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# Vital and Health Statistics

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## Americans Assess Their Health: United States, 1987

Series 10:  
Data From the National Health  
Interview Survey  
No. 174

Statistics are presented on the proportions of persons assessed in fair or poor health by respondents in household interviews conducted during 1987 on a sample of the civilian noninstitutionalized population. Estimates are shown by age, sex, race, family income, education, poverty status, Hispanic origin, major activity, marital status, living arrangement, family size, labor force and employment-related characteristics, geographic region, and place of residence.

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### *Cooperation of the U S Bureau of the Census*

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 Division of Health Interview 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 (more than 30-percent relative standard error in numerator of percent or rate)
  - # Figure suppressed to comply with confidentiality requirements
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# Americans Assess Their Health: United States, 1987

by Peter Ries, Division of Health Interview Statistics

## Introduction

This report presents estimates for 1987 on the association between respondent-assessed health status and selected sociodemographic characteristics of the civilian noninstitutionalized population of the United States, based on data collected in the National Health Interview Survey (NHIS). An earlier report presented similar estimates for 1978 (1). However, the estimates shown in the earlier report should not be compared directly with those included in this report as a basis for statements about trends during the 10-year interval. In 1982 the basic NHIS questionnaire was revised (the changes are discussed in appendix IV of the 1982 *Current Estimates*) (2), and as part of this revision the question on assessed health status was changed. Although the two forms of the question are similar, even a cursory glance at the estimates for the 2 years will reveal differences in estimates that cannot be attributed to actual changes in assessed health status. In general, the new form of the question produces a lower estimate of the percent of persons assessed in fair or poor health than did the earlier form of the question. However, even though the levels of the estimates changed because of the redesign of the question, the pattern of the relationships between subgroups of the populations defined by health status categories is, in general, the same for both periods.

The sociodemographic characteristics for which associations with assessed health status are shown in this report include age, sex, race, family income, education, poverty status, Hispanic origin, major activity, marital status, living arrangement, family size, labor force status, employment status, type of occupation, industry, geographic region, and place of residence.

To show as much detail as possible on respondent-assessed health status, the results are extensively cross-classified. Because of the vast number of estimates produced, the text highlighting these results can, at best, discuss only very limited aspects of the data. As such, the text is limited primarily to defining concepts where the meaning is not obvious, indicating limitations associated with specific concepts; associations between the percent of persons assessed in fair and poor health; and the characteristics associated with each sociodemographic variable. These associations are highlighted primarily in relation to age. The reader is invited to consult the detailed tables to interpret further the data in terms of other control variables or to locate estimates for specific subgroups in the civilian noninstitutionalized population.

The National Center for Health Statistics (NCHS) maintains a clearinghouse on health indexes, including a regular publication (*Bibliography on Health Indexes*). For copies of this report (which includes references to studies on assessed health status) and for other information on this subject, contact the Health Status Measurement Branch of the Division of Epidemiology and Health Promotion at the address shown on the back of this publication.

Since 1982, each annual edition of *Current Estimates* has included detailed tables showing estimates of assessed health status by age, sex, race, family income, geographic region, and place of residence.

Standardized microdata tapes which include the data used to produce the estimates shown in this report may be obtained by contacting the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161.

# Highlights

The following statements indicate which subgroups, defined in terms of selected characteristics, had relatively high levels of respondent-assessed fair or poor health in the civilian noninstitutionalized population of the United States during 1987:

- Except at the extremes of the lifespan (the young and the very old) the percent of persons assessed in fair or poor health increased with increasing age. However, the rate of increase was not even; it was relatively slow from the early teenage years until about 40 years of age. Thereafter, until about the age of 90 years, the percent of persons assessed in fair or poor health increased at a relatively rapid and constant rate.
- Proportionately more females than males were assessed in fair or poor health. However, for children under 10 years of age and for most age groups for adults 60 years of age and over a higher percent of males than of females were assessed in fair or poor health.
- Black persons were far more likely to be assessed in fair or poor health than were white persons or persons of other races. In general, this relationship holds within all of the subgroups defined by the sociodemographic characteristics described in this report.
- The percent of persons assessed in fair or poor health has a strong inverse relationship with family income and years of completed education. These relationships are somewhat independent, so that persons who were poor

*and* had little education had a much higher proportion assessed in fair or poor health than did persons who were either poor *or* who had little education, but not both.

- When age is taken into account, those living in poverty had a much higher percent of persons assessed in fair or poor health than other persons had.
- Considered within the differing age distributions of the two groups, Hispanics were more likely to be assessed in fair or poor health than were non-Hispanics.

Among other characteristics discussed in this report the percent of persons assessed in fair or poor health was relatively highest for

- Widowed persons 18–64 years of age.
- Persons not in the labor force and, among those in the labor force, persons who were unemployed.
- Service workers 18–64 years of age.
- Persons living in the South.
- Those living in the central cities of metropolitan statistical areas (MSA's) and those living outside of MSA's.

When all of the characteristics of persons discussed in this report are considered, the group with the consistently highest percent of people assessed in fair or poor health were black persons 45 years of age and over who were poor and had little education.

## Source and limitations of the data

The information from the National Health Interview Survey presented in this report is based on data collected by household interview in a continuing nationwide survey. 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 1987 NHIS sample was composed of 47,240 households containing 122,859 persons. The total noninterview rate was 4.7 percent: 2.9 percent was the result of respondent refusal, and the remainder was primarily the result of failure to locate an eligible respondent at home after repeated calls.

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. Because the estimates presented in this report are based on a sample of the population, they are subject to sampling errors. Therefore, readers should pay particular attention to the section of appendix I entitled "Reliability of the estimates," which presents formulas for calculating standard errors and instructions for their use.

The major concepts for which estimates are shown in this report are defined in appendix II. Appendix III includes a copy of the questions and flashcards used in the interviews that produced the data used for this report.

Although a considerable effort is made to ensure accurate reporting, information may be inaccurate because the respondent is unaware of relevant information, has forgotten it, does not wish to reveal it to an interviewer, or does not understand the intended meaning of a question.

The estimates shown in this report on respondent-assessed

health status are derived from responses to the following question: "Would you say \_\_\_\_'s health in general is excellent, very good, good, fair, or poor?"

Three things should be noted about the results. First, proxy responses are accepted from a family member meeting the NHIS eligible respondent rules for adult family members not at home at the time of interview or for family members who are present but do not meet the eligibility requirements (such as a mentally retarded family member). Responses for children and youths under 17 years of age are always sought from eligible adult family members (unless they are married or are not living with other family members). During 1987 proxy responses were accepted for about 29.7 percent of all sample persons 17 years of age and over.

Second, because the question refers to a person's health and not to the possible effects of any impairments, it is entirely reasonable for severely impaired persons to state that their health is "excellent" and for persons with no impairment to classify themselves as in "poor" health.

Third, estimates based on respondent-assessed health correlate very highly with other measures of health status and health service utilization. For example, in 1987, persons assessed in excellent health had 2.3 bed days per person per year; in comparison, persons assessed in poor health averaged 72.9 bed days per person per year. Associations of this nature do not, of course, remove the limitations of interpretation ordinarily associated with lay evaluations of health.

A secondary analysis of data on assessed health status from a large number of studies and a bibliography on this topic may be found in "Evaluating the Effects of Survey Design and Administration on the Measurement of Subjective Phenomena: The Case of Self-Assessed Health Status" (3).

# Results

The results discussed in the report are presented in detail in tables 1–16. In the first five of these tables (age, sex, race, family income, and education) the estimates for each of the five health status categories, as well as for persons assessed in excellent to good health combined and fair and poor health combined, are presented. These basic sociodemographic variables serve as control variables for the rest of the characteristics shown in tables 6–16. Every variable in these tables is shown by age and education of the individuals for persons 18 years of age and over. For persons 18–64 years of age three educational groupings are used (less than 12 years, 12 years, and more than 12 years of completed education). This educational classification did not produce a sufficient proportion of reliable results for persons 65 years of age and over (because of the size of this population and because they tend to have less education than persons under 65 years of age). These older persons were thus classified into two groups: “less than 12 years” and “12 years or more” of completed education. In cases where even this reduction of educational groupings did not produce a sufficient proportion of reliable results, estimates are shown for these older persons independently of educational variables.

The number of years of education completed rather than family income was used as a basic sociodemographic control variable primarily for two reasons. First, whereas family income was not reported for 32 million persons (about 13.4 percent of the population), education was not reported for only about 1.8 million persons (1.0 percent of persons 18 years of age and over). Thus, using education rather than family income means excluding fewer cases because of missing data.

Second, in terms of the categories used in this report, more variation of the estimates of persons assessed in fair or poor health is associated with education than with family income. The estimates of persons assessed in fair or poor health by education range from 36.0 percent for persons with less than 8 years of education to 4.3 percent for persons with 16 years or more education, whereas the range for family income is only from 20.7 percent for persons in families with less than \$5,000 in income to 3.6 percent for persons in families with income of \$50,000 or more (tables 4 and 3, respectively). On the other hand, the variations in the estimates by education and family income are only partially

associated with one another. There remain significant differences by family income within each of the categories of years of completed education. For this reason, broad income categories—along with age, sex, and race—are also shown in tables 6–16 when sampling error is not a major problem.

