5 4.4 12.1	4.2 2.6 6.1	3.7 3.0 8.2	25.9 18.9 35.2	5.2 3.6 10.0
Employment status ³										
Currently employed	5.6 11.0 25.8	17.0 *45.5 48.6	18.2 24.2 45.5	12.1 15.6 35.6	5.8 11.2 20.7	3.9 7.6 15.8	2.4 *5 4 10.8	2.3 *3.6 12.4	13.3 17.8 38.9	3.1 6.3 13.9

¹Includes unknown education.
²Includes unknowns of sociodemographic characteristics.
³For persons 18 years of age and over.

Table 8. Age-adjusted percent of persons assessed by respondents to be in fair or poor health, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4—7 years	8—11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
					Age-ad	justed perc	ent			
Total ²	9.7	22.6	20.9	17.2	8.9	6.5	4.2	4.0	18.3	5.3
Sex										
Male	9.2 10.2	22.2 23.1	19.6 22.3	15.5 18.7	8.8 9.0	6.1 6.9	4.2 4.3	3.8 4.2	17.0 19.7	4.9 5.7
Race										
White	8.8 16.9 10.2	21.6 32.2 18.0	19.6 29.6 17.8	16.0 22.8 16.4	8.2 14.5 10.6	6.0 10.9 9.6	4.0 7.0 4.1	3.6 9.1 4.7	17.0 24.8 17.0	4.9 9.7 6.2
Family income										
Less than \$5,000. \$5,000-\$9,999. \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$34,999. \$50,000 or more .	25.1 21.4 15.3 10.5 7.4 5.5 4.1	29.4 27.4 24.1 21.4 18.0 *12.5 *20.8	31.9 27.5 24.1 16.3 14.3 13.5 *9.5	32.0 25.4 18.6 15.2 12.3 10.2 8.9	22.7 18.1 12.7 9.3 6.8 5.8 5.0	16.3 13.7 10.1 8.1 6.0 4.7 3.8	*12.9 13.6 10.6 5.2 4.9 2.9 2.3	*19.2 *8.9 *9.5 6.9 3.9 3.3 2.6	32.4 26.3 20.3 15.8 12.9 10.6 9.3	16.1 13.3 10.2 7.2 5.3 3.8 2.8
Hispanic origin										
Hispanic	13.1 9.4	17.0 26.9	16.7 24.7	18.0 17.0	9.7 8.8	9.7 6.4	4.6 4.2	*6.7 3.9	17.5 18.6	7.6 5.2
Poverty status										
In poverty	23.6 7.9	25.8 22.9	27.3 18.4	28.5 14.0	20.8 7.6	15.7 5.9	15.0 3.8	*16.6 3.7	28.2 15.1	15.7 4.8
Geographic region										
Northeast Midwest South West	7.7 8.9 11.9 9.2	23.5 27.8 24.5 18.3	20.2 23.6 22.9 18.5	13.9 16.8 19.9 15.7	7.4 8.1 10.3 9.2	5.3 5.7 7.3 7.1	3.5 3.9 4.2 5.2	2.8 3.7 4.9 4.4	15.4 17.9 21.2 16.4	4.0 4.8 6.0 5.9
Place of residence										
MSA	9.2 11.1 7.9 11.4	20.9 22.5 18.7 28.6	19.0 20.1 17.6 28.0	16.4 18.8 14.3 19.2	8.7 10.4 7.8 9.2	6.5 7.6 5.8 6.8	4.2 5.1 3.7 4.0	4.1 4.8 3.6 3.8	17.3 19.6 15.1 21.4	5.3 6.3 4.7 5.5
All persons 18 years of age and over	12.2	29.8	27.2	21.1	10.9	8.2	5.3	5.1	22.9	6.7
Major activity ³										
Working	6.8 17.5 8.0 32.8	18.2 28.1 *13.5 48.5	17.1 31.7 *16.5 48.4	12.5 27.0 18.8 39.9	6.7 14.4 8.6 29.2	5.1 11.9 6.2 27.9	3.6 6.5 *1.0 15.9	3.2 5.8 *2.7 16.4	13.6 28.1 18.0 42.7	4.2 9.6 4.3 23.3
Marital status ³										
Married, living with spouse	11.2 12.7 17.0	26.5 30.5 32.9	24.8 26.1 32.4	19.8 20.4 26.8	10.2 11.6 14.7	7.7 11.2 11.3	5.4 6.4 5.3	4.6 5.8 7.3	21.2 22.5 28.6	6.3 8.0 9.1
Employment status ³										
Currently employed	6.8 13.3 21.3	17.5 *36.3 37.2	17.4 24.1 36.7	12.2 18.6 32.4	6.8 12.5 17.8	4.9 8.8 14.6	3.5 *10.8 8.6	3.3 *5.0 9.9	13.4 20.6 33.8	4.1 8.2 12.2

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 9. Number of physician contacts per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more			
	All yearsLess than 4 years4-7 years8-11 years12 years13-15 years16 years17 years or moreLess than 12 years5.45.86.55.85.05.65.15.96.04.4*1.22.23.74.04.75.25.73.34.82.84.24.54.55.44.64.94.43.9*1.1*2.63.33.94.73.52.33.25.1*2.92.95.14.95.95.04.64.75.0*3.56.44.94.65.44.75.85.16.15.68.56.45.56.95.46.76.85.9*5.29.36.55.46.74.83.66.96.45.97.96.35.77.26.47.36.68.910.89.08.68.78.78.111.88.94.76.56.35.04.34.54.55.25.36.15.26.86.65.76.65.86.86.55.65.16.66.05.35.85.36.16.04.76.56.35.04.34.54.55.25.36.15.26.35.05.85.94.74.05.56.97.76.6 <t< td=""></t<>												
Total ²	5.4	5.8	6.5	5.8	5.0	5.6	5.1	5.9	6.0	5.5			
Age													
Under 18 years	4.4	*1.2	2.2	3.7	4.0	4.7	5.2	5.7	3.3	5.1			
18-44 years	4.8	2.8	4.2	4.5	4.5	5.4	4.6	4.9	4.4	5.1 4.1			
18–24 years	3.9	*20	~2.6 2.9	3.3 5 1	3.9 4 9	4.7	5.0	2.5	4.7	5.4			
35–44 years	5.0	*3.5	6.4	4.9	4.6	5.4	4.7	5.8	5.1	5.3			
45–64 years	6.1	5.6	8.5	6.4	5.5	6.9	5.4	6.7	6.8	6.4			
45–54 years	5.9	*5.2	9.3	6.5	5.4	6.7	4.8	6.3	6.9	6.0			
55–64 years	6.4 8 Q	5.9 10.8	7.9	6.3 8.6	5.7 8.7	7.2	6.4 8.1	7.3 11.8	6.0 8.9	9.2			
	0.5	10.0	0.0	0.0	0.7	0.11	••••						
Sex		0 5		5.0	4.0	4 5	4 5	50	5.2	47			
Male	4.7 6.1	6.5 5.2	6.8 6.8	5.0 6.6	4.3 5.7	4.5 6.6	4.5 5.8	6.8	6.5	6.4			
Pago													
White	5.6	5.1	6.6	6.0	5.3	5.8	5.3	6.1	6.0	5.7			
Black	4.7	9.7	7.1	5.2	3.9	4.7	4.0	5.5	5.9	4.7			
Other	4.2	*3.3	*3.8	6.0	3.9	4.8	3.6	3.8	4.9	4.1			
Family income													
Less than \$5,000	6.7	9.0	7.5	6.7	6.3	6.4	*7.0	*3.7	7.1	6.3			
\$5,000-\$9,999	6.9	7.4	7.4	6.9	6.2	7.7	6.7	8.2	7.1	7.6			
\$10,000-\$14,999	6.2	*2.7	7.6	6.1	5.5	7.7	5.5	9.1	6.2	7.4			
\$15,000-\$24,999	5.4	*2.8	5.5	6.0 5.6	4.9	5.3	0.0 5.1	7.9	5.7	5.0			
\$25,000-\$34,999 \$35,000-\$49,999		*2.4	7.7	4.7	4.7	5.1	4.7	5.3	4.9	5.1			
\$50,000 or more	5.6	*3.6	*6.7	5.4	5.4	5.4	5.4	6.1	5.5	5.6			
Hispanic origin													
	4.2	3.6	4.3	4.0	3.9	5.2	3.8	5.8	4.0	5.0			
Non-Hispanic	5.5	7.5	7.6	6.1	5.1	5.7	5.2	5.9	6.4	5.6			
Poverty status													
In poverty	5.7	5.5	5.1	6.1	5.4	6.3	6.4 5 1	*3.7	5.8	6.1 5.5			
Not in poverty	5.5	5.4	7.0	5.9	5.1	5.0	5.1	0.0	0.2	0.0			
Geographic region													
Northeast	5.4	6.6	7.0	5.9	4.9	5.2	5.4	6.2	6.1	5.5			
	5.4	*4.5	8.0	5.1 5.8	5.2	5.7 5.5	4.7 5.4	5.7	6.2	5.6			
West	5.5	3.6	4.4	5.5	5.4	6.1	5.0	5.7	5.0	5.7			
Place of residence													
MSA	5.5	5.0	6.5	5.7	5.1	5.7	5.1	6.0	5.8	5.6			
Central city	5.6	5.8	6.0	5.6	5.2	5.8	5.2	6.4	5.7	5.7			
Not central city	5.4	3.9	7.1	5.7	5.1	5.7	5.1	5.8	5.9	5.5			
Not MSA	5.3	8.4	6.6	6.2	4.8	5.2	5.0	5.5	6.4	5.2			
All persons 18 years of age and over	5.8	6.9	7.5	6.4	5.4	6.0	5.1	6.0	0.0	5.8			
Major activity ³													
Working	4.6	*2.5	4.2	4,4	4.3	5.0	4.5	5.3	4.2	4.9 7 7			
	7.1	5.0 *1.4	*33	4.3	3.8	5.0	4.0	5.0	3.9	4.8			
Other	10.3	11.4	11.3	9.6	9.4	12.4	9.9	12.3	10.2	11.7			
Marital status ³													
Married, living with spouse	5.7	6.2	7.4	6.0	5.3	6.1	5.2	5.8	6.2	5.8			
Never married	4.4	7.7	4.2	4.4	3.8	4.6	4.2	5.2	4.6	4.6			
Other	7.8	7.6	8.8	8.2	7.4	8.0	6.4	9.0	8.3	7.8			
Employment status ³													
Currently employed	4.6	*1.8	4.1	4.3	4.3	5.1	4.5	5.4	4.2	5.0			
Unemployed	5.5 ຊາງ	^1.8 a n	~4./ Q 1	4.1 8 2	0.0 77	0.0 8.9	0.0 7.3	7.3 8.7	4.2 8.6	8.4			
	0.2	5.0	J	0.5		0.0			0.0				

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 10. Age-adjusted number of physician contacts per person per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Age-ad	justed nun	nber of phy	sician conta	acts per per	rson per year		
Total ²	5.5	3.9	5.1	5.2	5.1	5.9	5.4	6.3	5.1	5.9
Sex										
Male	4.8 6.1	4.1 3.7	4.6 5.7	4.5 5.8	4.6 5.6	4.9 6.8	4.9 5.9	5.5 7.4	4.6 5.7	5.1 6.7
Race										
White	5.6 5.1 4.6	3.8 5.2 *2.6	5.2 5.3 *3.6	5.3 5.3 5.9	5.3 4.6 4.3	6.0 5.6 4.9	5.5 5.2 4.3	6.5 6.0 4.3	5.2 5.3 4.7	6.0 5.6 4.5
Family income										
Less than \$5,000 \$5,000-\$9,999 . \$10,000-\$14,999 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$34,999 \$35,000 or more	6.9 6.4 5.3 5.7 5.3 6.0	5.9 5.4 *2.0 *1.9 *4.5 *2.4 *2.6	5.9 5.7 6.5 4.4 5.7 5.9 *5.2	6.5 6.1 5.6 5.3 5.1 4.1 4.4	6.8 6.2 5.6 5.0 5.2 5.1 5.8	7.4 7.9 5.5 6.6 5.5 5.8	*6.4 6.5 5.3 5.9 5.7 5.3 5.6	*2.9 7.7 8.9 8.3 6.0 6.1 7.0	6.4 6.0 5.6 5.0 5.2 4.3 4.5	6.7 7.8 7.3 6.0 6.2 5.6 6.1
Hispanic origin										
Hispanic	4.7 5.6	3.3 4.5	4.8 5.3	4.7 5.3	4.4 5.2	5.5 6.0	3.9 5.4	5.7 6.3	4.5 5.4	5.1 5.9
Poverty status										
In poverty	6.3 5.5	4.3 3.5	4.6 5.9	6.4 5.0	6.5 5.1	7.4 5.9	7.3 5.4	*3.0 6.4	5.8 5.1	7.1 5.9
Geographic region										
Northeast Midwest South West	5.3 5.5 5.5 5.6	4.6 *2.3 4.0 3.5	5.4 5.9 5.4 4.4	5.0 5.4 5.2 5.3	4.8 5.3 5.1 5.5	5.6 6.0 5.9 6.2	5.7 4.8 5.7 5.2	6.8 6.3 6.2 6.0	5.0 5.5 5.2 4.8	5.9 5.7 5.9 5.9
Place of residence										
MSA Central city Not central city Not MSA	5.5 5.6 5.5 5.3	3.7 4.3 2.8 4.9	5.2 4.9 5.5 5.0	5.1 5.3 5.0 5.5	5.2 5.3 5.2 4.9	6.0 6.1 6.0 5.5	5.4 5.4 5.3 5.2	6.4 6.8 6.1 5.8	5.0 5.2 4.9 5.5	5.9 6.1 5.8 5.5
All persons 18 years of age and over	5.8	4.9	6.1	5.7	5.5	6.4	5.4	6.5	5.8	6.1
Major activity ³ Working	4.9 6.9 6.2 9.9	*2.6 3.8 *3.1 8.0	4.1 6.9 *5.3 8.9	4.3 6.2 5.1 8.2	4.7 6.7 4.7 8.6	5.7 8.1 4.8 16.0	4.7 6.7 3.7 12.3	6.0 8.4 9.8 9.3	4.2 6.2 6.0 8.4	5.5 7.7 6.2 14.4
Marital status ³										
Married, living with spouse.	5.7 5.4 7.1	4.3 8.5 4.8	6.2 4.4 6.4	5.5 4.8 6.7	5.5 5.0 6.8	6.3 5.5 7.9	5.5 4.7 6.4	6.2 7.3 9.1	5.6 5.3 6.6	6.1 5.9 7.7
Employment status ³										
Currently employed	5.1 5.5 7.6	*2.0 *2.0 6.6	4.1 *4.3 7.8	4.4 4.9 7.2	4.9 5.6 7.1	5.7 6.3 9.0	4.9 4.4 6.9	6.5 6.8 7.6	4.2 4.5 7.3	5.6 6.1 8.3