The extensive cross-classification of the data included in this report has at least two implications. First, percents in these tables are accompanied only by population figures (that is, denominators) for the variable under consideration. To have included the number of persons for the assessed health statuses (that is, numerators) would have vastly increased the number of pages or necessitated showing data for fewer variables. A close approximation of each of the numerators may be obtained by multiplying the percent of persons assessed in fair or poor health by the population figure for the corresponding cell. This procedure will be necessary for readers wishing to regroup cells into new aggregates.

Second, the extensive cross-classification of the data produces more than the usual proportion of unreliable estimates found in Series 10 reports. For instance, many of the results are closely associated with race. Because only about 12 percent of the population is of the black race, results for this group often contain a high proportion of unreliable estimates. However, because of the importance of race in relation to the variables contained in this report, many of the tables include estimates for both black and white races in lieu of suppressing this variable altogether or showing the results only for the white population. By comparison, there are so few persons classified as “other” (that is, of neither white nor black race), that extensive cross-classification of this group produces an overwhelming proportion of unreliable estimates. Therefore, estimates for “others” are seldom shown separately.

Finally, it should be noted that in the discussion of the results, terms such as “similar” and “the same” mean that no statistically significant difference exists between the statistics being compared. Terms relating to difference (such as “greater” or “less”) indicate that differences are statistically significant. The *t*-test with a critical value of 1.96 (0.05 level of significance) was used to test all comparisons that are discussed. Lack of comment regarding the difference between any two statistics does not mean the difference was tested and found to be not significant.

# Age

The distribution of the civilian noninstitutionalized population by assessed health status categories according to 5-year age groups is shown in table 1. Figure 1 shows the percent of persons assessed in fair or poor health by age, the age being shown as the midpoint of the 5-year age groups.

The percent of persons assessed in fair or poor health is relatively low for children, ranging between 2 and 3 percent for age groups under 15 years of age. It then begins to rise and continues to rise until about the age of 90 years when it reaches 38.7 percent. However, the rate of increase is

not constant. It is relatively slow until about the age of 40 years. Thereafter, the increase in the percent of persons assessed in fair or poor health is much more rapid until about the age of 90 years, when a sharp decline in the percent occurs. This decline probably reflects the greater proportion of ill people who, at this advanced age, are in nursing homes and are not therefore included in the NHIS sample. It may also indicate that at a very advanced age people are less likely to claim that their health is poor.

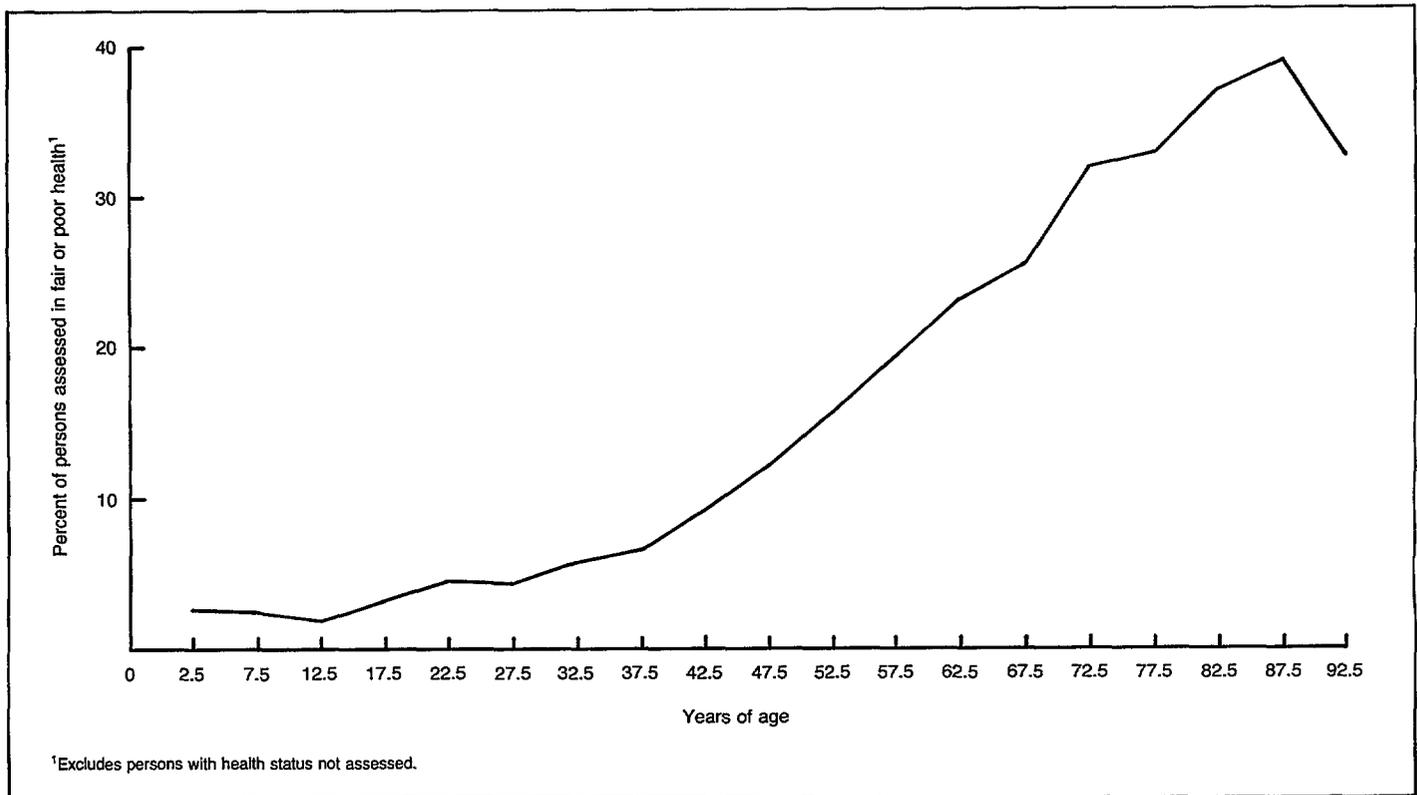


Figure 1. Percent of persons assessed in fair or poor health by age: United States, 1987

# Sex

Table 1 also shows the distribution of the population by assessed health status categories by age for males and females. For persons of all ages, a greater proportion of females (10.9 percent) than of males (9.0 percent) were assessed in fair or poor health.

Figure 2 shows that this relationship varies depending on the age range under consideration. For the youngest two

age groups (under 10 years of age), males were more likely than females to be assessed in fair or poor health. Thereafter, until about 60 years of age, females were more likely to be assessed in fair or poor health. After the age of about 60 years a reversal again occurs, and males for most of the age groups reported higher percents of persons in fair or poor health than did females.

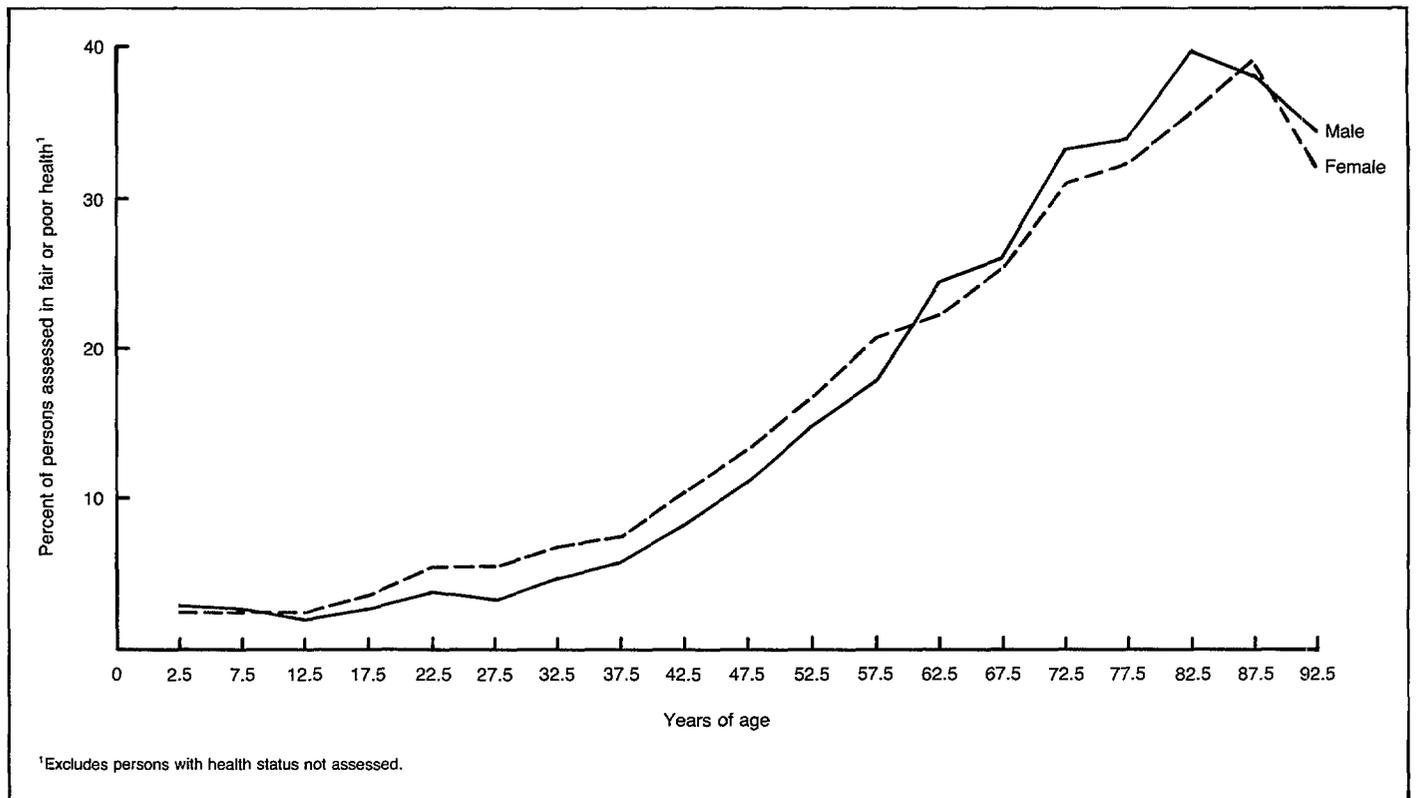


Figure 2. Percent of males and females assessed in fair or poor health by age: United States, 1987

# Race

Table 2 shows the distribution of the population by assessed health status according to age, sex, and race. Figure 3 shows the percent of persons assessed in fair or poor health by age and race.