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 11. Number of short-stay hospital discharges per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
				Number o	f discharge	es per 100 p	ersons per	year		
Total ²	11.3	20.4	20.2	16.7	11.3	9.3	7.6	6.7	17.6	8.2
Age										
Under 18 years	4.6	*1.9	4.5	7.7	5.0	4.3	4.1	2.4	6.8	3.8
18-44 years	10.2	14.1	11.9	14.0	11.2	9.9	7.3	6.5	13.7	8.5
18–24 years	11.5	*10.8	*5.6	15.6	13.5	10.8	5.7	*3.6	14.1	8.8
25–34 years	11.2	*6.8	12.3	14.7	11.8	11.0	8.4	8.6	14.8	9.7
45-64 years	13.1	21.2	21.4	17.2	12.2	11.4	9.3	9.7	18.3	10.3
45–54 years	11.3	27.1	20.4	13.1	11.3	9.6	9.8	8.5	15.3	9.3
55-64 years	15.1	17.7	22.1	20.4	13.2	14.1	8.8	11.6	20.6	11.9
65 years and over	26.6	34.9	32.9	26.8	25.2	22.2	22.6	24.7	28.9	22.8
Sex										
Male	9.6	21.0	20.0	14.8	9.6	6.9	6.4	6.4	16.2	6.6
Female	12.8	19.8	20.3	18.4	12.7	11.4	8.9	7.2	18.9	9.9
Race										
White	11.4	17.7	20.4	17.5	11.5	9.4	7.7	6.7	18.1	8.3
	11.5	30.8	22.7	13.5	10.2	8.8	8.3	7.8	16.5	8.5
Other	8.0	^17.9	^4.8	12.9	8.2	8.1	6.0	5.8	12.0	6.7
Family income										
Less than \$5,000	17. 9	25.9	24.9	21.5	17.3	8.7	*13.8	*19.1	22.6	9.8
\$5,000-\$9,999	18.0	25.9	20.6	19.8	16.3	12.5	20.1	*10.9	20.6	13.5
\$10,000-\$14,999	14.5	*10.6	24.3	15.5	13.4	12.2	10.1	*11.3	17.2	11.7
\$15,000-\$24,999	10.5	*11.8	19.5	13.7	10.8	10.4	7.8	8.1	14.9	9.4 0.4
\$35.000-\$49.999	8.1	*15.8	23.6	12.8	8.2	7.7	6.4	7.1	14.2	7.2
\$50,000 or more	7.5	*_	*13.8	11.9	9.5	7.6	7.2	5.3	11.9	6.6
Hispanic origin										
Hispanic	9.7	11.9	12.1	11.3	9.5	7.1	*4.8	9.9	11.7	7.1
Non-Hispanic	11.4	27.0	24.4	17.5	11.4	9.4	7.8	6.6	19.0	8.3
Poverty status										
In poverty	15.6	20.3	16.7	18.6	14.8	8.9	15.4	*13.7	18.4	10.0
Not in poverty	10.2	19.0	22.4	14.8	10.6	9.2	7.5	6.6	16.2	8.1
Geographic region										
Northeast	10.1	17.8	23.4	15.1	10.4	7.5	7.2	5.6	16.6	6.9
Midwest	11.7	*14.4	27.2	19.5	11.7	8.9	9.2	5.8	20.4	8.3
South	12.8	26.5	22.0	17.3	12.0	10.8	7.4	9.6	19.0	9.6
West	9.4	14.8	10.6	13.4	10.3	8.9	6.7	5.1	12.9	7.5
Place of residence										
MSA	10.8	18.1	19.8	15.9	10.9	9.4	7.4	6.7	16.8	8.2
Central city	11.4	21.3	18.1	15.3	11.3	9.5	8.2	6.9	16.4	8.5
Not MSA	12.9	27.8	21.0	18.9	12.5	9.3	0.9	6.0	10.2	8.0
All persons 18 years of age and over	13.6	24.7	23.5	18.9	13.4	11.3	9.1	9.0	20.2	10.2
Noise ostivitu3								0.0		
Major activity~	9.4	****	11 7	0.7	00	0.1	67	77	0.0	76
Keening house	20.0	22.8	23.8	9.7 21.1	20.1	19.3	15.3	14.6	9.9 21 7	17.6
Going to school	7.0	*_	*6.8	12.7	6.7	7.3	7.4	4.9	10.7	6.8
Other	32.4	40.6	36.7	34.7	30.7	30.5	26.4	22.7	35.8	27.8
Marital status ³										
Married, living with spouse	13.7	21.0	23.2	17.9	13.7	12.1	10.7	9.3	19.1	11.1
Never married	8.0	20.8	11.4	12.1	9.1	7.0	4.3	4.7	12.8	5.7
Ullef	19.6	32.8	28.2	24.7	17 .1	15.4	10.6	15.4	26.1	14.2
Employment status ³										
Currently employed	8.1	*8.9	11.3	9.9	8.6	7.8	6.4	6.9	10.1	7.2
Not in labor force	16.1 24 e	*15.2	*7.9	15.9	20.4	9.5	18.5	*10.3	14.6	11.9
	24.0	31.1	30.7	21.0	20.0	22.0	19.2	10./	20.2	21.0

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 12. Age-adjusted number of short-stay hospital discharges per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8—11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Age-a	djusted nu	mber of dis	charges pe	r 100 perso	ons per year		
Total ²	11.3	14.8	14.3	14.6	11.5	10.2	8.7	8.2	14.6	9.3
Sex										
Male	10.1 12.6	12.9 16.9	13.7 15.3	12.1 17.2	10.5 12.5	8.3 11.9	7.8 9.6	7.8 8.7	12.6 16.9	8.1 10.6
Race										
White	11.2 12.9 9.8	13.6 15.6 *19.5	14.6 16.2 *4.6	14.8 13.8 12.0	11.4 12.2 10.7	10.2 11.2 9.8	8.6 15.0 7.2	8.2 8.3 10.5	14.8 15.0 11.6	9.2 11.5 8.8
Family income										
Less than \$5,000 \$5,000-\$9,999. \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$34,999. \$35,000 or more	18.6 17.1 13.3 11.3 11.4 9.2 8.7	18.5 21.5 *10.2 14.1 *9.1 *7.9 *-	19.5 14.1 18.3 14.5 9.3 24.2 *6.0	21.4 19.4 14.4 11.7 11.8 12.6 12.7	19.6 16.9 12.9 11.4 11.2 8.7 10.2	10.6 12.8 11.2 11.5 9.1 8.3	*9.7 26.5 8.4 8.3 10.2 6.5 8.6	*15.4 *9.5 *8.9 9.4 10.3 9.4 6.7	20.9 18.7 15.0 12.3 11.3 13.2 11.4	11.8 14.8 11.5 10.3 11.1 8.5 7.9
Hispanic origin										
Hispanic	11.7 11.3	11.4 17.7	13.7 13.3	13.6 14.8	12.1 11.4	8.5 10.3	*4.5 8.8	12.0 8.1	13.3 15.0	8.0 9.4
Poverty status										
In poverty	18.2 10.3	19.0 11.7	14.5 14.7	20.6 11.5	18.5 10.7	11.1 10.1	25.6 8.6	*15.4 8.1	19.4 12.1	14.5 9.2
Geographic region										
Northeast Midwest South West	9.6 11.8 12.9 9.8	12.4 *8.0 16.3 14.4	17.4 14.5 15.4 10.7	11.2 16.2 16.1 12.3	10.0 11.9 12.9 10.4	8.2 9.8 12.0 9.8	8.0 10.3 8.4 8.2	6.9 7.6 11.5 6.3	12.2 16.1 16.3 12.0	7.7 9.5 10.9 8.5
Place of residence										
MSA	10.9 11.4 10.6 12.5	14.2 18.2 8.4 18.9	14.9 14.2 15.7 12.6	14.0 14.4 13.5 16.1	11.0 11.6 10.7 12.8	10.2 10.3 10.1 10.2	8.5 9.5 7.9 10.1	8.4 8.5 8.3 7.4	14.2 14.8 13.7 15.8	9.3 9.7 9.0 9.6
All persons 18 years of age and over	13.7	19.4	17.8	17.0	13.8	12.3	10.4	10.3	17.4	11.3
Major activity ³										
Working	9.9 20.3 7.9 30.4	*7.0 24.3 *_ 31.3	13.2 22.2 *9.6 26.3	10.5 22.9 21.3 33.0	10.0 20.9 4.0 27.9	9.4 18.8 4.3 39.1	8.1 14.8 9.4 21.4	10.7 12.8 7.2 21.7	10.9 23.0 16.2 32.0	9.5 16.9 6.3 32.7
Marital status ³										
Married, living with spouse	14.0 10.5 16.1	16.4 22.4 26.8	18.0 12.4 24.2	16.7 12.9 20.2	14.3 11.6 15.0	12.8 9.2 14.5	11.6 6.1 9.2	10.4 6.5 13.7	17.1 14.2 21.2	11.9 7.7 13.1
Employment status ³										
Currently employed	9.7 19.7 23.1	*9.7 *16.1 25.9	11.7 *10.1 24.5	10.9 27.5 27.0	9.8 20.3 22.6	9.2 7.5 22.5	8.6 34.2 18.1	9.5 *11.6 16.4	11.0 22.8 26.6	9.1 13.1 20.5

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 13. Number of short-stay hospital days per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
		·	Numb	er of short-	-stay hospi	tal days per	100 person	is per year		
Total ²	73.6	169.7	178.3	128.5	68.3	50.6	39.6	43.5	140.7	45.9
Age										
Under 18 years	28.2	*6.1	*18.8	54.4	29.8	21.4	25.4	20.2	45.2	22.1
18-44 years	47.1	*77.8	72.5	69.8	52.7	44.0	27.3 *20.5	28.8	70.7	36.1
18-24 years	474	~28.1 *159.4	*34.8	62.7 74.6	55.8	41.9	20.5	40.0	73 1	34.0
35-44 years	43.6	*25.7	140.6	69.6	43.8	42.5	34.5	23.1	79.6	35.1
45-64 years	93.8	170.3	174.5	140.5	80.2	75.0	56.1	68.2	149.2	67.9
45–54 years	77.5	*175.0	156.5	96.4	77.8	45.5	59.9	81.7	112.2	59.6
55–64 years	112.5	*167.5	186.4 333.6	175.1 250.8	83.0 207.7	119.1	50.8 162.7	*45.5 207.4	176.8	80.5 179.7
	200.1	000.4	000.0	200.0	207.7		102.1	201 1	21100	
Sex	70.0	172.2	192.0	133.5	61.6	42 4	40.2	44 7	147.9	42.3
Female	70.0	167.3	164.7	124.1	74.2	58.1	39.0	42.1	134.2	49.6
Race										
White	74.2	156.8	185.7	134.6	70.9	51.0	40.4	42.3	145.7	45.9
Black	77.8	269.1	182.2	107.1	51.7	49.5	44.8	85.4	133.1	53.5
Other	45.0	*68.3	*20.2	*80.1	66.4	*44.1	*17.3	^23.9	63.4	28.9
Family income										
Less than \$5,000	131.6	*189.7	235.1	173.4	110.4	*45.9	*74.5	*95.0	187.9	51.8
\$5,000-\$9,999	131.4	174.3	157.4	155.8	105.5	84.8 62.2	*131.4	*30.0	157.9	94.0 59.0
\$10,000-\$14,999	74.3	*100.2	235.0	99.0	63.6	49.4	41.4	98.8	119.6	54.1
\$25,000-\$34,999.	64.6	*65.0	*99.7	117.0	61.7	51.4	43.2	78.5	112.5	53.4
\$35,000-\$49,999	43.9	*164.2	*171.5	82.4	43.4	41.4	29.8	37.3	95.3	36.9
\$50,000 or more	45.1	*_	*268.3	92.1	68.0	39.2	35.6	28.5	116.3	34.2
Hispanıc origin										
Hispanic	65.4	111.6	74.7	82.2	70.3	32.6	*15.0	*46.7	84.0	31.1
Non-Hispanic	74.5	215.5	231.0	135.1	68.4	52.0	40.8	43.7	153.0	46.9
Poverty status							+100 -	+00.0	101.0	50.0
In poverty	101.3 66.1	124.1 164.2	113.6 234.2	139.5 115.6	82.4 64.5	49.3 50.2	*109.5 37.9	*96.8 42.6	131.9 137.6	59.3 44.8
Geographic region										
Notheast	72.3	*147 8	108.6	134 3	74 9	42.0	37 5	31.3	145.6	37.8
Midwest	76.9	*74.4	317.7	146.4	69.3	47.7	53.9	47.3	167.2	49.4
South	81.3	265.0	180.7	122.2	67.8	59.9	33.6	65.2	144.6	53.7
West	58.0	*74.4	81.4	111.7	60.7	47.9	34.7	25.4	100.1	39.4
Place of residence										
MSA	72.7	159.3	173.3	128.6	70.3	51.5	38.3	42.9	139.4	45.7
Central city .	78.9	198.5	150.3	115.8	78.1	54.1	44.7	43.3	130.3	49.0
Not central city	68.7 77.0	*99.5	193 /	139.5	62.5	46 9	34.9	42.6	148.1	43.7 47 0
All persons 18 years of age and over	89.8	203.7	212.5	146.9	81.4	62.9	45.4	55.7	163.7	56.3
Margarative 3	00.0	201.0	212.0	110.0	••••					
Working	41 4	*47 7	86.6	51.3	45.3	34.5	28.0	39.2	56.9	33.6
Keeping house	125.1	151.7	193.6	125.6	131.5	100.9	76.1	*77.3	141.0	90.7
Going to school	33.9	*	*13.6	*59.2	45.6	28.9	*21.7	*33.4	*46.9	28.5
Other	294.6	373.6	378.1	363.9	219.4	283.8	197.0	224.7	368.3	248.1
Marital status ³										
Married, living with spouse	81.1	186.1	207.2	127.0	74.2	60.3	53.8	48.8	145.6	55.8
Never married	54.6 159 9	*150.1 272.2	148.5 244 7	86.1 222.1	60.5 135.0	46.5 101.6	*18.3	34.7 137.0	102.4 230.7	35.9 97.5
	100.0	_16.6					50.0		20011	00
Employment status ³	20.0	*00.0	60.0	E0 7	12 0	24 1	05 A	07 7	EE 0	99.9
	39.9 73 0	*115 2	00.3 *34 8	52.7 *93.9	43.8 89.4	*30 7	20.4 *81.2	*43 2	85.1	*45.6
Not in labor force	192.8	264.3	297.5	231.9	163.4	155.9	124.4	143.9	249.3	145.6

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics, ³For persons 18 years of age and over.

Table 14. Age-adjusted number of short-stay hospital days per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13—15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Age-adjuste	d number o	f short-stay	hospital da	ays per 100	persons per y	/ear	
Total ²	73.7	106.8	109.1	100.9	70.5	60.0	48.6	55.5	103.7	55.7
Sex										
Male Female	74.4 74.2	99.6 115.4	112.9 109.7	103.6 101.8	68.4 72.9	54.3 64.6	51.7 45.9	57.7 50.1	106.2 103.9	54.3 57.1
Race										
White	72.3 91.2 67.2	109.3 96.1 *61.9	114.3 112.3 *20.8	101.1 106.7 *73.1	70.6 66.6 143.2	58.4 88.5 *65.6	48.0 93.0 *24.9	53.7 86.8 *74.3	104.2 111.6 58.3	54.3 85.7 54.0
Family income										
Less than \$5,000 \$5,000-\$9,999. \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$34,999. \$35,000 or more	144.2 114.3 88.7 70.1 73.6 55.9 56.4	*127.3 119.2 *83.0 *67.3 *58.2 *83.5 *_	155.6 81.6 194.9 115.1 *57.2 *120.7 *104.4	173.2 144.0 84.2 71.7 96.5 83.6 127.2	145.2 99.2 86.4 64.5 66.0 61.2 73.1	*67.9 87.4 62.7 57.3 65.0 64.2 47.8	*45.0 *197.6 *55.9 42.5 55.9 32.5 47.1	*82.3 *109.0 *32.3 146.1 86.3 49.1 44.1	162.5 130.2 108.5 80.3 86.6 88.1 131.7	71.0 107.0 59.3 66.2 66.5 48.9 46.1
Hispanic origin										
Hispanic	89.0 72.5	98.1 125.5	93.1 123.2	110.7 100.1	91.4 69.1	56.1 60.5	*14.0 49.7	*56.5 55.5	104.1 105.1	43.7 56.3
Poverty status										
In poverty	125.7 67.2	102.4 108.1	90.0 129.5	156.4 79.3	119.0 66.2	82.4 59.4	*197.6 47.2	*130.2 54.2	134.6 89.0	111.6 54.7
Geographic region										
Northeast Midwest South West	68.4 77.5 81.6 61.4	*92.8 *41.5 151.5 *66.3	118.6 124.7 122.0 79.0	85.1 105.8 106.6 91.8	71.6 71.3 74.7 62.0	47.3 56.6 72.6 55.7	45.0 61.1 42.4 44.8	46.4 69.0 75.3 31.9	91.1 110.1 113.9 83.6	45.9 60.5 65.6 46.8
Place of residence										
MSA	74.2 79.6 70.7 72.3	103.1 140.4 *51.1 157.8	114.8 112.7 114.5 92.5	101.4 101.4 99.7 100.5	72.3 80.4 66.7 65.1	60.2 65.1 57.1 58.0	47.0 54.8 41.9 55.1	57.6 56.4 57.8 46.7	104.5 108.0 100.2 103.4	55.6 60.0 52.6 55.0
All persons 18 years of age and over	89.9	142.7	141.2	117.5	85.0	73.7	56.8	68.0	124.5	67.7
Major activity ³										
Working	58.4 111.2 63.3 252.3	*48.0 113.9 *_ 270.8	104.5 168.1 *22.5 248.4	58.2 121.7 *137.8 304.2	60.1 119.7 27.1 186.5	48.2 90.0 17.2 358.9	40.1 70.8 *22.8 161.9	73.8 *60.3 *115.0 172.5	66.8 129.6 *99.4 293.6	53.3 80.6 52.8 290.3
Marital status ³										
Married, living with spouse	82.7 89.3 117.1	120.6 *162.4 157.3	131.0 156.9 173.4	104.9 115.8 167.1	78.0 98.2 107.3	67.6 78.6 87.5	64.8 *28.3 47.7	62.5 40.7 106.2	112.5 126.4 167.4	65.3 51.5 83.5
Employment status ³										
Currently employed	56.1 102.0 157.0	*75.3 *122.6 175.8	69.3 *52.2 212.2	60.2 *155.1 189.7	60.1 99.1 140.8	48.5 *24.5 149.7	39.1 *272.1 108.3	69.6 *43.4 123.7	62.7 131.9 193.6	51.2 *67.6 135.3

¹includes unknown education. ²includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

Table 15. Number of acute conditions per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Nu	mber of ac	ute conditi	ons per 100) persons p	er year		
Total ²	181.3	75.0	107.8	146.0	179.8	216.1	190.3	198.6	134.1	204.9
Age										
Under 18 years	286.8 169.1 180.8 183.5 143.8 113.6 122.7 103.0 100.2	*88.8 *69.4 *120.1 *63.2 *51.7 *87.6 *79.5 *92.5 *61.7	148.7 99.9 *123.0 *82.0 104.0 107.1 113.0 103.2 92.7	241.0 155.5 173.0 166.1 124.3 110.2 117.6 104.4 92.3	286.7 173.0 168.3 185.4 142.5 110.1 125.5 91.4 101.8	310.3 199.9 228.8 206.8 166.5 121.1 128.7 109.8 121.5	294.7 157.6 125.9 177.9 149.0 125.2 125.9 124.4 121.4	319.0 153.6 159.0 182.1 130.0 109.7 112.0 105.9 93.7	215.3 142.6 164.4 149.2 115.7 108.1 114.6 103.3 90.0	308.3 178.4 196.1 192.9 151.9 119.2 123.3 113.1 115.7
Sex										
Male	170.3 191.6	73.1 77.0	97.0 118.5	141.1 150.4	168.4 189.5	203.2 227.8	180.6 200.9	179.9 222.6	127.6 140.0	190.9 219.4
Race										
White	187.2 146.9 159.1	69.0 94.1 77.5	108.5 108.1 *94.2	151.6 118.3 158.9	184.2 148.7 191.5	219.8 191.3 209.6	199.0 131.3 119.5	207.1 137.8 139.5	138.6 114.6 126.0	210.9 170.7 157.9
Family income										
Less than \$5,000 \$5,000-\$9,999. \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$34,999. \$50,000 or more	206.6 208.9 169.8 178.3 197.7 183.0 184.8	*73.9 121.9 *72.7 *11.6 *50.7 *108.4 *220.6	139.2 138.9 101.8 100.5 *92.1 *139.2 *89.7	195.3 184.5 126.4 130.9 128.9 135.0 121.9	242.5 242.6 193.1 178.4 196.4 158.2 163.9	246.4 272.4 235.2 217.4 239.0 222.7 180.9	*49.0 237.4 188.2 234.2 189.1 176.5 208.5	*153.9 *236.5 *165.6 225.5 208.5 217.4 195.1	171.2 168.3 117.4 119.7 120.6 134.6 119.2	222.2 263.8 219.6 222.4 221.2 207.3 195.1
Hispanic origin										
Hispanic	174.9 181.4	70.3 79.3	116.0 103.7	170.0 141.0	195.6 178.8	226.8 215.4	190.8 190.8	195.7 198.0	135.9 132.4	213.2 204.4
Poverty status										
In poverty	206.6 181.1	102.6 *49.7	132.9 103.4	188.7 130.6	241.6 175.2	258.2 212.2	141.8 194.5	*175.5 200.0	166.4 122.6	239.2 204.1
Geographic region										
Northeast Midwest South West	144.6 185.1 176.4 219.2	*43.6 *54.9 74.9 91.5	80.2 100.3 112.2 122.9	118.9 143.1 154.0 164.4	143.5 185.2 181.8 207.9	153.5 221.2 195.2 280.5	173.4 183.6 187.3 217.3	166.5 190.6 196.4 240.3	109.0 135.8 139.6 145.8	162.9 204.3 193.2 254.7
Place of residence										
MSA	179.7 176.7 181.7 186.7	72.4 72.0 *73.0 *83.7	104.0 103.3 104.9 119.3	141.6 141.4 141.7 158.1	178.0 175.3 179.6 185.1	213.4 214.9 212.4 226.7	190.6 198.5 186.4 188.8	193.0 186.6 196.5 231.5	129.5 127.2 131.7 146.8	202.0 204.0 200.9 218.5
All persons 18 years of age and over	143.6	71.9	99.0	122.5	143.6	176.5	147.4	135.9	114.6	159.4
Major activity ³										
Working . Keeping house . Going to school Other	148.1 136.0 187.8 116.0	*63.4 *65.7 *162.7 79.7	97.9 112.6 *47.5 94.0	127.0 127.6 173.4 103.5	148.1 138.7 164.4 120.5	172.8 164.2 231.2 155.8	151.3 140.4 136.9 125.1	135.7 117.9 183.8 89.7	119.5 120.7 151.9 98.8	157.9 151.4 202.1 133.7
Marital status ³										
Married, living with spouse	137.7 149.1 156.6	*55.2 *120.3 *65.4	82.5 147.6 112.4	117.7 112 4 137.4	138.2 141.1 166.2	166.8 192.5 186.2	149.3 125.9 186.6	127.6 148.2 161.6	107.4 119.0 126.7	152.7 164.4 181.6
Employment status ³										
Currently employed	152.6 112.4 128.0	*48.9 *_ 82.3	96.5 *146.6 98.6	130.7 110.6 116.1	148.8 137.4 132.7	182.3 87.3 168.1	154.6 *79.3 124.9	143.0 *89.4 108.1	121.6 113.1 109.4	165.2 85.7 146.4

¹Includes unknown education.
²Includes unknowns of sociodemographic characteristics.
³For persons 18 years of age and over.

Table 16. Age-adjusted number of acute conditions per 100 persons per year, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
			Age-adju	sted numb	er of acute	conditions	per 100 per	rsons per yea		
Total ²	181.3	77.0	113.2	161.9	180.5	204.6	183.2	181.6	148.9	193.9
Sex										
Male	167.0 194.3	80.1 72.8	103.6 124.6	153.7 168.6	163.5 194.1	187.1 219.8	174.8 192.6	166.7 201.4	140.9 156.3	179.0 209.1
Race										
White	189.7 139.8 155.8	73.5 114.3 72.3	112.0 143.3 *93.9	175.5 117.9 157.7	189.0 141.3 172.6	210.3 167.6 206.5	190.4 155.2 159.7	190.1 127.4 120.5	158.1 121.7 125.4	200.3 160.9 166.9
Family income										
Less than \$5,000 \$5,000-\$9,999 . \$10,000-\$14,999 \$15,000-\$24,999 \$25,000-\$34,999 \$35,000-\$34,999 \$50,000 or more	205.9 219.2 176.3 180.2 191.1 173.8 186.3	*59.5 128.5 *73.7 *20.3 *112.8 *97.2 *188.8	127.3 160.8 112.4 99.4 *104.6 *126.4 *40.7	190.8 197.3 144.8 150.5 146.7 148.9 124.8	223.9 235.9 189.5 175.7 192.5 155.6 177.7	184.3 249.2 217.0 203.0 221.4 196.1 198.2	*62.7 242.3 181.7 246.9 177.1 169.8 201.1	*235.1 *173.5 *174.7 225.6 196.2 190.5 172.6	168.5 185.1 132.5 137.1 138.8 148.2 118.4	176.4 247.2 207.0 215.5 205.0 187.2 190.3
Hispanic origin										
Hispanic	159.6 184.0	69.3 87.1	111.2 114.2	157.4 162.2	181.5 181.9	191.7 205.7	161.6 184.6	177.1 182.0	127.2 155.8	184.0 194.7
Poverty status										
In poverty	192.8 183.0	101.4 *71.8	132.6 113.9	174.7 154.8	210.5 179.7	218.7 202.0	134.9 186.7	145.2 *182.6	159.0 146.8	205.2 193.2
Geographic region										
Northeast Midwest South West	149.7 184.8 175.6 215.3	*58.0 *64.8 51.9 91.9	94.3 79.3 129.2 116.5	142.9 166.8 162.6 174.4	150.8 186.1 178.6 208.3	148.5 201.7 187.8 266.4	173.6 169.4 179.8 208.6	154.1 172.3 179.6 222.7	132.5 158.2 152.8 149.0	158.0 187.2 184.5 241.0
Place of residence										
MSA	179.4 176.7 181.2 188.6	73.3 69.9 *78.4 *92.9	108.6 110.1 104.5 127.3	155.3 149.2 161.0 181.1	179.6 174.1 183.5 182.9	203.5 208.4 199.6 210.4	184.4 194.7 178.9 177.2	175.7 181.5 171.2 219.5	141.6 135.2 147.9 172.5	192.0 199.0 186.9 204.8
All persons 18 years of age and over	143.7	72.9	100.6	133.6	142.6	166.9	143.4	132.6	125.2	153.0
Major activity ³										
Working	142.3 151.6 175.4 135.1	*58.0 *56.0 *390.6 109.5	99.2 116.2 *31.3 72.2	124.2 152.0 152.2 113.4	145.2 151.8 166.4 141.8	165.1 171.6 137.2 203.8	144.2 143.3 146.6 62.3	133.4 118.3 136.7 119.7	117.6 141.4 201.9 106.2	151.5 156.5 138.8 161.8
Marital status ³										
Married, living with spouse	139.4 129.1 180.2	*44.9 *129.8 *139.3	85.9 149.8 98.1	131.1 97.3 169.3	139.2 122.9 184.2	161.0 149.3 196.7	145.2 102.9 191.3	126.8 131.2 177.8	119.5 114.8 157.1	148.9 133.1 192.3
Employment status ³										
Currently employed	145.7 125.5 148.3	*43.4 *_ 93.9	94.7 *217.2 90.7	127.9 128.8 144.3	145.7 165.0 153.6	169.8 72.5 178.5	149.4 55.1 127.2	140.7 *79.4 116.9	119.1 146.9 131.6	157.4 70.4 155.8

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.
Table 17. Number of selected chronic conditions per 1,000 persons, by age and years of education: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

	· · · · ·	All ages		Under 65 years				65 years and over				
Type of chronic condition	Total ¹	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years cr more			
Selected skin												
and musculoskeletal conditions			Nu	mber of chro	onic conditions	per 1,000 pers	ons					
Arthritis	127.3	241.9	99.0	78.8	138.8	67.4	483.0	518.7	452.6			
Gout, including gouty arthritis	8.5	16.0	6.7	5.8	7.8	5.5	28.4	38.1	20.6			
Intervertebral disc disorders	18.0	25.9	16.1	16.5	22.1	15.4	29.2	36.3	24.3			
Bone spur or tendinitis, unspecified	8.2	8.2	8.1	0.V 20	7.0 *23	7.0	22.5	18.3	25.7			
Trouble with buniops	5.5 11.4	16.9	9.9	7.5	8.2	7.4	40.0	40.5	37.5			
Bursitis, unclassified,	18.1	20.0	17.7	15.5	15.0	15.6	37.7	33.5	41.5			
Sebaceous skin cyst	6.9	6.8	7.0	7.0	7.7	6.9	6.2	*4.4	*7.7			
Trouble with acne	16.5	7.6	18.8	18.5	9.8	20.3	*1.7	*1.7	*1.8			
	9.2	9.1	9.3	8.7 34.8	23.6	37.1	33.3	24.7	41.1			
Trouble with dry (itching) skin	34.0	20.9	07.4	04.0	20.0	0	00.0	2				
unclassified	17.6	22.9	16.1	16.2	17.8	15.6	28.1	36.7	21.9			
Trouble with ingrown nails	23.5	37.3	20.2	20.3	28.6	18.7	47.3	60.6	37.0			
Trouble with corns and calluses	17.8	26.2	15.9	14.0	18.1	13.2	46.2	48.1	46.0			
Impairments												
Visual impairment	32.4	54.0	27.3	25.6	37.6	23.5	81.9	97.9	69.8			
Color blindness.	9.6	7.8	10.2	9.3	6.0	10.0	12.5	12.7	12.7			
	23.4	53.6	16.1	5.2	11.2	4.1	100.0 54.1	51.9	54.6			
Glaucoma	9.4 83.1	1477	67.6	55.4	86.4	49.7	286.5	312.3	266.6			
Tinnitus	24.1	39.2	20.7	17.4	28.6	15.3	73.5	67.6	80.2			
Speech impairment	9.3	15.6	7.7	9.1	16.6	7.6	10.7	13.0	9.2			
Absence of extremities (excludes tips of												
fingers or toes only)	6.3	11.7	4.8	4.8	8.1	3.9	17.6	21.5	14.3			
partial	5.1	12.8	3.3	3.4	7.5	2.6	17.7	26.9	10.7			
Deformity or orthopedic impairment	114.9	138.6	109.6	109.5	124.4	106.9	155.2	176.6	140.3			
	68.3	83.8	64.8 13.0	13.0	15.8	12.4	24.6	29.9	19.8			
Lower extremities	45.4	51.9	44.2	41.9	44.4	41.8	71.0	72.2	71.2			
Selected directive conditions												
	474	00 1	146	15.0	26.7	13.1	30.7	31.8	30.6			
	17.1	20.1	14.0	13.2	20.7	12.3	55.2	57.8	54.7			
Gastritis or duodenitis	12.1	18.1	10.7	10.8	16.0	9.8	21.8	23.8	20.7			
Frequent indigestion.	22.2	40.7	18.0	20.1	35.7	17.3	38.0	54.1	25.8			
Enteritis or colitis	9.8	11.9	9.4	8.3	8.7	8.3	20.9	20.6	21.7			
Spastic colon	5.6	5.3	5.7	5.4	6.7	5.3	6.6 26 0	*1.7	10.8			
Diverticula of intestines	8.2	14.0	6.9 14.2	4.3	5.0	4.2 11 7	50.9 61 7	87.8	41.5			
	10.0	07.0	14.2	12.1	10.0		01.7	01.0	1110			
Selected conditions of the genitourinary,												
nervous, endocrine, metabolic, and												
blood and blood-forming systems							.					
Goiter or other disorders of the thyroid	13.2	17.5	12.3	10.8	11.9	10.7	31.1	32.6	30.7			
	26.6	54.1	19.9	18.3	37.0	14.8	00.2 21.4	99.0 26.6	17.8			
Enilensy	4.2	73	34	45	9.4	3.5	*1.8	*1.6	*2.1			
Migraine headache	41.0	34.1	42.9	43.5	37.0	44.9	22.8	26.3	20.6			
Neuralgia or neuritis, unspecified	2.6	3.5	2.3	2.0	*2.3	2.0	6.7	*6.9	*5.8			
Kidney trouble	13.9	24.4	11.3	12.0	19.7	10.6	27.3	37.0	19.5			
Bladder disorders	14.6	17.4	14.0	12.3	12.1	12.3	32.0	31.4	32.5			
Diseases of prostate	6.2 19.2	8.1 14.7	5.8 20.5	3.5 20.5	17.1	21.3	10.3	*8.2	12.2			
Selected circulatory conditions												
Rheumatic fever, with or without heart												
disease	6.9	6.8	7.1	6.3	6.3	6.3	11.6	*8.1	14.8			
Heart disease	75.9	133.4	62.1	48.3	71.6	44.1	278.9	299.5	264.3			
Ischemic heart disease	28.5	57.9	21.4	13.8	25.9	11./	136.2	143.9	130.3			
Techycardia or repid boart	30.4	41.4	21.8	24.5	31.1 RQ	20.4	22.9	18.4	26.4			
Heart murmurs	16.1	15.4	16.3	15.0	15.3	15.0	23.9	15.9	31.0			
Other and unspecified heart rhythm												
disorders	6.3	14.5	4.2	3.4	6.9	2.8	26.9	34.8	20.5			
Other selected diseases of heart,	<i></i>			~ ^	447	~ ~ ~	60.0	96 C	56 1			
excluding hypertension	17.0	34.2	12.9	9.9	14./	9.0	09.0	00.0	50.1			

See note at end of table.

Table 17. Number of selected chronic conditions per 1,000 persons, by age and years of education: United States, 1989-Con.