In general, there is relatively little difference between the percents of white persons (9.3 percent) and persons of other races (that is, other than white or black—8.2 percent) assessed in fair or poor health. However, black persons (15.2

percent) were far more likely to be assessed in fair or poor health than the other two racial groups, and this relationship holds regardless of age. As may be noted in figure 3, the differences by race were greatest for persons under 65 years of age, where for the three age groups shown the percent of black persons was about twice that of white persons. Table 2 shows that the patterns of the relationship among the three racial groups were similar for both males and females.

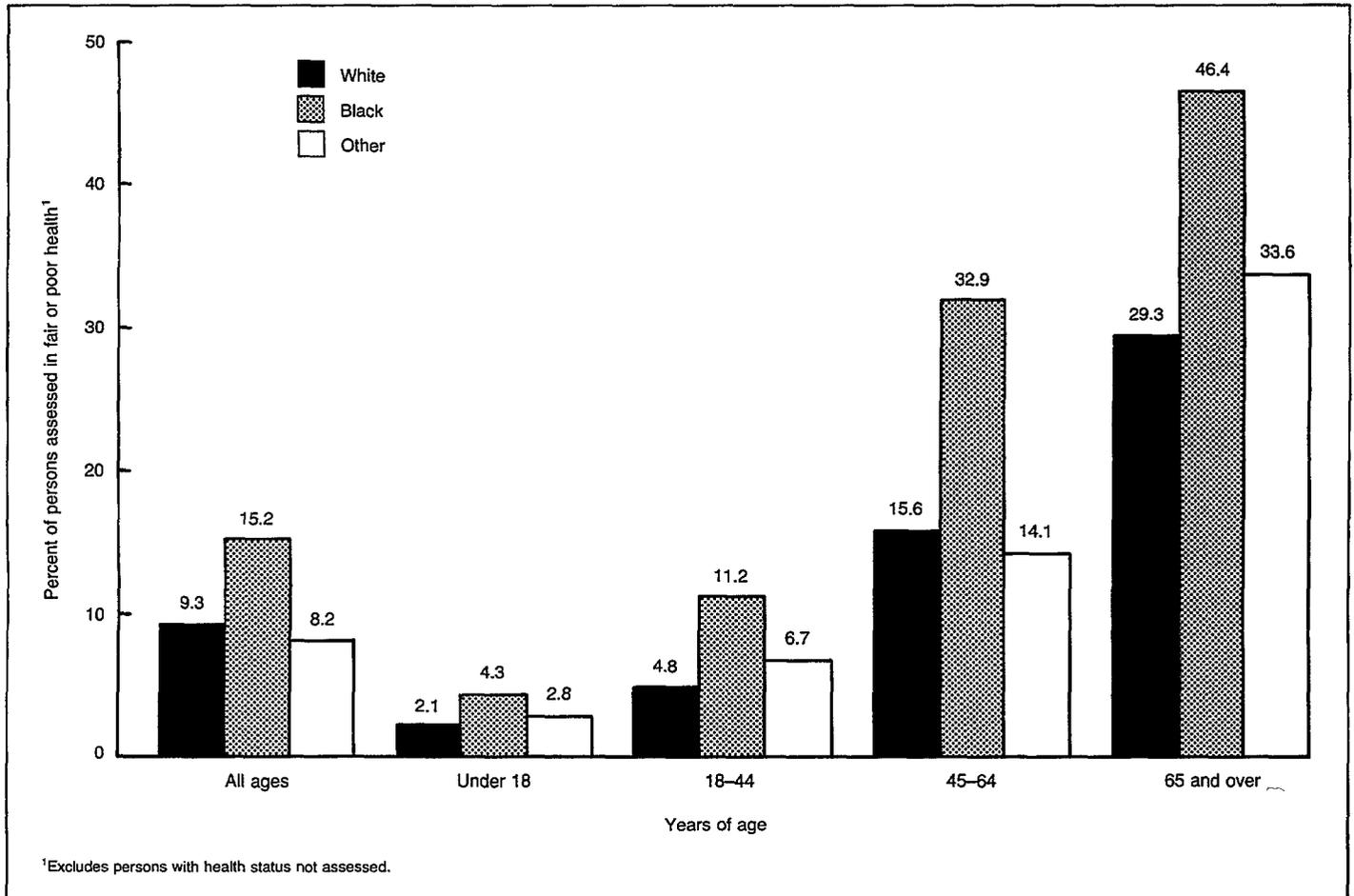


Figure 3. Percent of persons assessed in fair or poor health by age and race: United States, 1987

# Family income

Figure 4 shows the percent of persons assessed in fair or poor health by age and annual family income. The distribution by family income for persons of all ages indicates that the highest percent of persons assessed in fair or poor health was in the \$5,000–\$9,999 income category, rather than in the lowest family income category (less than \$5,000) as might be expected. This results from the relatively large number of persons aged 65 years and over in families with an annual income of \$5,000–\$9,999. The population estimates from table 3 show that although only 9.3 percent of persons of all ages with annual family income were in the \$5,000–\$9,999 category, 21.6 percent of persons 65 years of age and over were in this income category. Because this oldest age group

has a very high percent of persons assessed in fair or poor health, the relatively high percent estimate for this family income group is not surprising.

As may be noted in figure 4, the percents of persons assessed in fair or poor health did tend to decrease monotonically as family income increased within each of the specific age groups. Taking into account both age and family income, the percents of persons assessed in fair or poor health ranged from a low of 1.0 percent for persons under 18 years of age in families with an annual income of \$50,000 or more to a high of 51.7 percent for persons 45–64 years of age in families with an annual income of less than \$5,000 (table 3).

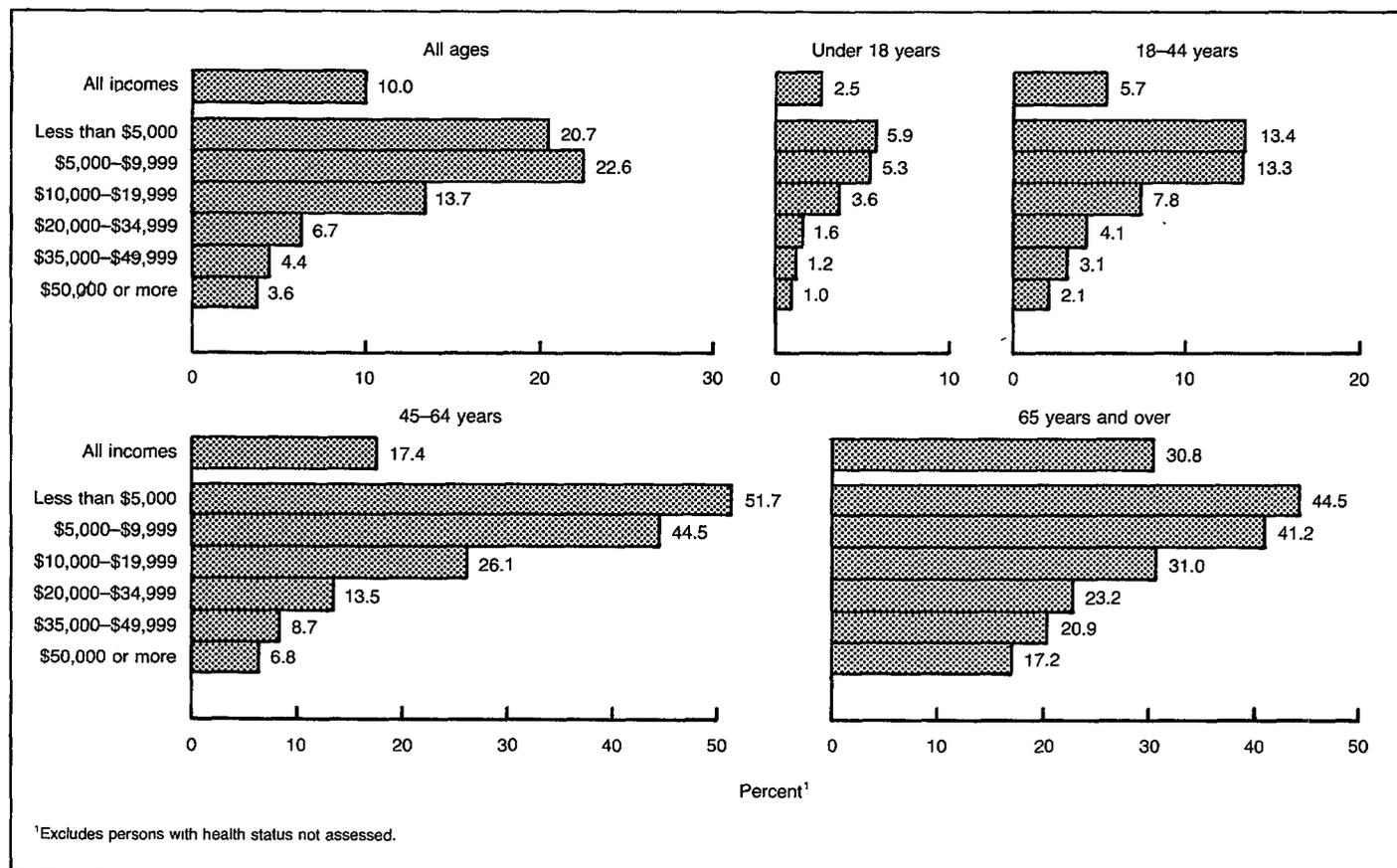


Figure 4. Percent of persons assessed in fair or poor health by age and family income: United States, 1987

# Education

The strong association between years of education and the percent of persons 18 years of age and over assessed in fair or poor health is shown in figure 5. Table 4 shows that within each age group the percent of persons in fair or poor health declines sharply as the number of years of education increases. The estimates of the percent of persons in fair or poor health range from a low of 1.7 percent for persons 18–44 years of age who have 16 years or more of education to a high of 43.3 percent for persons 65 years of age and over who have less than 8 years of education.

Because there is a strong association between years of education and family income, it might be that all or a large part of the associations to assessed health status described in this and in the previous section are largely attributable to either years of education or family income alone. Table 5, where the percent of persons assessed in fair or poor health is shown by years of education cross-classified by family income, shows that this is not the case. As may be noted, in each of the several family income groups in general there is a high association between increasing years of education and a decreasing percent of persons assessed in fair or poor health. For instance, within the family income group of \$20,000–\$34,999 about 24.0 percent of persons with less than 8 years of education were assessed in fair or poor health while the corresponding estimate for persons with 16 years or more of education was only 4.4 percent.

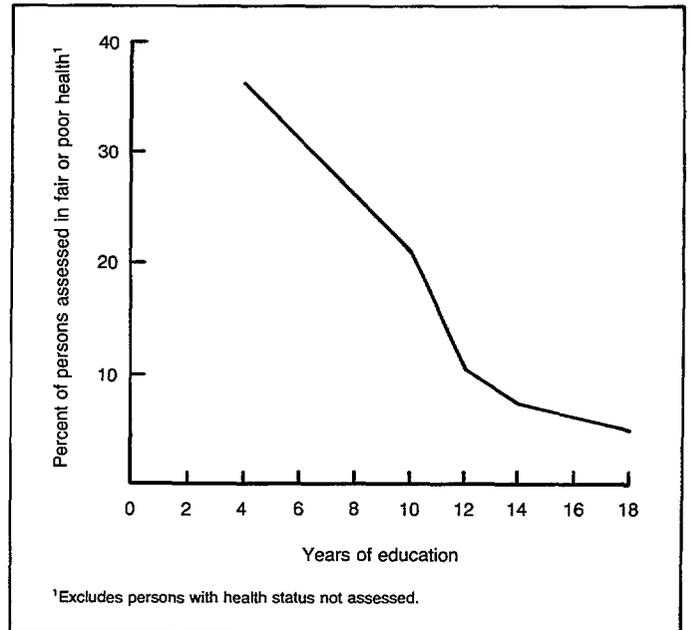


Figure 5. Percent of persons 18 years of age and over assessed in fair or poor health by years of education completed: United States, 1987

# Poverty status

NHIS classifies all persons in the survey for whom family income is known, as living in poverty or not living in poverty. Poverty is defined by the criteria established by the Office of Management and Budget of the Federal Government. However, because income data are collected by NHIS in terms of income categories rather than as precise dollar amounts, and because those with unknown family income cannot be classified, the estimates of the number of persons by poverty status derived from NHIS will not correspond exactly with official U.S. Government estimates.

Figure 6 indicates little difference in the percents of persons assessed in fair or poor health for persons of all ages in families earning less than \$20,000 per year between those classified as living in poverty (17.9 percent) and those not living in poverty (16.6 percent). However, this is because proportionately so many of the persons classified as living in poverty are children and youth—who, in general, have the lowest proportion of persons assessed in fair or poor

health. For instance, table 6 shows that among persons in families with an annual income less than \$20,000 about 10 of the 28 million persons (38.1 percent) living in poverty were under 18 years of age, whereas the corresponding estimate for those in the same income group not living in poverty was only about 20.1 percent. Thus, within specific age groups figure 6 shows that among persons in families with an annual income of less than \$20,000, persons living in poverty had consistently much higher percents of persons assessed in fair or poor health than did persons classified as not living in poverty. As stated before, the percents for each of these groups were much higher than for persons in families with an annual income of \$20,000 or more.

In relation to the detailed estimates shown in table 6, the subgroup of the population with the highest percent of persons assessed in fair or poor health (61.6 percent) was black persons 45–64 years of age with less than 12 years of education who were living in poverty.

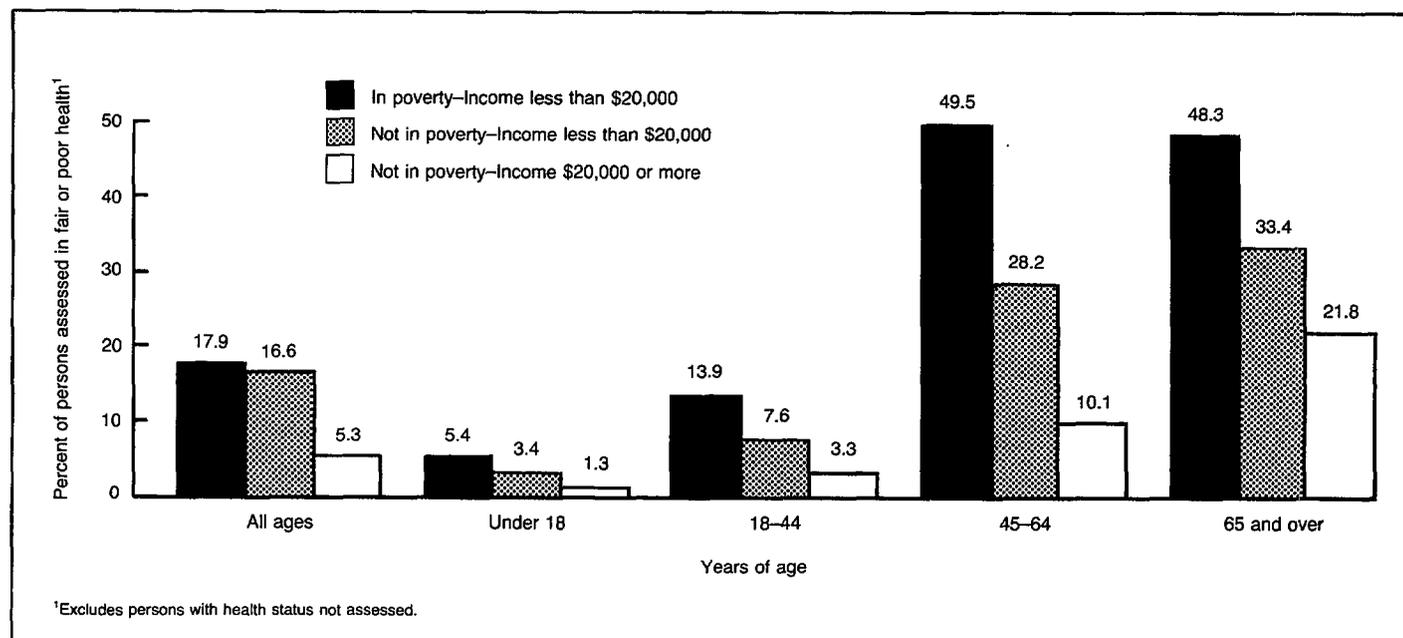


Figure 6. Percent of persons assessed in fair or poor health by age, family income, and poverty status: United States, 1987

# Hispanic origin

Because persons of Hispanic origin living in the United States are on the average younger than the non-Hispanic population, estimates of the assessed health status of the two groups should be compared in terms of specific age groups. Figure 7 shows that when viewed in this context the percent of persons assessed in fair or poor health was higher for Hispanics than for non-Hispanics in each of the four age groups.