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

		All ages			Under 65 year	s	65 years and over			
Type of chronic condition	Total 1	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	
Selected circulatory conditions-Con.			Nur	mber of chro	nic conditions p	per 1,000 pers	ons			
High blood pressure (hypertension) Cerebrovascular disease Hardening of arteries Varicose veins of lower extremities Hemorrhoids	113.6	201.8	92.4	77.2	128.8	67.5	380.6	397.9	370.3	
	10.8	26.0	6.9	4.5	12.0	3.1	57.0	63.6	50.2	
	9.0	18.9	6.6	4.0	8.1	3.2	46.2	48.0	44.5	
	30.9	46.8	27.3	24.5	31.8	23.3	78.1	87.3	71.7	
	47.2	52.0	46.5	44.1	47.0	43.9	69.6	65.2	75.2	
Selected respiratory conditions	49.2	50.4	49.1	48.3	44.4	49.0	55.5	66.7	46.4	
Chronic bronchitis	47.7	48.6	47.6	47.2	44.0	48.0	51.5	60.9	43.8	
asthma	86.9	55.1	95.3	89.5	50.0	97.7	67.9	68.8	68.4	
	138.3	137.4	139.6	136.3	121.6	140.2	153.4	179.9	132.9	
	5.4	4.0	5.8	5.0	*3.9	5.3	8.0	*4.3	11.2	
	12.6	9.6	13.4	14.2	12.6	14.5	*1.5	*1.6	*1.4	
	8.2	22.8	4.5	4.3	14.4	2.4	36.3	45.2	27.5	

¹Includes unknown education.

Table 18. Number of selected chronic conditions, by age and years of education: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

		All ages			Under 65 year	rs	65 years and over			
Type of chronic condition	Total ¹	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	
Selected skin and musculoskeletal conditions				Number of cl	nronic condition	is in thousands	;			
Arthritis . Gout, including gouty arthritis . Intervertebral disc disorders . Bone spur or tendinitis, unspecified . Disorders of bone or cartilage . Trouble with bunions . Bursitis, unclassified . Sebaceous skin cyst . Trouble with acne . Psoriasis . Dermatitis . Trouble with dry (Itching) skin, unclassified	30,999 2,069 4,381 1,988 1,300 2,776 4,420 1,673 4,019 2,235 8,420 4,289	11,451 757 1,227 389 316 802 947 323 360 430 1,132 1,086	19,218 1,299 3,127 1,577 964 1,920 3,436 1,349 3,647 1,806 7,256 3,131	16,886 1,239 3,528 1,622 636 1,609 3,318 1,492 3,969 1,854 7,449 3,468	4,788 269 761 241 81 282 517 267 339 246 815 615	12,009 971 2,741 1,358 555 1,322 2,775 1,226 3,619 1,608 6,601 2,782	14,113 830 853 366 664 1,168 1,168 1,102 180 49 381 972 821	6,663 489 466 148 235 520 430 57 22 184 317 472	7,209 328 387 219 409 598 661 123 28 198 654 349	
Trouble with ingrown nails	5,726 4,342	1,767 1,241	3,924 3,078	4,345 2,992	988 623	3,335 2,346	1,381 1,350	779 618	589 732	
Impairments										
Visual impairment Color blindness. Glaucoma Hearing impairment Tinnitus. Speech impairment Absence of extremities (excludes tips of	7,881 2,350 5,698 2,299 20,246 5,867 2,261	2,555 369 2,540 838 6,992 1,856 740	5,293 1,980 3,125 1,417 13,108 4,011 1,497	5,489 1,985 1,115 717 11,874 3,720 1,948	1,297 207 387 171 2,979 987 573	4,181 1,778 728 546 8,861 2,733 1,351	2,392 365 4,583 1,582 8,372 2,147 313	1,258 163 2,153 667 4,012 869 167	1,112 202 2,397 870 4,247 1,278 146	
fingers or toes only) Paralysis of extremities, complete or	1,535	554	927	1,019	278	699	515	276	228	
partial	1,254 27,993 16,623 3,496 11,066	605 6,561 3,969 929 2,459	638 21,272 12,580 2,520 8,580	738 23,457 14,228 2,776 8,990	260 4,293 2,745 545 1,531	467 19,038 11,409 2,204 7,446	516 4,536 2,394 720 2,075	345 2,268 1,224 384 928	171 2,234 1,170 316 1,134	
Selected digestive conditions										
Ulcer . Hernia of abdominal cavity	4,154 4,576 2,943 5,418 2,394 1,362 1,996 4,529	1,329 1,507 859 1,928 565 253 664 1,768	2,825 3,069 2,084 3,486 1,829 1,109 1,332 2,747	3,258 2,963 2,307 4,308 1,783 1,168 917 2,726	921 764 553 1,233 300 232 172 640	2,337 2,198 1,754 3,075 1,483 936 745 2,086	896 1,613 636 1,110 611 194 1,079 1,802	408 742 306 695 265 22 492 1,128	488 871 330 411 346 172 587 661	
Selected conditions of the genitourinary, nervous, endocrine, metabolic, and blood and blood-forming systems										
Goiter or other disorders of the thyroid . Diabetes . Anemias . Epilepsy . Migraine headache . Neuralgia or neuritis, unspecified . Kidney trouble . Bladder disorders . Diseases of prostate . Disease of female genital organs .	3,223 6,489 3,896 1,019 9,978 625 3,375 3,563 1,515 4,686	828 2,559 795 346 1,615 167 1,154 824 382 694	2,395 3,857 3,101 662 8,332 444 2,194 2,715 1,121 3,981	2,314 3,913 3,270 965 9,312 430 2,577 2,628 741 4,386	409 1,278 453 326 1,277 79 679 419 111 589	1,906 2,635 2,817 628 8,004 351 1,883 2,198 620 3,786	908 2,576 625 54 666 195 798 935 773 300	419 1,282 342 20 338 88 475 404 272 105	489 1,222 284 328 93 311 517 502 195	
Selected circulatory conditions										
Hneumatic fever, with or without heart disease	1,689 18,493 6,949 7,397 1,962 3,913	322 6,318 2,740 1,959 543 731	1,368 12,054 4,152 5,399 1,409 3,167	1,349 10,343 2,968 5,245 1,294 3,216	217 2,470 892 1,072 307 527	1,131 7,846 2,077 4,159 988 2,675	340 8,150 3,981 2,152 668 697	104 3,847 1,848 887 236 204	236 4,209 2,075 1,240 421 493	
disorders	1,523	685	824	735	238	497	787	447	327	
excluding hypertension	4,147	1,618	2,503	2,130	507	1,610	2,017	1,112	893	

See note at end of table.

Table 18. Number of selected chronic conditions, by age and years of education: United States, 1989-Con.

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

		All ages			Under 65 year	s	65 years and over			
Type of chronic condition	Total ¹	Less than 12 years	12 years or more	Total 1	Less than 12 years	12 years or more	Total ¹	Less than 12 years	12 years or more	
Selected circulatory conditions-Con.			I	Number of cl	hronic conditior	s in thousand	s			
High blood pressure (hypertension) Cerebrovascular disease	27,664 2,626 2,200 7,536 11,489	9,555 1,229 897 2,218 2,460	17,922 1,347 1,277 5,300 9,022	16,542 959 849 5,254 9,455	4,443 413 281 1,096 1,623	12,024 547 568 4,158 7,825	11,122 1,666 1,351 2,282 2,034	5,112 817 616 1,122 837	5,898 800 709 1,142 1,197	
Chronic bronchitis	11,974 11,621 21,166 33,683 1,316 2,076	2,387 2,301 2,608 6,505 188	9,537 9,243 18,499 27,092 1,128	10,352 10,117 19,182 29,202 1,081	1,530 1,519 1,724 4,194 133	8,798 8,547 17,409 24,975 948 0 200	1,622 1,504 1,984 4,481 235	857 782 884 2,311 55	739 697 1,090 2,117 179	
Emphysema	3,076 1,993	455 1,078	2,605 871	3,033 931	434 497	2,583 434	43 1,062	21 581	22 438	

¹Includes unknown education.

Table 19. Number of persons, by years of education and selected sociodemographic characteristics: United States, 1989

[Data are based on household interviews of the civilian noninstitutionalized population. Information on the statistical reliability of the estimates is given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All years ¹	Less than 4 years	4–7 years	8–11 years	12 years	13–15 years	16 years	17 years or more	Less than 12 years	13 years or more
				Nu	umber of pe	rsons in the	ousands			
Total ²	243,532	3,080	9,079	35,185	91,437	50,469	28,901	23,233	47,344	102,604
Age										
Under 18 years	64,003 104,196 25,401 42,814 35,982 46,114 24,685 21,429 29,219	578 731 139 296 296 768 288 480 1,003	1,604 2,089 478 805 806 2,259 901 1,358 3,126	6,989 11,069 3,054 4,716 3,299 8,411 3,696 4,715 8,717	23,133 40,623 10,571 16,956 13,096 18,261 9,999 8,263 9,420	14,936 24,945 7,081 9,720 8,144 7,232 4,338 2,894 3,356	8,421 14,280 2,636 6,346 5,297 4,397 2,539 1,858 1,803	7,956 9,609 1,247 3,662 4,700 4,320 2,705 1,615 1,348	9,170 13,889 3,672 5,816 4,401 11,438 4,884 6,554 12,846	31,313 48,834 10,964 19,728 18,142 15,949 9,582 6,367 6,507
Sex										
Male Female	118,009 125,523	1,541 1,539	4,516 4,563	16,483 18,702	42,162 49,275	24,092 26,377	15,072 13,830	13,059 10,174	22,540 24,804	52,223 50,381
Race										
White	205,312 29,891 8,329	2,106 627 347	7,228 1,473 377	28,235 6,071 878	77,434 11,845 2,158	42,787 6,105 1,577	25,435 2,094 1,372	20,359 1,327 1,547	37,570 8,171 1,603	88,582 9,525 4,497
Family income										
Less than \$5,000 \$5,000-\$9,999 . \$10,000-\$14,999. \$15,000-\$24,999. \$25,000-\$34,999. \$35,000-\$49,999. \$50,000 or more .	9,367 16,819 19,015 41,201 37,542 39,450 40,752	417 795 454 465 203 95 34	849 1,844 1,636 1,654 609 347 224	2,805 5,608 5,059 7,365 3,826 2,552 1,235	3,126 5,665 7,898 18,812 16,511 14,917 9,438	1,800 2,148 2,779 8,048 9,495 9,859 9,405	196 417 760 3,026 4,286 6,574 9,794	141 266 363 1,703 2,530 5,012 10,575	4,071 8,247 7,149 9,485 4,638 2,994 1,494	2,137 2,832 3,901 12,777 16,310 21,444 29,773
Hispanic origin										
Hispanic	21,017 220,297	1,328 1,738	3,075 5,964	4,348 30,646	6,685 84,240	3,271 46,878	1,238 27,509	956 22,119	8,751 38,348	5,465 96,507
Poverty status										
In poverty	26,053 195,674	1,313 1,199	2,684 4,7 6 3	7,820 22,335	9,368 73,931	3,909 43,429	577 27,298	278 22,163	11,817 28,297	4,765 92,889
Geographic region										
Northeast Midwest South West	48,930 59,540 83,148 51,913	433 195 1,373 1,079	1,522 1,232 4,130 2,195	7,250 8,065 14,004 5,866	18,559 24,969 30,996 16,913	8,954 12,627 16,012 12,876	6,256 6,994 8,949 6,703	5,549 5,066 6,975 5,643	9,206 9,492 19,507 9,139	20,759 24,687 31,935 25,222
Place of residence										
MSA	189,860 74,410 115,450 53,672	2,358 1,424 934 722	6,833 3,750 3,083 2,246	25,705 11,878 13,827 9,480	68,438 25,576 42,862 22,999	40,294 15,456 24,838 10,175	24,601 8,527 16,074 4,300	19,837 7,052 12,785 3,396	34,896 17,052 17,844 12,447	84,732 31,035 53,697 17,871
All persons 18 years of age and over	179,529	2,502	7,475	28,196	68,304	35,533	20,480	15,277	38,174	71,290
Major activity ³										
Working Keeping house Going to school Other	111,721 33,073 10,306 23,192	694 720 59 993	2,569 2,291 118 2,395	12,623 8,322 542 6,454	44,290 13,529 2,605 7,482	23,890 4,636 4,023 2,808	15,235 2,283 1,371 1,451	11,543 1,018 1,525 1,124	15,885 11,332 719 9,842	50,668 7,938 6,919 5,383
Marital status ³										
Married, living with spouse	113,369 34,309 31,033	1,289 453 755	4,272 826 2,368	16,994 3,660 7,488	45,002 12,153 10,961	21,562 8,682 5,214	13,300 4,957 2,194	10,214 3,288 1,739	22,554 4,939 10,611	45,077 16,927 9,148
Employment status ³										
Currently employed	117,227 4,714 57,588	704 33 1,766	2,567 178 4,730	12,678 904 14,614	45,666 1,908 20,730	26,187 920 8,426	166,152 405 3,923	12,371 329 2,577	15,949 1,115 21,110	54,710 1,653 14,927

¹Includes unknown education. ²Includes unknowns of sociodemographic characteristics. ³For persons 18 years of age and over.

NOTE: MSA is metropolitan statistical area.

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Appendixes

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Appendix I Technical notes on methods

Age standardization

The method used to age standardize estimates is described above under Presentation of the results.

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Reliability of the estimates

To produce approximate standard errors for National Health Interview Survey (NHIS) estimates, the reader must first determine the type of characteristic to be estimated, that is, the parameter set in table I to be used. The reader must then determine the type of estimate for which the standard error is needed. The type of estimate corresponds to one of five general rules for determining standard errors.

Rule 1. Estimated number of people or events—For the estimated number of people or events published in this report, there are two cases to consider. For the first case, if the estimated number is adjusted to U.S. Bureau of the Census estimates, then its standard error is assumed to be 0.0. This corresponds to parameter set VIII in table I. As an example, this would be the case for the number of persons in the U.S. target population or the number of males 18–44 years of age.

> For the second case, the standard errors for all other estimates of numbers of people or events, such as the number of people limited in activity or the number of acute conditions, are approximated using the parameters provided in table I and in formula 1 below.

If the aggregate x for a characteristic has associated parameters a and b, then SE(x), the approximate standard error for x, can be computed using the formula

$$SE(x) = \sqrt{ax^2 + bx} \tag{1}$$

Rule 2. For rates, proportions, and percents when the denominator is generated by the poststratification agesex-race classes — In this case, the denominator has no sampling error. For example, rule 2 would apply to the estimated number of bed days per person for black persons ages 65 years and over because the denominator is a combination of the poststratification cells. Approximate standard errors for such estimates can be computed using table I a and b parameters associated with the numerator characteristics along with formula 2 below.

If the estimate of rate, proportion, or percent p is the ratio of two estimated numbers, p = x/Y (where p may be inflated by 100 for percents or 1,000 for rates per 1,000 persons), with Y having no sampling error, then the approximate standard error for p is given by the formula

$$SE(p) = p \sqrt{a + \frac{b}{x}}$$
(2)

Rule 3. Proportions and percents when the denominator is not generated by the poststratification age-sex-race classes – If p represents an estimated percent, b is the parameter from table I associated with the

Table I. Estimated standard error parameters and 30-percent relative standard error (RSE) cutoff points for the National Health Interview Survey, 1989

Derewster		Estimated p	30-percent	
set	Characteristic	a	b	points ¹
1	Number of acute conditions	0.000225	67,800	755,000
11	Days of restricted activity or bed days	0.000363	475,000	5,300,000
111	Prevalence of chronic conditions.	0.0000893	12,200	136,000
N	Number of physician contacts based on a 2-week reference period	0.0000282	166,000	1,800,000
v	Hospital discharges based on a 6-month reference period.	0.000187	6,220	69.000
VI	Hospital discharge days based on a 6-month reference period	0.00194	82.300	935,000
VII	Population estimates for demographic, socioeconomic, and health characteristics	0.0000307	3,640	41,000
VIII	Age-sex-race population based on combining the poststratification cells	0.0	0.0	41,000

¹Estimates below the cutoff points have an RSE of more than 30 percent and are considered to be statistically unreliable.

numerator characteristics, and y is the number of persons in the denominator upon which p is based, then the standard error of p may be approximated by

$$SE(p) = \sqrt{\frac{bp(100-p)}{y}}$$
 (3)

(If p is a proportion, then the above formula can be used, but with 100 replaced by 1.0.)