Table 7 shows that the highest reliable estimate of the percent of Hispanics assessed in fair or poor health (45.6 percent) was for persons 65 years of age and over with less than 12 years of education living in families with an annual income of less than \$20,000. Table 7 also shows the estimates for Hispanics in terms of their national origin. However, because of the small sample size for these subgroups, many of the estimates are unreliable and these results should be used with great caution. The estimates by race for the subgroups are so unreliable (especially for black Hispanics) that they are not shown in the table.

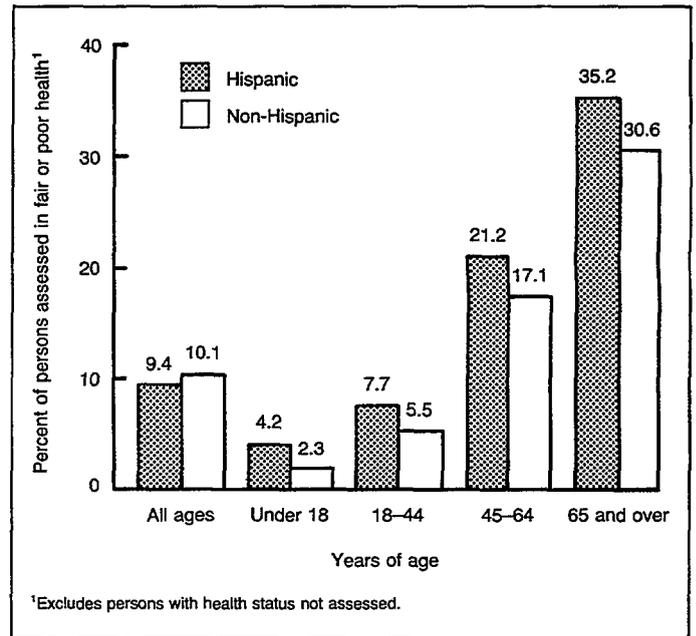


Figure 7. Percent of persons assessed in fair or poor health by age and Hispanic origin: United States, 1987

# Major activity

Respondents 18 years of age and over in NHIS are asked to state their major activity during the year preceding the interview. The choices given are “working,” “keeping house,” “going to school,” and “something else.” Because “something else” often includes persons who are disabled and older persons who are retired, it is not surprising that, as is shown in figure 8, persons in this group have the highest percent of persons assessed in fair or poor health. In general, persons classified as working or going to school have the lowest percents of persons assessed in fair or poor health. Persons keeping house generally occupy an intermediate position between these two extremes.

Table 8 shows that an exception to this general rule is for males who give as their major activity “keeping house.” The estimates of the percent of persons in fair or poor health for this group are in general almost as high as for persons classified as doing “something else.” Table 8 also shows that the highest estimate of the percent of persons in fair or poor health among persons classified as doing “something else” (72.5 percent) was for black persons 45–64 years of age with less than 12 years of education.

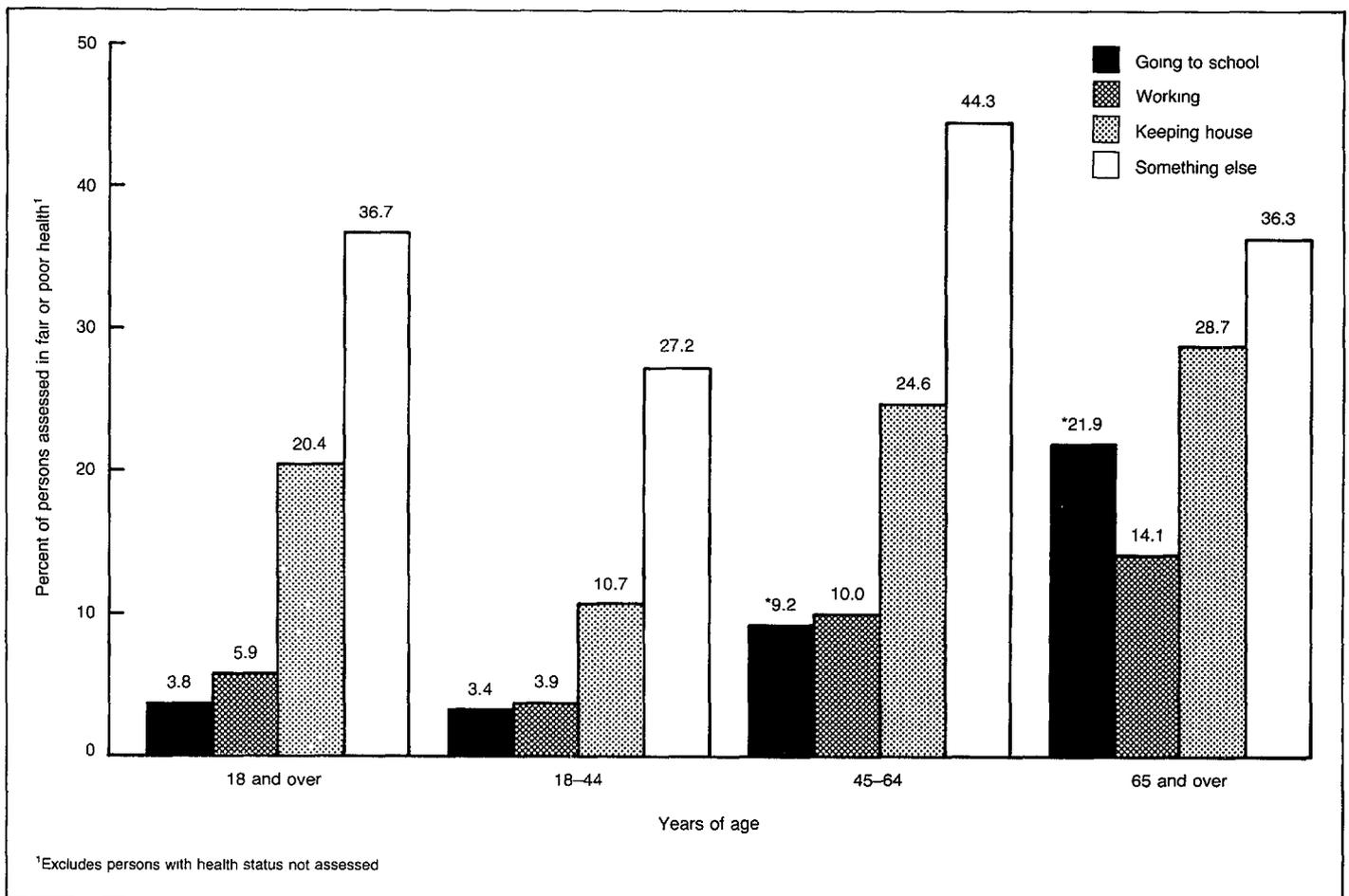


Figure 8. Percent of persons 18 years of age and over assessed in fair or poor health by age and major activity: United States, 1987

# Marital status

The percent of persons 18 years of age and over assessed in fair or poor health by marital status and age is shown in figure 9. For persons 65 years of age and over the differences by marital status are relatively small, with never married persons showing the lowest percent of persons assessed in fair or poor health (27.7 percent, compared with, for instance, 33.5 percent for separated or divorced persons). For persons 18–64 years of age, married persons and those never married had in general the lowest percent of assessed fair or poor

health, whereas widowed persons in this age range had the highest percent assessed in fair or poor health.

Table 9 shows that within each of the marital status categories increased assessments of fair or poor health were associated with decreasing years of education and lower levels of family income. The highest percents of assessed fair or poor health were for unmarried (that is, never married, widowed, separated, or divorced) black persons 45 years of age and over with less than 12 years of education.