Rule 4. Rates when the denominator is not generated by the poststratification age-sex-race classes—If the estimated rate p is expressed as the ratio of two estimates, p = x/y (inflated by 100 or 1,000, when appropriate), then the estimated standard error for p is given by the formula

SE(p) =

$$p\sqrt{\frac{\mathrm{SE}(x)^2}{x^2} + \frac{\mathrm{SE}(y)^2}{y^2} - 2r \frac{\mathrm{SE}(x)}{x} \frac{\mathrm{SE}(y)}{y}}{(x^2)^2}}$$
 (4)

where SE(x) and SE(y) are computed using rule 1 and x and y are obtained from the tables. No estimates of r, the correlation between the numerator and denominator, are presented in this report; therefore, only the first two terms are available. The reader must assume that r = 0.0. Assuming r = 0.0 will yield an overestimate of the standard error if r is actually positive and an underestimate if r is negative.

Rule 5. Difference between two statistics (mean, rate, total, and proportion) – If x_1 and x_2 are two estimates, then the standard error of the difference $(x_1 - x_2)$ can be computed as follows:

$$SE(x_{1} - x_{2}) = \sqrt{SE(x_{1})^{2} + SE(x_{2})^{2} - 2r SE(x_{1})SE(x_{2})}$$
(5)

where $SE(x_1)$ and $SE(x_2)$ are computed using rules 1-4 as appropriate and r is the correlation coefficient between x_1 and x_2 .

Assuming r = 0.0 will result in an accurate standard error if the two estimates are actually uncorrelated and will result in an overestimate of the standard error if the correlation is positive or an underestimate if the correlation is negative.

Prior to 1985, relative standard error (RSE) curves were presented in Current estimates reports for approximating relative standard errors. For readers who wish to continue using them, the following provides guidance. The RSE of an estimate is obtained by dividing the standard error (SE) of the estimate by the estimate x itself. This quantity is expressed as a percent of the estimate:

$$RSE = 100 \frac{SE(x)}{x}$$

Appendix II Definitions of certain terms used in this report

Terms relating to conditions

Condition – Condition is a general term that includes any specific illness, injury, or impairment. Condition data are derived from the survey in two ways. First, respondents are asked to identify any conditions that caused certain types of impact associated with health, such as a visit to a doctor or a day spent in bed. Second, respondents are read lists of selected chronic conditions and asked whether they or any family members have any of these conditions.

At a later point in the survey, a series of questions is asked about each of the conditions identified in either of the two ways just described. The information obtained on each condition helps to clarify the nature of the condition and whether medical services have been involved in its diagnosis or treatment. It also aids in the coding of the condition. All conditions except impairments are coded according to the Ninth Revision of the International Classification of Diseases (5), with certain modifications adopted to make the codes more suitable for information derived from a household survey. A special set of codes devised by NHIS is used to code impairments.

Chronic condition – A condition is considered chronic if (a) the respondent indicates it was first noticed more than 3 months before the reference date of the interview, or (b) it is a type of condition that ordinarily has a duration of more than 3 months. Examples of conditions that are considered chronic regardless of their time of onset are diabetes, heart conditions, emphysema, and arthritis. A complete list of these conditions may be obtained by contacting the Division of Health Interview Statistics, National Center for Health Statistics.

Impairment – An impairment is a chronic or permanent defect, usually static in nature, that results from disease, injury, or congenital malformation. It represents a decrease in or loss of ability to perform various functions, particularly those of the musculoskeletal system and the sense organs. Impairments are grouped according to type of functional impairment and etiology in the special NHIS impairment codes.

Acute condition -A condition is considered acute if (a) it was first noticed no longer than 3 months before the reference date of the interview and (b) it is not one of the conditions considered chronic regardless of the time of onset. (See definition of chronic condition.) However, any acute condition not associated with either at least one doctor visit or at least one day of restricted activity during the reference period is considered to be of minor consequence and is excluded from the final data produced by the survey.

Onset of condition -A condition is considered to have had its onset when it was first noticed. This could be the time the person first felt sick or became injured, or it could be the time the person or family was first told by a physician that the person had a condition of which he or she had been previously unaware.

Incidence of conditions – The incidence of a condition is the number of cases that had their onset during a specified period of time. A person may have more than one acute condition during a period of time or may have the same condition, such as a headache, more than once. Ordinarily, however, a chronic condition can begin only one time during a given reference period.

Prevalence of conditions – The prevalence of a condition is the number of persons who have the condition at a given point in time. Although the prevalence of acute conditions is a meaningful concept, it is seldom used in health statistics, which generally focus on the incidence of acute conditions. If the prevalence of a chronic condition is measured during a period of time (say, each week during a year), then the resulting estimate of prevalence is an average of 52 weekly prevalence estimates. This is called an average annual point prevalence estimate.

Terms relating to disability

Disability – Disability is a general term that refers to any long- or short-term reduction of a person's activity as a result of an acute or chronic condition. Limitation of activity refers to a long-term reduction in a person's capacity to perform the average kind or amount of activities associated with his or her age group. Restriction of activity refers to particular kinds of behavior usually associated with a reduction in activity because of either long- or short-term conditions. Thus limitation of activity refers to what a person is generally capable of doing, but restriction of activity ordinarily refers to a relatively shortterm reduction in a person's activities below his or her normal capacity.

Limitation of activity because of chronic conditions – Persons are classified in terms of the major activity usually associated with their particular age group. The major activities for the age groups are (a) ordinary play for children under 5 years of age, (b) attending school for those 5–17 years of age, (c) working or keeping house for persons 18–69 years of age, and (d) capacity for independent living (the ability to bathe, shop, dress, eat, and so forth, without needing the help of another person) for those 70 years of age and over. People aged 18–69 years who are classified as keeping house are also classified by their ability to work at a job or business. (In this report, the major activity of persons 65–69 years of age is assumed to be working or keeping house; however, questions were also asked about the capacity for independent living in this age group, which would permit an alternative definition of limitation.)

In regard to these activities, each person is classified into one of four categories: (a) unable to perform the major activity, (b) able to perform the major activity but limited in the kind or amount of this activity, (c) not limited in the major activity but limited in the kind or amount of other activities, and (d) not limited in any way. In regard to these four categories, NHIS publications often classify persons only by whether they are limited (groups a-c) or not limited (group d). Persons are not classified as limited in activity unless one or more chronic conditions are reported as the cause of the activity limitation. If more than one condition is reported, the respondent is asked to identify the condition that is the major cause of the limitation.

Restriction of activity—Four types of restricted activity are measured in NHIS: Bed days, work-loss days for currently employed persons 18 years of age and over, school-loss days for children 5–17 years of age, and cutdown days.

A bed day is one during which a person stayed in bed more than half a day because of illness or injury. All hospital days for inpatients are considered bed days, even if the patient was not in bed more than half a day.

A work-loss day is one on which a currently employed person 18 years of age and over missed more than half a day from a job or business.

A school-loss day is one on which a student 5–17 years of age missed more than half a day from the school in which he or she was currently enrolled.

A cut-down day is a day on which a person cut down for more than half a day on the things he or she usually did.

Work-loss, school-loss, and cut-down days refer to the short-term effects of illness or injury. However, bed days are a measure of both long- and short-term disability, because a chronically ill bedridden person and a person with a cold could both report having spent more than half a day in bed because of an illness.

The number of restricted-activity days is the number of days on which a person experienced at least one of the four types of activity restriction just described. It is the most inclusive measure of disability days and the least descriptive; 4 days of restricted activity may mean 4 bed days associated with serious illness or 4 days during which a person merely cut down on his or her activities because of a mild illness.

A single restricted-activity day may involve both a bed day and a work-loss or school-loss day. However, a cutdown day cannot overlap with any of these three types of disability days. In calculating the sum of restricted-activity days, each day is counted only once even if more than one type of activity restriction was involved.

Restricted-activity days may be associated with either persons or conditions. *Person days* are days during which a person restricted his or her activity. *Condition days* are days during which a condition caused a person to restrict his or her activity. A person day of restricted activity can be caused by more than one condition. In such a case, each condition causing restriction is associated with that day of restricted activity. Therefore, the number of condition days of restricted activity may exceed the number of person days of restricted activity. This relationship holds for each type of restricted-activity day.

When two or more conditions cause a day of restricted activity, the conditions may be (a) both (all) acute, (b) one (some) acute and the other (some) chronic, or (c) both (all) chronic. The number of restricted-activity days associated with acute conditions includes groups (a) and (b); the number of such days associated with chronic conditions includes groups (b) and (c). The phrase "associated with" rather than "caused by" is used to indicate that some days associated with acute or chronic conditions are not necessarily caused solely by that type of condition.

Assessed health status – The categories related to this concept result from asking the respondent, "Would you say ______''s health is excellent, very good, good, fair, or poor?" As such, it is based on a respondent's opinion and not directly on any clinical evidence.

Terms relating to physician contacts

Physician contact -A physician contact is defined as consultation with a physician, in person or by telephone, for examination, diagnosis, treatment, or advice. (Physician contacts with hospital inpatients are not included.) The contact is considered to be a physician contact if the service is provided directly by the physician or by a nurse or other person acting under a physician's supervision. For the purpose of this definition, "physician" includes doctors of medicine and osteopathic physicians. The term "doctor" is used in the interview rather than "physician" because of popular usage. However, the concept toward which all instructions are directed is that which is described here.

Physician contacts for services provided on a mass basis are not included in the tabulations. A service received on a mass basis is defined as any service involving only a single test (such as a test for diabetes) or a single procedure (such as a measles inoculation) when this single service is administered identically to all persons who are at the place for this purpose. Hence obtaining a chest x ray in a tuberculosis chest x ray trailer is not included as a physician contact. However, a special chest x ray given in a physician's office or in an outpatient clinic is considered a physician contact.

If a physician is called to a house to see more than one person, the call is considered a separate physician contact for each person about whom the physician is consulted.

A physician contact is associated with the person about whom the advice is sought, even if that person does not actually see or consult the physician. For example, if a mother consults a physician about one of her children, the physician contact is ascribed to the 'child.

Terms relating to hospitalization

Hospital-For this survey, a hospital is defined as any institution either (a) named in the listing of hospitals in the current American Hospital Association Guide to the Health Care Field or (b) found on the Master Facility Inventory List maintained by the National Center for Health Statistics.

Short-stay hospital—A short-stay hospital is one in which the type of service provided is general; maternity; eye, ear, nose, and throat; children's; or osteopathic, or it may be the hospital department of an institution.

Hospital day -A hospital day is a day on which a person is confined to a hospital. It is counted as a hospital day only if the patient stays overnight. Thus a patient who enters the hospital on Monday afternoon and leaves Wednesday noon is considered to have had two hospital days.

Hospital discharge – A hospital discharge is the completion of any continuous period of stay of 1 night or more in a hospital as an inpatient except the period of stay of a well newborn infant. A hospital discharge is recorded whenever a present member of the household is reported to have been discharged from a hospital in the 12-month period prior to the interview week. (Estimates were based on discharges that occurred during the 6-month period prior to the interview.)

Demographic terms

Age—The age recorded for each person is the age at last birthday. Age is recorded in single years and grouped in a variety of distributions depending on the purpose of the table.

Race-The population is divided into three racial groups, "white," "black," and "all other." "All other" includes Aleut, Eskimo or American Indian, Asian or Pacific Islander, and any other races. Race characterization is based on the respondent's description of his or her racial background.

Income of family or of unrelated individuals—Each member of a family is classified according to the total income of the family of which he or she is a member. Within the household, all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own income.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12-month period preceding the week of interview. Income from all sources—for example, wages, salaries, rents from property, pensions, government payments, and help from relatives—is included.

Geographic region—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the U.S. Bureau of the Census, are as follows:

Region	States included
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.
Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska.

Place of residence—The place of residence of a member of the civilian noninstitutionalized population is classified as inside a metropolitan statistical area (MSA) or outside an MSA. Place of residence inside an MSA is further classified as either central city or not central city.

Metropolitan statistical area – The definition and titles of MSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Metropolitan Statistical Areas. Generally speaking, an MSA consists of a county or group of counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city. In New England, towns and cities rather than counties are the units used in defining MSA's. There is no limit to the number of adjacent counties included in the MSA as long as they are integrated with the central city, nor is an MSA limited to a single State; boundaries may cross State lines. The

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metropolitan population in this report is based on MSA's as defined in the 1980 census and does not include any subsequent additions or changes.

Central city of an MSA – The largest city in an MSA is always a central city. One or two additional cities may be secondary central cities in the MSA on the basis of either of the following criteria:

- 1. The additional city or cities must have a population one-third or more of that of the largest city and a minimum population of 25,000.
- 2. The additional city or cities must have at least 250,000 inhabitants.

Not central city of an MSA – This comprises all of the MSA that is not part of the central city itself.

Not in an MSA – This comprises all other places in the country.

Currently employed – Persons 18 years of age and over who reported that at any time during the 2-week period covered by the interview they either worked at or had a job or business are currently employed. Current employment includes paid work as an employee of someone else; self-employment in business, farming, or professional practice; and unpaid work in a family business or farm. Persons who were temporarily absent from a job or business because of a temporary illness, vacation, strike, or bad weather are considered currently employed if they expected to work as soon as the particular event causing the absence no longer existed.

Freelance workers are considered currently employed if they had a definite arrangement with one employer or more to work for pay according to a weekly or monthly schedule, either full time or part time.

Excluded from the currently employed population are persons who have no definite employment schedule but work only when their services are needed. Also excluded from the currently employed population are (a) persons receiving revenue from an enterprise but not participating in its operation; (b) persons doing housework or charity work for which they received no pay; (c) seasonal workers during the portion of the year they were not working; and (d) persons who were not working, even though having a job or business, but were on layoff and looking for work.

The number of currently employed persons estimated from NHIS will differ from the estimates prepared from the Current Population Survey (CPS) of the U.S. Bureau of the Census for several reasons. In addition to sampling variability, they include three primary conceptual differences:

- 1. NHIS estimates are for persons 18 years of age and over; CPS estimates are for persons 16 years of age and over.
- 2. NHIS uses a 2-week reference period; CPS uses a 1-week reference period.
- 3. NHIS is a continuing survey with separate samples taken weekly; CPS is a monthly sample taken for the survey week, which includes the 12th of the month.

Currently unemployed—Persons 18 years of age and over who during the 2-week period prior to interview did not work or had no job or business but were looking for work and those who had a job but were on layoff or were looking for work are considered currently unemployed.

Not in labor force—Persons not in the labor force include those under 18 years of age and those who did not at any time during the 2-week period covered by the interview have a job or business, were not looking for work, and were not on layoff from a job. In general, persons excluded from the labor force are children under the age of 18, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

Hispanic origin—A person is Hispanic if any of the following groups describes his or her national origin or ancestry—Puerto Rican, Cuban, Mexican, Mexicano, Mexican American, Chicano, other Latin American, or other Spanish. Respondents make this determination by looking at a flashcard that contains the above-listed Hispanic groups and deciding whether any of them are the person's national origin or ancestry. The Hispanic population consists of all Hispanic people regardless of race.

NHIS poverty level-Persons are classified as being above or below the poverty level according to the poverty index originated at the Social Security Administration in 1964 and revised by the Federal Interagency Committees in 1969 and 1980. The poverty index is based solely on money income and does not reflect the fact that many low-income persons receive noncash benefits, such as food stamps, Medicaid, and public housing. The index is based on the Department of Agriculture's 1961 economy food plan and reflects the different consumption requirements of families according to their size and composition. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index. Because NHIS data on family income are collected by income category rather than in specific amounts of money, the NHIS estimates of persons living in poverty will vary slightly from the Current Population Survey estimates.

Major activity—The categories of major activity shown in this report are derived from answers to the following question: "What was _____ doing most of the past 12 months; working at a job or business, keeping house, going to school, or something else?"

Marital status—Persons are classified as married only if they are living with their spouse. All other persons are classified as never married or other. "Other" includes married persons not living with their spouses, and widowed, separated, and divorced persons.

Education—The categories of educational status are based on the years of school completed. Only years completed in regular school, where persons are given a formal education, are included. A "regular" school is one that advances a person toward an elementary or high school diploma or a college, university, or professional school degree. Thus, education in vocational, trade, or business school outside the regular school system is not counted in determining the highest grade of school completed.

The most detailed operational definitions of all of

these terms are found in the *NHIS Interviewer's Manual* (6). Instructions are given in the manual on how problem cases associated with each concept are to be handled.

Appendix III Questionnaire and flashcards

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c. 🛛 is there any other buildi	ng on th	is prop	orty for	people to] Yes (73	Table X)		22	Other	(Specif	" 1			1	
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A. HOUSEHOLD COMP(s of all persons living or staying here) who owns or rents this home. Enter n of all other persons living or staying he ames/. Have I missed: all children?	DSITION PAGE Start with the name of the person ame in REFERENCE PERSON colu re? Enter names in columns.	n or mor columna No L) C MBERSHIP members iter reason.)	1. 1 2. 1 3. 1 C 1 0 C 2	I Auf Mail Mai
s of nil persons living or staying here? who owns or rents this home. Enter n of all other persons living or staying he a <u>mes</u> /. Have I missed: all children?	Start with the name of the person ame in REFERENCE PERSON colu re? Enter names in columns. If "Tree names in Yes Pres?	ABERSHIP members ter reason.)	2	Inst name And nut April nut Asti name Sit y Asti name Sit y Sit of the sit of the sit name Sit y Sit of the sit name Sit y Sit of the s
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emes/. Have I missed: all children? ders, or persons you employ who live h ALLY lives here but is now away from t espital?	Yes iome Yes (2) No (APPLY HOUSEHOLD MEN RULES. Delete nonhousehold by an "X" from 1 – C2 and en ex.) ERIODS	No L) C U U MBERSHIP members iter reason.)	3. C1	IOSP. WORK NO Year Number 20 Wb 21 No Number Number 20 Wb 21 No Number LA INA 16V INJ Int Int Introduction
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sons in this family now on full-time a	ctive			
ed forces?	C Yes	🗆 No (5)		
Delete column number(s) by a	n ''X'' from 1–C2.			
	Yes (Reask 4b and c)			
n in armed forces:			44.	Living at home
isually live and sleep, here or somew	hera elso?			[] Not fiving at home
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have all adult family members who a	e at home take part in the intervie	w.		
t(e):	, ask. could they join ust (/iii//	11/10/		
ng conducted to collect information	on the nation's health. I will ask a	bout		
disability, visits to doctors, illness in	the family, and other health relate	d items,	$\left - \right $	
HOSPITAL PH	Use: Illent in a hospital OVERNIGHT?		6.	
ent times did — — stay in any hospital I date) a year ago?	overnight or longer since			Make cotry "HOSP." ha
				Number of times
under one:			78.	
a hospital?				
				1 2 L J NO (NP)
d child:			Ь.	U Yes (NP)
	Delete column number(s) by a on in armed forces: usually live and sleep, here or somewin's column. 17 and over are listed in addition to the re- have all adult family members who an sons 17 and over) at home now? If 'Ye nt(s): ing conducted to collect information o disability, visits to doctors, illness in HOSPITAL PRI hospital date) a year ago, was & per rent times did wiay in any hospital al date) a year ago? Junder one: a hospital?	Delete column number(s) by en "X" from 1 - C2. [] Yes (Reask 4b and c) on in anned forces: usually live and sleep, here or somewhere else? n's column. 17 and over are listed in addition to the respondent and are not present, say: have all adult family members who are at home take part in the intervie sons 17 and over) at home now? If "Yes," esk: Could they join us? (Allow nt(s): ng conducted to collect information on the nation's health, i will ask al disability, visits to doctors, illness in the family, and other health relate HOSPITAL PROBE hospital date) a year ago, was a patient in a hospital OVERNIGHT? rent times did slay in any hospital overnight or longer since al date? a year ago?	Delete column number(s) by an "X" from 1 - C2. Uses (Reesk 4b and c) No on in armed forces: usually live and sleep, here or somewhere else? n's column. 17 and over are listed in addition to the respondent and are not present, say: have all adult family members who are at home take part in the interview. sons 17 and over) at home now? If "Yes," ask: Could they join us? (Allow time) nt(s): ing conducted to collect information on the nation's health. I will ask about disability, visits to doctors, litness in the family, and other health related items. HOSPITAL PROBE hospital date) a year ago, was e patient in a hospital OVERNIGHT? rent times did stay in any hospital overnight or longer since al date? a year ago? Junder one: a hospital?	Delete column number(s)

	B. LIMITATION OF ACTIVITIES PAGE		
B1	Refer to age.	B1	1 18-69(1) 2 0 Other (NP)
1. Wh kee	at was — — doing MOST OF THE PAST 12 MONTHS; working at a job or business, ping house, going to school, or something else?	1.	1 Working (2) 2 Keeping house (3)
	n y n 2 of more activities reported. (17 Spent the most time doing; (2) Considers the most important.		4 Something else (5)
2a. Do	as any impairment or health problem NOW keep —— from working at a Job or business?	22.	1 🛛 Yes (7) 🗌 No
b. ls -	limited in the kind OR amount of work can do because of any Impairment or health problem?	ь.	2 Yes (7) 3 No (8)
3a. Do	as any impairment or health problem NOW keep —— from doing any housework at all?	3a.	4 🛛 Yes (4) 💭 No
b. Is- or I	limited in the kind OR amount of housework can do because of any impairment sealth problem?	ь.	5 Yes (4) 8 No (5)
4a. Wh Ask Ask If pi	at (other) condition causes this? if injury or operation: When did [the <u>(injury</u>) occur?/—— have the operation?] if operation over 3 months ago: For what condition did —— have the operation? regnancy/delivery or 0—3 months injury or operation — Reask question 3 where limitation reported, saving: Except for —— (condition),?	41.	(Enter condition in C2, THEN 4b) 1 Old age (Mark "Old age" box, THEN 4c)
b. Bea	OR reask 4b/c	ь.	☐ Yes (Reask 4a and b) ☐ No (4d)
c. 1s t	his limitation caused by any (other) specific condition?	c.	Yes (Reask 4a and b)
Mai d.Wh	k box if only one condition. Ich of these conditions would you say is the MAIN cause of this limitation?	d.	Only 1 condition
5a. Do	any impairment or health problem keep —— from working at a job or business?	5.	1 (1) Yes (7) (1) No
b. 1s -	- limited in the kind OR amount of work could do because of any impairment or health problem?	ь.	2 🛛 Yes (7) 3 🗋 No
B2	Refer to questions 3a and 3b.	B2	1 - ''Yes'' in 3s or 3b (NP) 2 - Other (6)
6a.is -	limited in ANY WAY in any activities because of an impairment or health problem?	6a.	1 🛛 Yes 2 🗌 No (NP)
b. In v	rhat way is limited? Record limitation, not condition.	Ь.	
7a. Wh Ask Ask If pi	at (other) condition causes this? If injury or operation: When did (the <u>(injury</u>) occur?/ have the operation?] If operation over 3 months ago: For what condition did have the operation? egnancy/delivery or 0-3 months injury or operation Reask question 2, 5, or 6 where limitation reported, saying: Except for <u>(condition</u>),? OR reask 7b/c.	7=.	Inntetion
b. Bes	ides (<u>condition</u>) is there any other condition that causes this limitation?	Ъ.	Yes (Reask 7a and b)
c. is ti	ls limitation caused by any (other) specific condition?		Yes (Reask 7s and b)
Mar d. Whi	k box if only one condition. Ich of these conditions would you say is the MAIN cause of this limitation?	d.	Only 1 condition
			Main cause

	B. LIMITATION OF ACTIVITIES PAGE, Continued			
B3	Refer to age.	B 3	0 🗌 Under 5 (10 1 🗍 5–17 (11)) 2 18 - 69 (NP) 3 170 and over (R)
8. WI ho	at was —— doing MOST OF THE PAST 12 MONTHS; working at a job or business, keeping use, going to school, or something else?	8.	1 🗌 Working 2 🗍 Keeping hos	150
Pri	ority if 2 or more activities reported: (1) Spent the most time doing; (2) Considers the most important.		3 Going to scl 4] Something	else
9a. Ba	cause of any impairment or health problem, does — — need the help of other persons with - personal care needs, such as eating, bathing, dressing, or getting around this home?	9n.	1 🖸 Yes (13)	No.
b.Be	cause of any impairment or health problem, does — — need the help of other persons in handling - routine needs, such as everyday household chores, doing necessary business, shopping, or ting around for other purposes?	ь.	2 🗌 Yes (13)	3 [] No (12)
10a. 1s	able to take part AT ALL in the usual kinds of play activities done by most children age?	108.	1 Yes	0 🗋 No (13)
b. Īs or	— — limited in the kind OR amount of play activities — — can do because of any impeirment health problem?	- b .	1 🛛 Yes (13)	2 [] No (12)
11a. Do	es any impairment or health problem NOW keep —— from attending school?	11a.	1 🛛 Yes (13)	[] No
b. D	es —— attend a special school or special classes because of any impairment or health problem?	b.	2 🗋 Yes (13)	[⁻] No
c.D he	es — — need to attend a special school or special classes because of any impairment or alth problem?	- c.	3 🗌 Yes (13)	No
d. Īs	limited in school attendance because of health?	d.	4 🗌 Yes (13)	5 🗋 No
12a. 1s	—— limited in ANY WAY in any activities because of an impairment or health problem?	12 a .	1 🗋 Yes	2]] No (NP)
b. În	what way is Ilmited? Record limitation, not condition.	<u>Б.</u>		
			u	mitation
138. W A If	hat (other) condition causes this? sk if injury or operation: When did [the <u>(injury</u>) occur?/—— have the operation?] sk if operation over 3 months ago: For what condition did —— have the operation? pregnancy/delivery or 0—3 months injury or operation — Reask question where limitation reported, saying: Except for —— <u>(condition</u>),? OB reask 13b/c.	13a.	(Enter condition 1 Old age (M THEN 13c	in C2, THEN 13b) ark ''Old age'' box,)
ь. в	usides (<u>condition</u>) is there any other condition that causes this limitation?	Б.	Ves (Reas)	13a and b)
c. 1	this limitation caused by any (other) specific condition?	c.	Yes (Reas)	(13a and b)
d. W	ark box if only one condition. Thich of these conditions would you say is the MAIN cause of this limitation?	d.	Only 1 cor	dition
FOOT	INTEQ	1	Ma	
FORM HIS-	(1989) (3-21-89) Page 6			

B4 Refer to sige. B4 a Under 5 (M)? 3 00-1 1 0 5-59 (89) 30 con 0 00 of 1 0 5-59 (89) B5 Refer to "Old age" and "LA" boxes. Mark first appropriate box. B5 b 00 age" box marked fit 0 00 age fits 0 0 age fits 0 ag			1	
B4 Refer to age. B4 0 Under 5 MP/7 10 0		B. LIMITATION OF ACTIVITIES PAGE, Continued		
B5 Refer to "Old age" and "LA" boxes. Mark first appropriate box. B5 Image: Dox marked first appropriate box. 14a. Because of any impairment or health problem, does — need the help of other persons with — paramal care needs, such as	B4	Refer to age.	B4	0 Under 5 (NP) 2 60 - 69 (14) 1 5 - 59 (85) 3 70 and over (NP)
14a. Beccuse of any impairment or health problem, does — need the help of other persons (the media, such as esting, bathing, dressing, or yesting around this home? 14a. I was / 15 / 10 / 10 / 10 / 10 / 10 / 10 / 10	B5	Refer to ''Old age'' and ''LA'' boxes. Mark first appropriate box.	B5	"Old age" box marked (14) Entry in "LA" box (14) Other (NP)
If under 19, skip to next person; otherwise eski; b. Because of any impairment or health problem, does need the help of other persons in handling getting second for other purposes? 2] Yes 3 No. 10 b. Because of any impairment or health problem, does need the help of other persons in handling getting second for other purposes? 2] Yes 3 No. 10 15s. What (other) condition causes this? 15s. What (other) condition causes this? 15s. 15s. What (other) condition causes this? Ask if operation over 3 months ago: For what condition did have the operation? 15s. 10 dd age (Mark * 'Otd age'' here are a thick on the condition in ported, saying: Except for (condition),? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition is ported, saying: Except for (condition),? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 dd age (Mark * 'Otd age'' here are a to bick on the condition? 10 de age (Mark * 'Otd age'' here are a to bick on the condition? 10 de age (Mark * 'Otd age'' here are a to bick on the condition? 10 de age (Mark * 'Otd age'' here are a to bick on there are a to bick on there are a to bick on the condition?	14a. Be	cause of any impairment or health problem, does — — need the help of other persons with – personal care needs, such as eating, bathing, dressing, or getting around this home?	148.	1 🗆 Yes (15) 🔹 No
15a. What (other) condition causes this? 15a. 15a. Ask if operation over 3 months ago: For what condition did — have the operation? 15a. ifener condition in C2. THEN 15 Ask if operation over 3 months ago: For what condition did — have the operation? 10. 10. Ask if operation over 3 months ago: For what condition did — have the operation? 10. 10. Ask if operation over 3 months ago: For what condition did _ months ago: For what condition that causes the operation? 10. 10. Besk question 14 where limitation reported, saying: Except for — (condition)? 0. 0. 10. OR ready. 15b/c. b. Besides (condition) is there any other condition that causes this limitation? b. 0. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10. 11. 10.	b.Be	nder 18, skip to next person; otherwise ask: cause of any impairment or health problem, does — need the help of other persons in handling - routine needs, such as everyday household chores, doing necessary business, shopping, or ting around for other purposes?	b.	21]Yes 31 No (NP)
Ask if operation over 3 months ago: For what condition did — have the operation? If pregnancy/delivery of 0-3 months injury or operation - Reask question 14 where limitation reported, saying: Except for — (condition),? OR reask 15b/c. b. Besides (<u>condition</u>) is there any other condition that causes this limitation? c. Is this limitation caused by any (other) specific condition? d. Which of these conditions would you say is the MAIN cause of this limitation? FOOTNOTES	15a. WI As	eat (other) condition causes this? k if injury or operation: When did [the (injury) occur?!—— have the operation?]	15a,	(Enter condition in C2, THEN 15b)
b. Besides (condition) is there any other condition that causes this limitation? b. Uves (Resk 15s and b) c. Is this limitation caused by any (other) specific condition? c. Uves (Resk 15s and b) Mark box if only one condition. d. Uves (Resk 15s and b) d. Which of these conditions would you say is the MAIN cause of this limitation? d. Only 1 condition FOOTNOTES Main cause Main cause Main cause	As If p	k if operation over 3 months ago: For what condition did — — have the operation? regnancy/delivery or 0—3 months injury or operation — Reask question 14 where limitation reported, saying: Except for — — (condition),? OR reask 15b/c.		1 Old age (Mark "Old age" box, THEN 15c)
e. Is this limitation caused by any (other) specific condition? Mark box if only one condition. d. Which of these conditions would you say is the MAIN cause of this limitation? footnotes	b.Be	sides (<u>condition</u>) is there any other condition that causes this limitation?	ъ.	Yes (Reask 15s and b)
Mark box if only one condition. d. Image: Only 1 condition d. Which of these conditions would you say is the MAIN cause of this limitation? d. Image: Only 1 condition FOOTNOTES Main cause Main cause Main cause	c. [s]	his limitation caused by any (other) specific condition?		Yes (Reask 15a and 6)
FOOTNOTES	Ma d.Wi	rk box if only one condition. Not of these conditions would you say is the MAIN cause of this limitation?	d.	Only 1 condition
FOOTNOTES				Main cause
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	E. 2-WEEK DOCTOR VISITS PROBE PAGE	1		
R	lead to respondent(s):			
T	hese next questions are about health care received during the 2 weeks outlined in red on the	at calendar.		
E1	Refer to age.		E1	Under 14 (1b)
1a, D ol pi	uring those 2 weeks, how many times did —— see or talk to a medical doctor? {Include f doctors, such as dermatologists, psychiatrists, and ophthalmologists, as well as gene ractitioners and osteopaths.} (Do not count times while an overnight patient in a hospit	all types trai tal.)	1a. and b.	
ъ. D (С	uring those 2 weeks, how many times did anyons see or talk to a medical doctor about Do not count times while an overnight patient in a hospital.)	?		Number of times
2a. (B hi fr	Besides the time(s) you just told me about) During those 2 weeks, did anyone in the fami eaith care at home or go to a doctor's office, clinic, hospital or some other place? Inclue om a nurse or anyone working with or for a medical doctor. Do not count times while a vernight patient in a hospital.	ily receive de care n		
ь. W	The received this care? Mark "DR Visit" box in person's column.		<u>2</u> ь.	
c. A	nyone else?	□ No		
۸ ط. H	sk for each person with "DR Visit" in 2b: low many times did —— receive this care during that period?		-ā.	Number of times
3a. (B ge ar	Besides the time(s) you already told me about) During those 2 weeks, did anyone in the f et any medical advice, prescriptions or test results over the PHONE from a doctor, nurse nyone working with or for a medical doctor?	iamily e, or		
ь. W	ho was the phone call about? Mark "Phone call" box in person's column.		ЗБ.	Phone call
c.Ŵ	/ere there any calls about anyone else?		+	
А: d. H	sk for each person with ''Phone call'' in 3b: ow many telephone calls were made about ——?		ď.	Number of calls
E2	Add numbers in 1. 2d, and 3d for each person. Record total number of visits and calls in "2-	WK. DV" box	in ite	m C 1
OOTN	NOTES			
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F. 2-WEEK DOCTOR VISITS PAGE	DR	VIBIT 1
Refer to C1, ''2-WK. DV'' box.	PE	RSON NUMBER
F1 Refer to age.	F1	Under 14 (16)
1 a. On what (other) date(s) during those 2 weeks did see or talk to a medical doctor, nurse, or doctor's assistant? b. On what (other) date(s) during those 2 weeks did anyone see or talk to a medical doctor, nurse, or doctor's assistant about? Ask streps OB will column for this person:	1a. and b.	Month Date OR 7777
c. Were there any other visits or calls for during that period? Make necessary correction to 2-Wk. DV box in C1.		2 No (Ask 2-6 for each visit)
 Where did — — receive health care on (<u>date in 1</u>), at a doctor's office, clinic, hospital, some other place, or was this a telephone call? If doctor's office: Was this office in a hospital? If doctor's office: Was the office in a hospital? If hospital: Was it the outpatient clinic or the emergency room? If clinic: Was it a hospital outpatient clinic, a company clinic, a public health clinic, or some other kind of clinic? If lab: Was this lab in a hospital? What was done during this visit? (Footnote) What was done during this visit? (Footnote) Output Out	2.	O1 Telephone Hospital: Not in hospital: 06 0.P. clinic 03 Doctor's office 09 Emergency room 04 Co. or ind. clinic 10 Doctor's office 05 Other Chinc 11 Lab 05 Lab 12 Overnight patient(6) 07 Other (Specify) z 88 Other (Specify) z
Ask 3b if under 14. 3a. Did —— actually talk to a medical doctor? b. Did anyone actually talk to a medical doctor about ——?	3a. and b.	1 🛛 Yes (37) 8 🗂 DK II M.D. (3c) 2 🔜 No (3c) 9 💭 DK who was seen (37)
c. What type of medical person or assistant was taiked to?	с.	түра 99 ОК
d. Does the (entry in 3c) work with or for ONE doctor or MORE than one doctor?	d.	1 One (3/) 2 More 3 None (4) 9 DK
 For this [visit/cell] what kind of doctor was the (entry in 3c) working with or for — a general practitioner or a specialist? Is that doctor a general practitioner or a specialist? 	e. and f.	1 🗍 GP (4) 2 Specialist (3g) 9 🗌 DK (4)
g. What kind of specialist?	g.	Kind of specialist
Ask 4b if under 14. 4a. For what condition did — — see or talk to the [doctor/(entry in 3c/) on (date in 1)? Merk first appropriate box.	4a. and b.	1 Condition (Item C2, THEN 4g) 2 Pregnancy (4c) 3 Testic) or examination (4c)
b. For what condition did anyone see or talk to the [doctor/(antry in 3c]] about on (data in 1)? Mark first appropriate box.		s Other (Specify) 7 (4g)
c. Was a condition found as a result of the (test(s)/examination)? d. Was this (lest/examination) because of a specific condition — had? e. During the past 2 weeks was — — sick because of her pregnancy?	c. d.	Yes_(4h) No Yes_(4h) No (4g) Yes_ No (4g)
f. What was the matter?	1.	Condition THEN 4gi
g. During this [visit/call] was the [doctor/[<u>entry in 3c]</u>] talked to about any (other) condition? h. What was the condition?	g. h.	
Mark box if "Telephone" in 2. 5a. Did — — have any kind of surgery or operation during this visit, including bone settings and stitches?	5a,	0 Telephone m 2 (Next 1 Yes 2 No 16) Dr. visit)
b. What was the name of the surgery or operation? If name of operation not known, describe what was done.	b.	(1)
c. Was there any other surgery or operation during this visit?	c.	Yes (Reask 5b and c)
Go to next DV if "Home" in 2. 6. In what city (town), county, and State is the <u>(place in 2)</u> located?	6.	City/County/