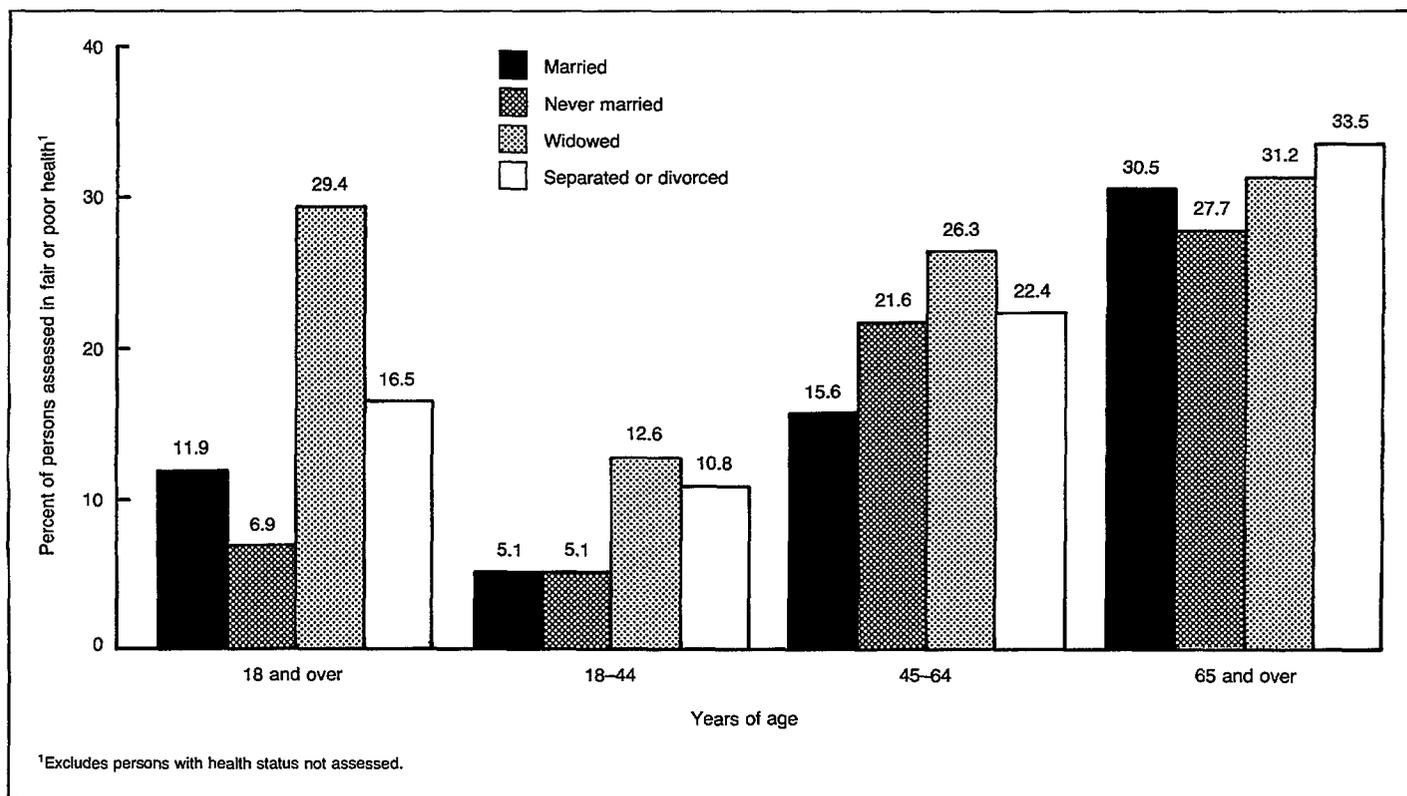


Figure 9. Percent of persons 18 years of age and over assessed in fair or poor health by age and marital status: United States, 1987

# Living arrangement

Four categories of living arrangement are distinguished in this report: living alone, living with nonrelatives, living with a spouse, and living with other relatives. Because each of these categories has such different age distributions the results should be viewed only in terms of specific age groups. Figure 10, showing the percent of persons assessed in fair or poor health, does not include estimates for persons under 18 years of age because almost all of these youth are classified as living with other relatives (that is, other than a spouse). Aside from a tendency for the estimates to be relatively high

in each of the remaining three age groups for persons living with other relatives, no consistent relationship holds for the other three types of living arrangement for the age groups shown for adults.

Table 10 shows that when considering age, sex, years of education, race, and family income, the highest estimate (51.7 percent) of persons assessed in fair or poor health was for black persons 45–64 years of age with less than 12 years of education living with relatives other than a spouse.

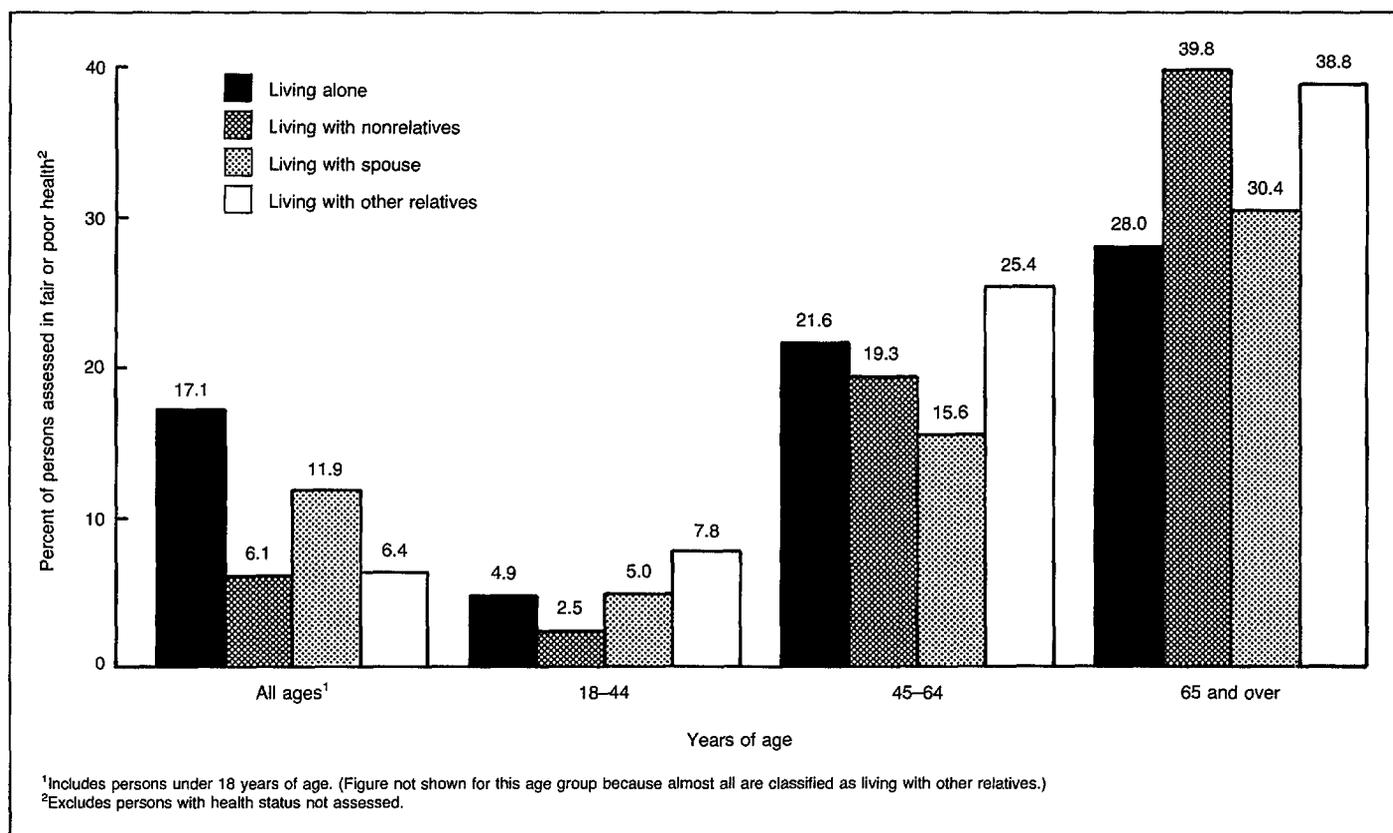


Figure 10. Percent of persons assessed in fair or poor health by age and living arrangement: United States, 1987

## Family size

Although family size and number of persons living in a dwelling unit ordinarily correspond, this is not always the case, because more than one family may reside in one dwelling unit. The characteristic under consideration here is the number of related individuals living in a single family, not the number of persons living in a single dwelling unit.

Figure 11 shows that there is little relationship between family size and the percent of persons assessed in fair or poor health for persons under 45 years of age. The major difference by family size was for persons 65 years of age and over, where proportionately more persons in four-person families were assessed in fair or poor health than were persons in smaller or larger families. For persons 45–64 years of age the relationship was reversed, as those in four-person families tended to have relatively fewer persons assessed in fair or poor health.

Table 11 shows these results by other characteristics. For the various subgroups defined by these characteristics, the highest estimates of the percent of persons assessed in fair or poor health was in general for persons 65 years of age and over who had less than 12 years of education.

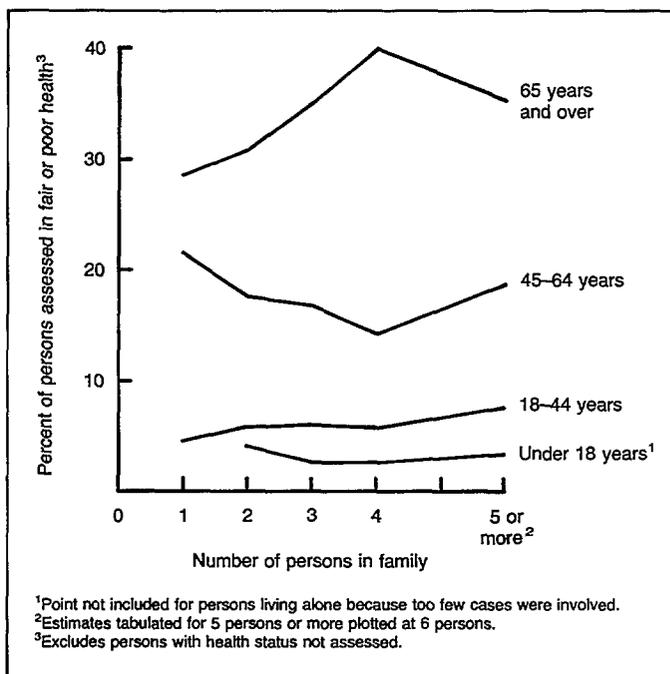


Figure 11. Percent of persons assessed in fair or poor health by age and family size: United States, 1987

# Labor force and employment status

An unambiguous picture emerges with regard to labor force and employment status for persons 18 years of age and over. As is indicated in figure 12 and table 12, regardless of whether all ages or specific age groups are considered, there is a consistent relationship between labor force, employment status, and health assessment. The percent of persons assessed in fair or poor health was relatively low for currently employed persons, relatively high for persons not in the labor force, and at an intermediate level for unemployed persons. The same pattern of relationships held in general for all of the subgroups specified in table 12.