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G. HEALTH INDICATOR PAGE	[1
1a. During the 2-week period outlined in red on that calendar, has anyone in the family had an injury from an accident or other cause that you have not yet told me about?		
□Yes □No (2)		
b. Who was this? Mark "Injury" box in person's column.	1ь.	
c. What was — — injury? Enter injury(ies) in person's column.	c.	
d. Did anyone have any other injuries during that period?		
Yes (Reask 1b. c. and d)		
Ask for each injury in 1e:		
 As a result of the (injury in 1c) did [/anyone] see or talk to a medical doctor or assistant (about) or did cut down on usual activities for more than half of a day? 	•.	Yes (Enter injury in C2, THEN 1e for next injury) No (1e for next injury)
2. During the next 12 months, (that is since /12.month details uses and) ABOUT how month data		
Illness or injury keep —— in bed more than half of the day? (Include days while an overnight patient in a hospital.)	2.	000 LINone
3a. During the past 12 months, ABOUT how many times did [/anyone] see or talk to a medical doctor or assistant (about)? (Do not count doctors seen while an overnight patient in a hospital.) (Include the (<u>number in 2-WK DV box</u>) visit(s) you already told me about.)	3a.	000 None (3b) 000 Only when overnight petient in hospital (NP)
b. About how long has it been since [——/anyone] last saw or talked to a medical doctor or assistant (about ——)? Include doctors seen while a patient in a hospital.	Ъ.	No. of visits 1 Interview week (Reask 3b) 2 Less than 1yr. (Reask 3a) 3 1 yr., less than 2 yrs. 4 2 yrs., less than 5 yrs. 5 5 yrs. or more 0 Never
 Would you say — — health in general is excellent, very good, good, fair, or poor? 	4.	1 □ Excellent 4 □ Fair 2 □ Very good 5 □ Poor 3 □ Good
Mark box if under 18.	5a.	Under 18 (NP)
5a. About how tall is —— without shoes?		
		Feet Inches
b. About now much does —— weigh without shoes?	ь.	Pounds
FOOTNOTES	<u> </u>	
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J. HOSPITAL PAGE	нов	PITAL STAY 1			
1. Refer to C1, "HOSP." box.	1.	PERSON	UMBER_		
 You said earlier that — — was a patient in the hospital since (1.3-month hospital date) a year ago. On what date did — — enter the hospital ((the last time/the time before that))? 		Month	Date	Year	
Record each entry date in a separate Hospital Stay column.	2.			19	
3. How many nights was — in the hospital?	3.	0000 None	(Next HS)		
4. For what condition did — – enter the hospital? • For newborn ask: • For initial "No condition" ask: 4 • For delivery ask: • For newborn ask: • For initial "No condition" ask: 4 Was this a normal delivery? Was the baby normal at birth? Why did — – enter the hospital? 6 If "No," ask: If "No," ask: • For tests, ask: • For tests, ask: 9 What was the matter? What was the matter? What was the tests of the tests? 11 no results, ask: Why were the tests performed?			t Normal delivery 2 Normal at birth 3 [,] No condition Condition		
J1 Refer to questions 2, 3, and 2-week reference period.	J1	At leas referer in C2,	t one night in 2-v to period (Enter THEN 5) ats in 2-week refer	veek condition rence period (5)	
5a. Did —— have any kind of surgery or operation during this stay in the hospital, including bone settings and stitches?	5a.	1 🗌 Yes		2 🗍 No <i>(6)</i>	
b. What was the name of the surgery or operation? If name of operation not known, describe what was done.	ь.	(1) (2) (3)			
c. Was there any other surgery or operation during this stay?	c.	Yes (R	eask 5b and c)		
6. What is the name and address of this hospital?	6.	Name Number and stre	et		
		City or County		State	
FOOTNOTES	•	<u></u>	<u> </u>		

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	CONDI	TION 1	PERSON NO		Ask 3g if there is an impai following antrias in 3b—f	rment (refer to C	ard CP2) or any of the
1. N	ame of condition				Abscess Ache (except head or ser)	Demage Growth	Palsy Paralysis
N in 2. V	fark ''2-wk. ref. pd.') C2 as source. Vhen did [——/anyo bout —— (<u>condition</u>	' box without asking if ''l ne] last see or talk to a /?	DV'' or ''HS'' doctor or assistant		Bleeding (except menstrual) Blood clot Boll Cancer	Hemorrhage Infection Inflammation Neuralgia	Rupture Screinuss) Stiff(ness) Tumor
0 1 2 3	 Interview week (Reas 2-wk, ref. pd. Over 2 weeks, less th 6 mos., less then 1 yr 	k 2) 5 ⊡ 2 γr. 6 ⊡ 5 γr. an 6 mos. 7 ⊡ Dr. ; . 8 ⊡ DK i	s., less than 5 yrs. s. or more seen, DK when { Dr. seen } (3b)		Gramps (except menstruel) Cyst	Nouritis Poin	Uicer Varicose veine Weak(ness)
4 3 (I c	1 yr., less than 2 yrs. Earlier you told me at all the (condition) by a Yes	9 Dr. Nout — <u>(condition</u>) Did th more technical or specifi 2 No 9	e doctor or assistant ic name?	g.	Show the following detai Head Back/spine/vertebrae	= ==================================	(Specify)
4 it b. V 1 3	Isk 3D if "Yes" in 3a tem 1 without asking Vhat did he or sha o Color Blindness (NC) Normal pregnancy, normal delivery.	, otherwise transcribe co :: :all it? 2 Cancer (3e) 4 Old age (NC (5) B Other (3c)	ndition name from Specify)		Ear	lder, upper, elbow, entire hend . hip, upper, knee, l entire foot, arc	Inner or outer; left, right, or both left, right, or both lower or wrist; left, right, or both or fingers only; left, right, or both lower, or ankle; left, right, or both h, or toes only; left, right, or both
c, V - - - - - - -	Vast was the cause Mark box if accident Did the (<u>condition in</u>	of —— (<u>condition in 3b</u> i or injury. o 🗆 Acci <u>3</u> b) result from en accie	7 (Specify) 7 dent/injury (5) dent or injury?	Ъ.	Except for eyes, ears, or i following entries in 3b—1 Infection Sore What part of the <u>(part or</u> sore/soreness) — the si	internal organs, a Soreness (<u>body in 3b – g</u>) (In, muscle, bor	is affected by the [infection ne, or some other part?
1	Yes (5)		v of the following words:		(Specify)		
	Aliment Cencer Anemia Conditio Asthme Cyst Atteck Delect Bed	Disesso Pr m Disorder Ri Growth Tr Messies Tu UU	oblem apture ouble imar icer	4.	Ask if there are any of the Tumor Cyst Is this [tumor/cyst/grov 1 🗌 Melignent 2	e following entrie Growth wth] malignant : 🗆 Benign	ss in 3b−f: or benign? 9 □ DK
•.1	What kind of (<u>condi</u> 	tion in 3b) is it? or stroke in 3b—e:. gy/stroke] NOW affect	(Specify)	5	a. When was —— (cond first noticed? b. When did —— (name	dition in 3b/3f) of injury in 3b)7	1 2-wk. ref. pd. 2 0ver 2 weeks to 3 month 3 0ver 3 months to 1 year 4 0ver 1 year to 5 years 5 0ver 5 years
	For Stroke, fill remai effect. Enter in item each additional pres	nder of this condition pag C2 end complete a separ ent effect.	e for the first present ate condition page for		Ask probes as necessary (Was it on or since <i>(firs</i>) or was it before that da (Was it less than 3 mor (Was it less than 1 year (Was it less than 5 year)	: t <u>date of 2-week</u> ite?) iths or more the r or more than 1 is or more than	<u>ref. period)</u> un 3 months ago?) year ago?) 5 years ago?)

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K	Refer to RD and C2. 1 □ ''Yes'' in ''RD'' box AND more than 1 condition in C2 (6) 3 □ Other (K2)	13.	is this <i>(condition in 3b)</i> the result of the same accident you already told me about?
6a.	During the 2 weeks outlined in red on that calendar, did —— (<u>condition</u>) cause —— to cut down on the things —— usually does? ☐ Yes No (K2)	1	 Yes (Record condition page number where accident questions first completed.) Page No.
ь. 7. 8.	During that period, how many days did — — cut down for more than half of the day? oo[None (K2) Days During those 2 weeks, how many days did — — stay in bed for more than half of the day because of this condition? oo[None Days Ask if "Wa/Wb" box marked in C1: During those 2 weeks, how many days did — — miss more than half of the day from — — Job or business because of this condition?	14.	Where did the accident happen? 1 At home (inside house) 2 At home (adjacent premises) 3 Street and highway (includes roadway and public sidewalk) 4 Farm 5 Industrial place (includes premises) 6 School (includes premises) 7 Pisce of recreation and sports, except at school 8 Other (Specify) 7
9.	oo□NoneDays Ask if age 5—17: During those 2 weeks, how many days did —— miss more than half of the day from school because of this condition? oo□NoneDays	15a. b.	Mark box if under 18. Under 18 (16) . Was
K	Condition has "CL LTR" in C2 as source (10)	c.	Was at work at job or business when the accident happened 3 Yes 4 No Was a car, truck, bus, or other motor vehicle involved in the accid
10.	About how many days since <u>(12-month date</u>) a year ago, has this condition kept — — in bed more than half of the day? (Include days while an overnight patient in a hospitai.) 000Days	ь.	in any way? 1 Yes 2 No (17) . Was more than one vehicle involved? 1 Yes 2 No
11.	Was —— ever hospitalized for —— <u>(condition in 3b)</u> ? 1 🛛 Yes 2 🗖 No	с.	• Was [it/either one] moving at the time? 1 Yes 2 No
K	Missing extremity or organ (K4) Other (12)	17a.	At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?
12 8 .	Does — suin nave this condition? 10 Yes (K4) 0 No Is this condition completely cured or is it under control?		Part(s) of body * Kind of injury
с.	2 Cursd s Other (Specify) 3 Under control (K4) (K4) About how long did — – have this condition before it was cured? 000 Less than 1 month OR Number {1 Months 2 Ursers	ь.	Ask if box 3, 4, or 5 marked in Q.5: What part of the body is affected now? How is — (<u>part of body</u>) affected? Is — affected in any other way? Partial of body 5
d.	Was this condition present at any time during the past 12 months? 1 [] Yes 2 [] No		
K4	o□ Not an accident/injury (NC) 1□ First accident/injury for this person (14) s□ Other (13)		 Enter part of body in same detail as for 3g. If multiple present offects, enter in C2 each one that is not the same as 3b or C2 and complete a separate condition page for it.