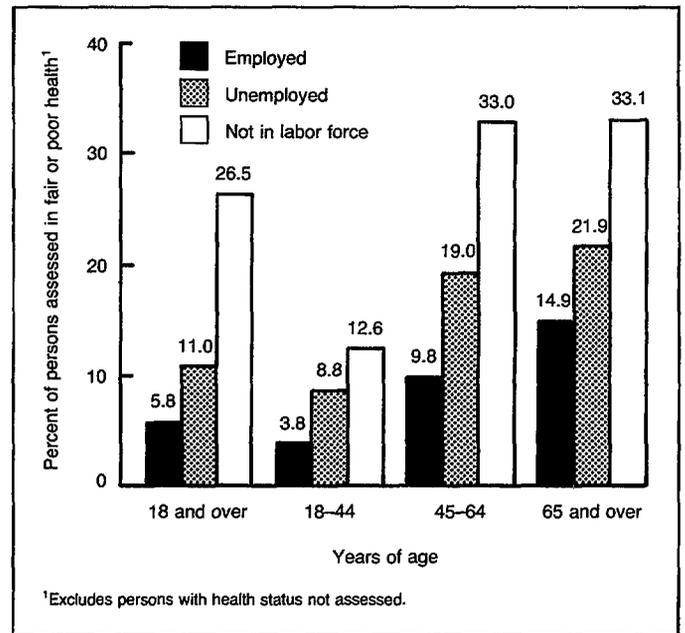


Figure 12. Percent of persons 18 years of age and over assessed in fair or poor health by age and employment status: United States, 1987

# Type of occupation

Because they are restricted to currently employed persons 18 years of age and over and because currently employed persons tend to be healthier than other employment-related groups, a relatively large number of the estimates of assessed health status reported in this and the following section (on industry) are unreliable because of a large sampling error.

Figure 13 (table 13 for detailed estimates) shows that

in general those working in service and farming occupations had the highest percent of persons assessed in fair or poor health. For persons 18–64 years of age, service workers had the highest estimates, whereas for persons 65 years of age and over, the relatively largest percents of persons assessed in fair or poor health were for operators and those working in farming.

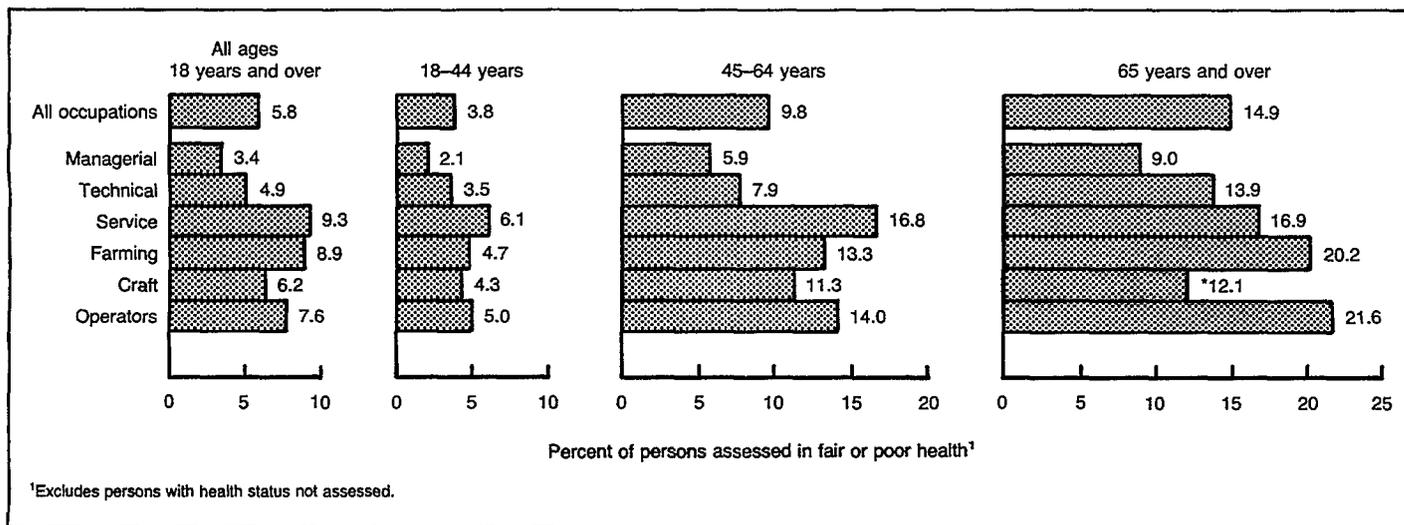


Figure 13. Percent of currently employed persons 18 years of age and over assessed in fair or poor health by age and type of occupation: United States, 1987

# Industry

Using the U.S. Bureau of the Census Classification of Industry, figure 14 shows the percent of currently employed persons 18 years of age and over assessed in fair or poor health, by age and industry. The estimates for persons 65 years of age and over are excluded because for many of the industries there were too few persons in this age group to produce reliable estimates. As may be noted, the highest percent of persons assessed in fair or poor health (10.2 percent) was for those engaged in personal services.

Unlike all of the other detailed tables included in this report, table 14, showing the estimates by industry, does not include estimates by education and race. Because inclusion of these characteristics would have resulted in a high number of unreliable estimates, they were excluded. The remaining number of unreliable estimates (especially for persons 65 years of age and over) is still relatively large, and the estimates shown in this table should therefore be used with great caution.

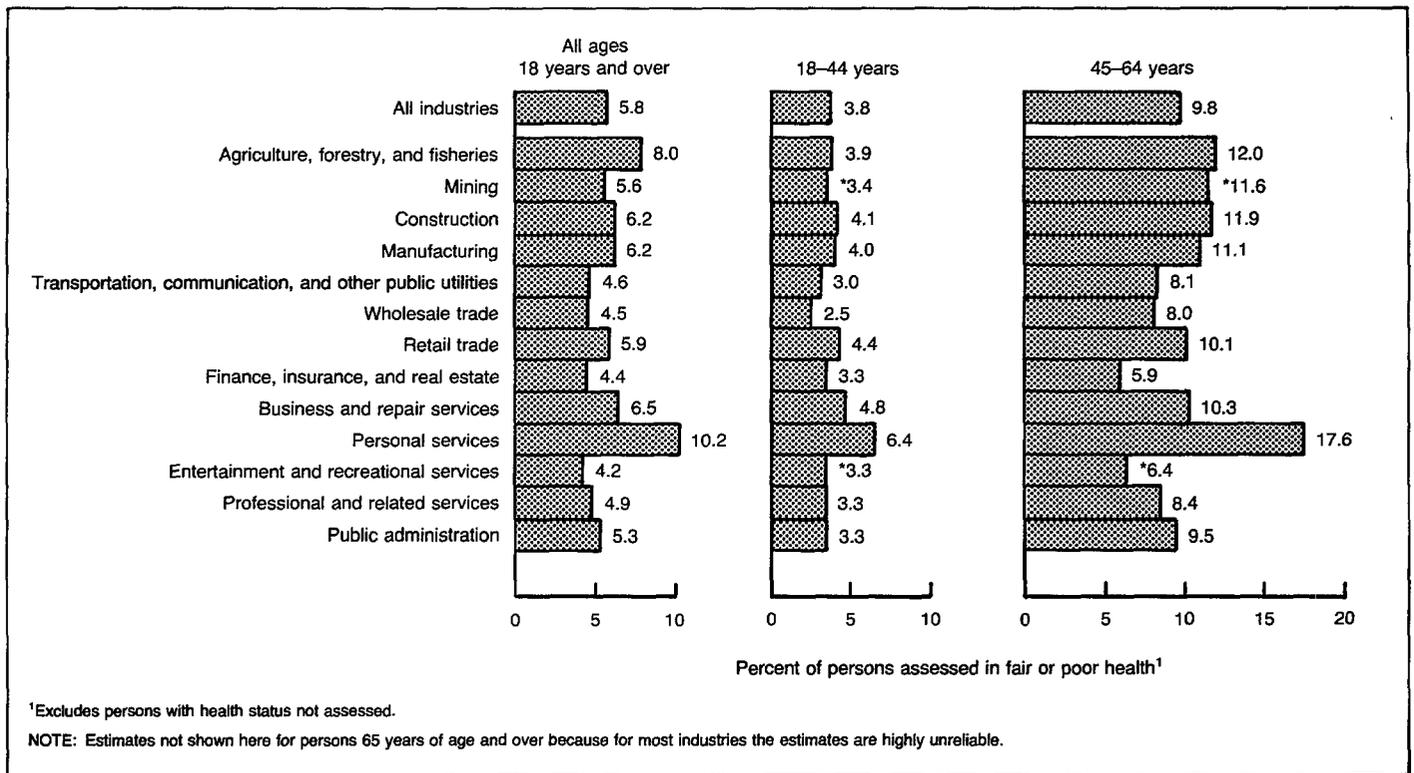


Figure 14. Percent of currently employed persons 18 years of age and over assessed in fair or poor health by age and industry: United States, 1987

# Geographic region

Proportionately more persons were assessed in fair or poor health in the South than in the other three regions of the country. Figure 15 shows that this relationship held for persons of all ages and for persons within each of the four age groups shown in the figure. In general, the percents for the other three regions of the country were not highly dissimilar.