	L. DEMOGRAPHIC BA	ACKGROUND PAGE					
L1	Refer to age.		L1	Under 517 18 an	5 (NP) (2) d over (1)		
1. Di	1 a. Did —— EVER serve on active duty in the Armed Forces of the United States?			1 🗌 Yes () 2 🗌 No (2	Mark "AF" }	' box, 1	HEN 16
b. W M Th m	b. When did — serve? Mark box in descending order of priority. Thus, if person served in Vietnam and in Korea mark VN. Vietnam Era (Aug. '64 to April '75) VN Korean War (June '50 to Jan. '55) KW World War II (Sept. '40 to July '47) WWI World War I (April '17 to Nov. '18) WWI Post Vietnam (May '75 to present) PVN Other Service (all other periods) OS			1 🗌 VN 2 🗌 KW 3 🗍 WWR 4 🗌 WWR		s [] P\ 8 [] O: 9 [] Di	/N S K
c. W	as EVER an active member of a National C	Buard or military reserve unit?	с.	Yes	2 🗆 No 1	- 2) 7	(Прк <i>(2)</i>
d. W	as ALL of active duty service related to Na	tional Guard or military reserve training?	- .	1 🗌 Yes	3 🗆 No	 9	 Прк
2a.W	hat is the highest grade or year of regular scho	ol —— has ever attended?	2.	00 🗋 Never kinde	sttended garten (N	or Pj	
ь. D	b. Did —— finish the <u>(number in 2a)</u> [grade/yeer]?			Elem: High: College: 1 TYes	1 2 3 9 10 1 1 2 3 2 🗌 No	4 5 1 12 4 5	678 6+
H. 3a.[W	and Card R. Ask first alternative for first person; as That is the number of the group or groups whic That is —— race?	k second alternative for other persons. h represents — — race?	3a.	12	34	5 Z	
Ci 1 2 3	rcle all that apply — Aleut, Eskimo, or American Indian 4 — Asian or Pacific Islander 5 — Black	White Another group not listed Specify			(Specify	۲۹ ۲	
ь. W	sk if multiple entries: hich of those groups; that is, <u>(entries in 3a</u>) wor	uld you say BEST represents —— race?	b.	1 2	3 4	5 ¥	
c. 7	ark observed race of respondent(s) only.		- <u>-</u> .	10w	2 🗆 8	y) 	 Do
H 48.A	Hand Card O. 4a. Are any of those groups —— national origin or ancestry? (Where did —— ancestors come from?)			1 .Yes 2 No (/			
ь. Р С 1 2 3 4	b. Please give me the number of the group. Circle all that apply. 1 - Puerto Rican 5 Chicano 2 - Cuban 6 Other Latin American 3 - Mexican/Mexicano 7 Other Spanish 4 - Mexican American			12	34	5	67

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	L. DEMOGRAPHIC BACKGR	OUND PAGE, Continued			
L2	Refer to "Age" and "Wa/Wb" boxes in C1.	L2	0 Under 18 (NP) 1 Wa box marked (5s) 2 Wb box marked (5s) 3 Neither box marked (5h)		
Sa.Ea Wi	rlier you said that —— has a job or business but is —— looking for work or on layoff from a job	t did not work last week or the week before. during those 2 weeks?	5a.	1 Yes (5c)	2 [] No (6b)
b. Ea Wa	rlier you said that —— didn't have a job or busin as —— looking for work or on layoff from a job	ness last week or the week before. during those 2 weeks?	ь.	1 🗆 Y#5	2[.]No (NP)
c.WI	nich, looking for work or on layoff from a job?		 c.	1 Looking (6c) 2 Layoff (6b)	3 Both (6b)
6a.Ea	rlier you said that —— worked last week or the	week before. Ask 6b.			
b.Fo	whom did work? Enter name of company, i	business, organization, or other employer.	6b. and	Employer	NEV (6g)
c.Foi Ent	whom did —— work at —— last full-time job or busi er name of company, business, organization, or other en	iness lasting 2 consecutive weeks or more? nployer, or mark "NEV" or "AF" box in person's column.	с.		(oe) AF لي
d. Wi ret	at kind of business or industry is this? For exam all shoe store, State Labor Department, farm.	nple, TV and radio manufacturing,	 d.	Industry	
77 ●.₩I	lf ''AF'' in 6b/c, mark ''AF'' box in person's column without asking. •.What kind of work was — — doing? For example, electrical engineer, stock clerk, typist, farmer.				AF (NP)
f.WI ke	nat were —— most important activities or dutie aps account books, files, sells cars, operates printir	s at that Job7 For example, types, ng press, finishes concrete.	-Ŧ.	Duties	
Ċo	mplete from entries in 6b—f. If not clear, ask:			Class of worker	
g. Wa An Ind Af Al	NS —— employee of a PRIVATE company, business or vidual for wages, salary, or commission P EDERAL government employee?	Self-employed in OWN business, professional practice, or farm? Ask: is the business incorporated? Yes	g.	1 □ P 2 □ F 3 □ S 4 □ L	5]] I 6]] SE 7]] WP 8]] NEV
FOOTNO	DTES				
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	L.DEMOGRAPHIC BACKGROUND PAGE, Continued		
7.	Mark box if under 14. If ''Married'' refer to household composition and mark accordingly. Is — — now married, widowed, divorced, separated, or has — — never been married?	7.	0 Under 14 1 Married spouse In HH 2 Married spouse not in HH 3 Widowed 4 Divorced 5 Separated 6 Nover married
88.	Was the total combined FAMILY income during the past 12 months — that is, yours, <u>(read names, including</u> <u>Armed Forces members living at home</u>) more or less than \$20,000? include money from jobs, social security, retirement income, unemployment payments, public assistance, and so forth. Also include income from interest, dividends, net income from business, farm, or rent, and any other money income received.	8a.	t \$20,000 or more (Hand Card I) 2 Less than \$20,000 (Hand Card J)
	Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often then those in another group.		
ь.	Read parenthetical phrase if Armed Forces member living at home or if necessary. Of those income groups, which latter best represents the total combined FAMILY income during the past 12 months (that is, yours, <u>(read names, including Armed Forces members</u> <u>living at home</u>)? Include wages, salaries, and other items we just talked about. Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often than those in another group.	ь.	00 A 10 K 20 U 01 B 11 L 21 V 02 C 12 M 22 W 03 D 13 N 23 X 04 E 14 O 24 Y 05 F 15 P 25 Z 06 G 16 Q 28 ZZ 07 H 17 R 06 1 18 S 09 J 19 T J J J J J J
R	a. Mark first appropriate box.	Ra.	0 Under 17 1 Present for all questions 2 Present for some questions 3 Not present
	b. Enter person number of respondent.	ь.	Person number(s) of respondent(s)
L	Enter person number of first parent listed or mark box.	L3	Person number of parent
L4	Enter person number of spouse or mark box.	L4	Person number of spouse oo 🗌 None in household
FOO	TNOTES	<u> </u>	

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	L. DEMOGRAPHIC BACKGROUND PAGE, Continued		AT61				
L5	Refer to age. Complete a separate column for each nondeleted person aged 18 and over.	L5	PERSON NUMBER				
Read	to respondent(s): In order to determine how health practices and conditions are related to how long people live, we would like to refer to statistical records maintained by the National Center for Health Statistics.						
L6	Enter date of birth from question 3 on Household Composition page.	L6	Date of birth 5-11 Month Date Year				
9a. In w Print pers	hat State or country was — — born? the full name of the State or mark the appropriate box if the on was not born in the United States.	9a.	99 DK 12-13 				
If bo b. Alto	rn in U.S., ask 9b; if born in foreign country, ask 9c. gether, how many years has —— lived in <u>(State of present residence</u>)?	b.	1 Less than 1 yr. 4 10 yra., less than 15 2 1 yr., less than 5 5 15 yra., or more 3 5 yra., less than 10 9 DK				
c, Alto	gether, how many years has — — lived in the United States?	c.	1 Less than 1 yr. 4 10 yrs., less than 15 2 1 yr., less than 5 5 15 yrs., ress than 5 3 5 yrs., less than 10 9 DK				
L7	Print full name, including middle initial, from question 1 on Household Composition page.	L7	Lest [16–35 First [36–50 Middle initial [51				
Verin 10. What Veri	y for males; esk for females. t is —— father's LAST name? fy spelling. DO NOT write "Same."	10.	Father's LAST name 82-71				
Read	to respondent(s): We also need — — Social Security Number. This information is voluntary and collected under the authority of the Public Health Service Act. There will be no effect on — — benefits and no information will be given to any other government or nongovernment agency.	11.	999999999 DK				
Read	Read if necessary: The Public Health Service Act is title 42, United States Code, section 242k. 11. What is Social Security Number?		Social Security Number Mark II number obtained from 2 Records				
L8	Mark box to indicate how Social Security number was or was not obtained.	LB	1 Self-personal 82 2 Self-telephone 3 Proxy-personal 4 Proxy-telephone				

FORM HIS-1 (1989) (3-21 89)

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L. DEMOGRAPHIC BACKGROUND PAGE, Continued								
Read to Hhid. respondent: The National Center for Health Statistics may wish to contact you again to obtain additional health related information. Please give me the name, address, and telephone number of a relative or friend who would know where you could be reached in case we have trouble reaching you. (Please give me the name of someone who is not currently living in the household.) Please print items 12-15.								
12. Contact Person name Last	3-4 5-24	First	25-39	1 Middle Linitial	40	14.	Area code/telephone number	97-108
13a. Address (Number and street)				ł	41-85		1 🖸 None 2 🗋 Refused 9 🗍 DK	107
b. City	66-85	State	86-87	ZIP	88-96	15.	Relationship to household respondent	108-109

FORM HIS-1 (1989) (3-21-89)

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3		If this questionnaire is for an	•••• <u></u>					LISTING SHEET		
Han I	E	EXTRA unit, enter Control Number of original sample unit	also enter for FIRST unit listed property	ion	Sheet number	Line number				
		······	AT LISTED ADDRESS	I						
1	ADDRE	SS OF ADDITIONAL LIVING QUARTERS	SEPARATENESS AND FACILITIES		CLASSIFICATION	AREA AND BLOCK SEGMENTS		PERMIT SEGMEN	NTS	
	if airead and stop and unit location	y listed, fill sheet and line number below Table X. Otherwise, enter basic address address, if any, OR description of	and line number below vise, enter basic address OR description of		Do the occupants (or intended occupants) of <u>faddress in column (1)</u> live and eat seperately from all other persons on the property?		Is this unit within the first segment boundaries?		Is this unit within the same structure as the original sample unit?	
L		(1)	(2)	(3)	(4)	(5)		(6)	(7)	
	Sheet _	Line	☐ Yes — Skip to column (5) and mark according to Table A in Part C of manual ☐ No	□Yes □No Skip to column (5) and mark N	☐ Yes — Mark HU in column (5) ☐ No — Mark N in column (5)	□N Stop Table X for this line □HU Fill column (6) or (7), as appropriate □OT Fill column (6) or (7), as appropriate	☐ Yes — Interview as an EXTRA unit ☐ No — Do hot interview		 Yes — List on first available line of list sheet. Interview if sample. No — Do not interview 	t ting fin view
Pane 52	Sheet _	Line	☐ Yes — Skip to column {5} and mark according to Table A in Part C of manual ☐ No	☐ Yes ☐ No — Skip to column (5) and mark N	□Yes — Mark HU in column (5) □No — Mark N in column (5)	□ N — Stop Table X for this line □ HU Fill column (6) or (7), as appropriate □ OT Fill column (6) or (7), as appropriate	UYes EXTRA	Interview as an A unit Do not Interview	 Yes — List on first available line of list sheet. Interview if sample. No — Do not interv 	ting in view
-	Sheet _	Line	 Yes — Skip to column (5) and mark according to Table A in Part C of manual No 	☐ Yes ☐ No — Skip to column (5) and mark N	□Yes — Mark HU in column (5) □No — Mark N in column (5)	 □ N - Stop Table X for this line □ HU Fill column (6) or (7), as appropriate □ OT Fill column (6) or (7), as appropriate 	□Yes – EXTRA □No – I	Interview as an Vunit Do not interview	☐ Yes — List on first available line of list sheet. Interview if sample. ☐ No Do not interv	ting in riew
F	NOTE	: Be sure to continue interview for origina TES	I unit after completing Table X	for all lines.						



RACE

- 1. Aleut, Eskimo, or American Indian
- 2. Asian or Pacific Islander
- 3. Black
- 4. White

ORIGIN 1. Puerto Rican 2. Cuban 3. Mexican/Mexicano 4. Mexican American 5. Chicano 6. Other Latin American 7. Other Spanish

CARD O

CARD I

INCOME

- U \$20,000 \$24,999
- V \$25,000 \$29,999
- W ... \$30,000 \$34,999
- X \$35,000 -- \$39,999
- Y \$40,000 --- \$44,999
- **Z** \$45,000 \$49,999
- ZZ... \$50,000 and over

CARD J

INCOME

	A Less then \$1,000 (including loss)	l
	B \$1,000 - \$1,999	
	C \$2,000 - \$2,999	
	D \$3,000 - \$3,999	
	E \$4,000 \$4,999	
	F \$5,000 — \$5,999	
	G \$6,000 \$6,999	Card 1
	H \$7,000 — \$7,999	
	\$8,000 \$5,999	1
	J \$9,000 \$9,999	
	K \$10,000 \$10,999	
	L \$11,000 \$11,999	
	M \$12,000 \$12,999	1
	N \$13,000 \$13,999	1
	0 \$14,000 - \$14,999	1
	P \$15,000 - \$15,999	
	Q \$16,000 - \$16,999	12
	R \$17,000 - \$17,999	
	s \$18,000 \$18,999	
	T \$19,000 \$19,999	
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Reviews of New Reports



National Center for Health Statistics

Current Estimates from the National Health Interview Survey, 1989

Series 10, No. 176 (PHS) 90-0000

Authors: Adams, P.; Benson, V.

For information contact:

Sharon Ramirez Scientific and Technical Information Branch 6525 Belcrest Road, Rm. 1064 Hyattsville, MD 20782

Tel: (301) 436-8500

Data from the 1989 National Health Interview Survey (NHIS) are now available in this year's edition of "Current Estimates from the National Health Interview Survey, 1989," an annual report of the National Center for Health Statistics.

As in previous editions, this report provides information on various health measures for all persons injured. These health measures include disability days, physician contacts, prevalence of chronic conditions, limitation of activity, hospitalizations, and respondent-assessed health status. Estimates are presented for various groups in the population, including those defined by age, sex, race, family income, geographic region, and place of residence.

In 1989, the incidence rate of acute conditions was 181.3 per 100 persons. Approximately 61.6 percent of these conditions received some medical attention. Restricted activity days associated with the incidence of acute conditions totaled 749.1 days per 100 persons.

The reported chronic conditions with the highest prevalence rates per 1,000 persons in 1989 were sinusitis (138.3), arthritis (127.3), deformity or orthopedic impairment (114.9), and hypertension (113.6).

Overall, the 1989 estimates of respondent-assessed health status were similar to the estimates for 1987

and 1988. The percent of persons assessing their health as "excellent" or "very good" in 1989 was 39.7 and 28.1 percent, respectively. Only 2.6 percent of respondents assessed their health as "poor."

The NHIS is a continuous nationwide household survey of the civilian noninstitutionalized population of the United States. Data on health and other characteristics are obtained for each household member. A description of the survey design, the methods used in estimation, and general qualifications of the data obtained from the survey are presented in Appendix I of this report.

Copies of the report can be obtained from the U.S. Government Printing Office by using the order form on the back of this release.






(84 percent) was greater than the proportion of black children covered (81 percent). For infants under 1 year

of age, however, there was no difference in health insurance coverage by race. Hispanic children of all ages were less likely to be covered by a health insurance plan (70 percent) than non-Hispanic children (85 percent). Hispanic infants were less likely to be covered

(62 percent) than non-Hispanic infants (83 percent).

Health Insurance and Medical Care: Health of Our Nation's Children, United States, 1988

> Most children had a regular source of medical care in 1988. However, fewer black infants under 1 year of age had a regular source of medical care (80 percent) compared with white infants (92 percent). There was no difference in the proportions of Hispanic and non-Hispanic infants and toddlers with a regular source of routine medical care. At 5 years of age and over, however, Hispanic children were less likely to have a regular source of medical care than non-Hispanic children.

Where a child received medical care and how often a child visited a doctor depended on race and ethnicity. Black children were three times as likely as white children to receive routine care in a clinic setting. Nearly one-half of black infants under 1 year of age (47 percent) received routine medical care in a clinic setting, compared with 16 percent of white infants. Forty-eight percent of Hispanic infants, compared with 19 percent of non-Hispanic infants, received routine care in a clinic setting. Ninety-five percent of white

infants under 1 year of age had visited a doctor recently, compared with 88 percent of black infants.

Whether a child received private or clinic care and whether a child visited a doctor during the past 12 months were also highly dependent on economic factors. Thirty-seven percent of children in families with annual incomes of less than \$10,000 received clinic care, compared with only 6 percent of children in families with incomes of \$40,000 or more. At all ages, more children in the highest income families than the lowest income families had a recent health visit.

This report is one of four Advance Data reports, subtitled "Health of Our Nation's Children," which present findings from the National Health Interview Survey on Child Health. Other reports are on child care arrangements; developmental, learning, and emotional problems; and exposure to environmental cigarette smoke. Single copies of this report can be obtained from the Scientific and Technical Information Branch.

Reviews of New Reports National Center for Health Statistics







Advance Data No. 188

For information contact:

6525 Beicrest Road, Rm. 1064 Hyattsville, MD 20782

Scientific and Technical Information Branch

Insurance coverage and health

services for children are the topics of

a new report, "Health Insurance and

Eighty-three percent of the

Nation's children ages 17 years and

insurance plan in 1988. Overall, the

proportion of white children covered

under were covered by a health

Medical Care," published by the National Center for Health Statistics.

(PHS) 90-1250

Sabra Llovd

Author: Bloom, B.

Tel: (301) 436-8500

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Vital and Health Statistics series descriptions

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For answers to questions about this report or for a list of titles of reports published in these series, contact:

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