Table 15 shows that in general the South had the highest percent of persons assessed in fair or poor health for all of the sociodemographic characteristics shown in the table. However, the relatively higher percent estimates for the South were less discernible for black persons and for persons with an annual family income of \$20,000 or more.

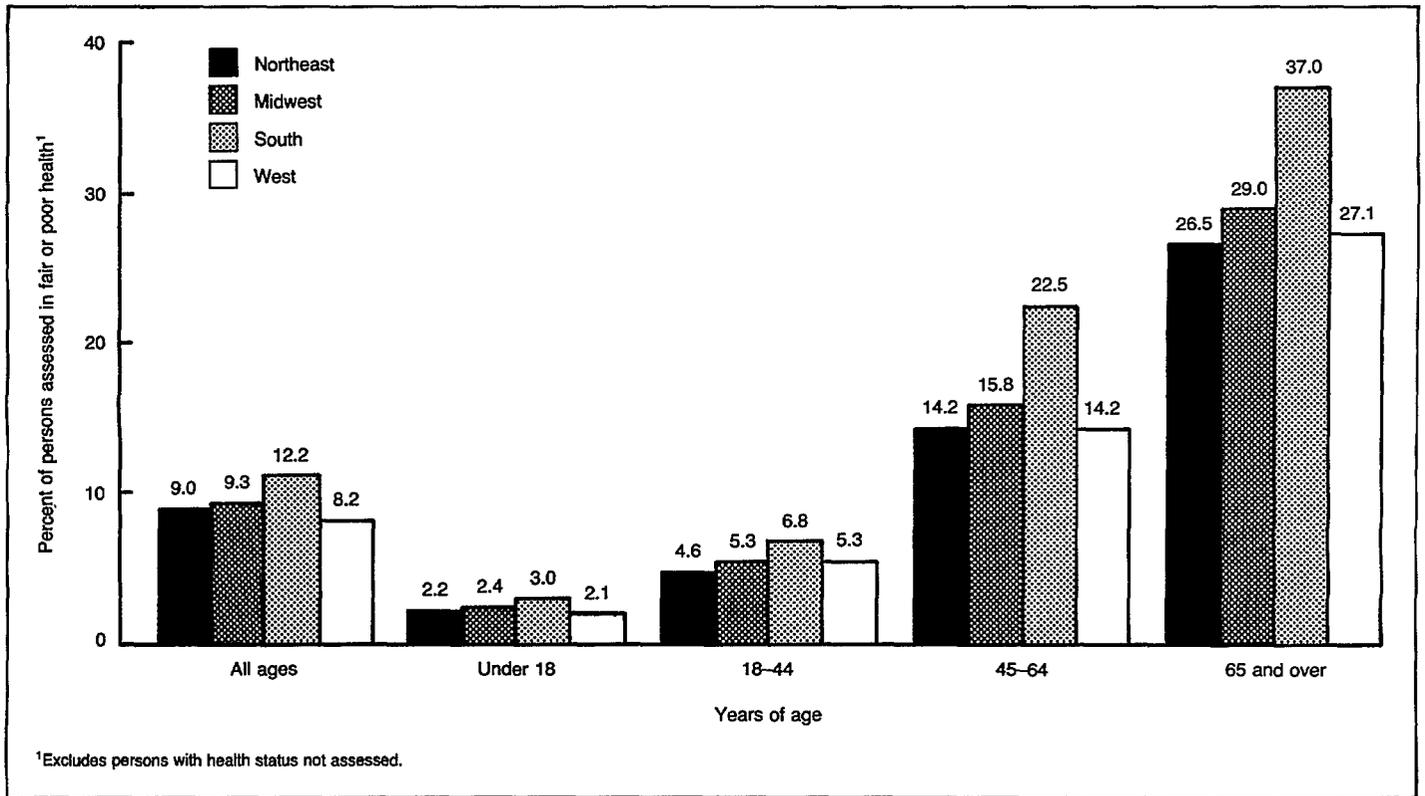


Figure 15. Percent of persons assessed in fair or poor health by age and geographic region: United States, 1987

# Place of residence

Those living outside of the central cities of MSA's reported the lowest percent of persons assessed in fair or poor health (figure 16). Most of this difference was associated with persons under 65 years of age. For those 65 years of age and over there was little difference between those living inside or outside of MSA's and, among those living in MSA's, between those living inside or outside of the central city of the MSA.

Table 16 also shows the estimates of persons assessed

in fair or poor health by farm and nonfarm residence for those living outside of MSA's. In general, for persons 18-64 years of age the percent of persons assessed in fair or poor health was lower for those living on farms than for those not living on farms. However, there were no significant differences between these two groups for the younger and older age groups.

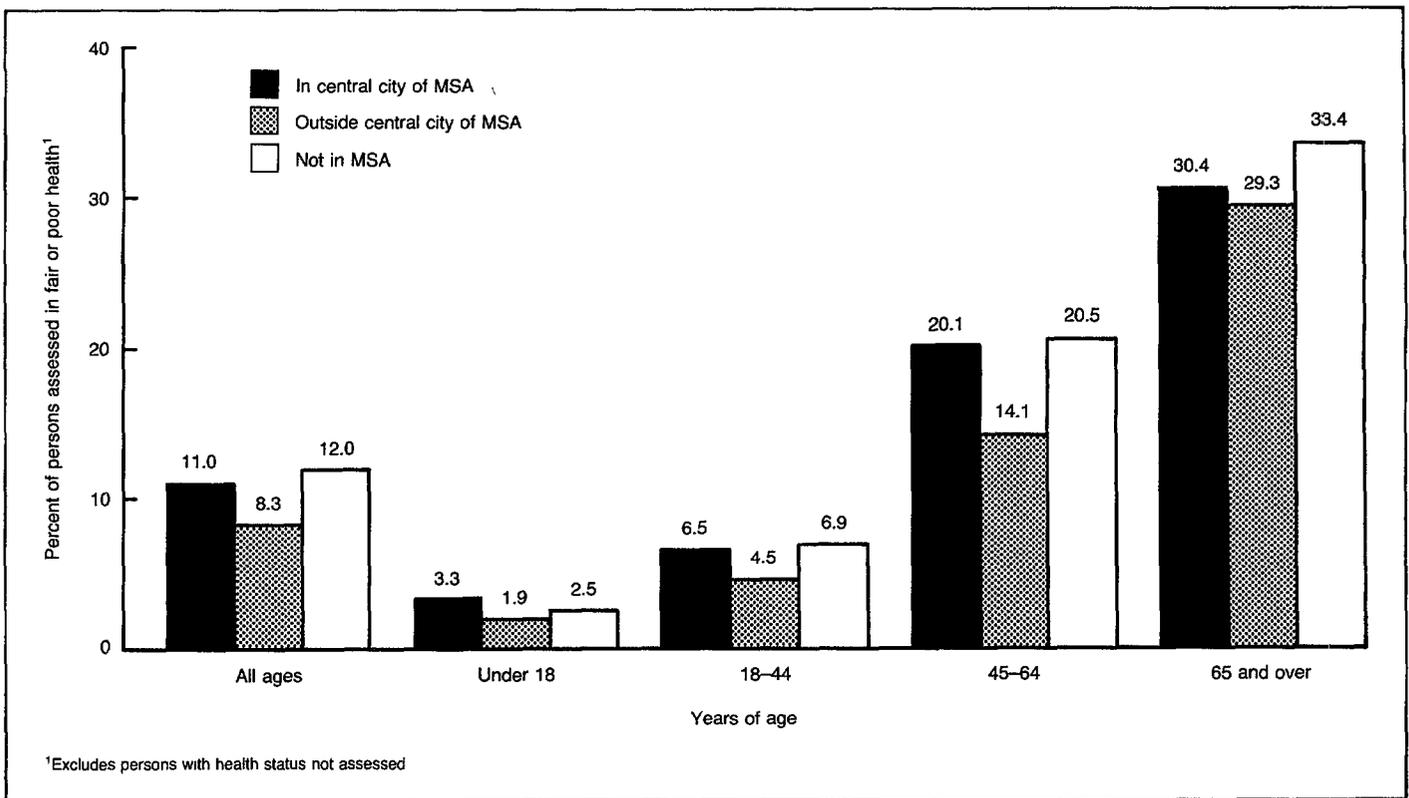


Figure 16. Percent of persons assessed in fair or poor health by age and place of residence: United States, 1987

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**Table 1. Number of persons by sex and age and percent distribution of persons by respondent-assessed health status, according to sex and age: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Sex and age	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
Both sexes		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
All ages . . . . .	238,550	100.0	90.0	10.0	39.0	27.7	22.7	7.2	2.7
Under 5 years . . . . .	18,176	100.0	97.4	2.6	53.4	27.1	15.9	2.2	0.4
5-9 years . . . . .	17,624	100.0	97.5	2.5	53.0	27.3	16.4	2.2	0.3
10-14 years . . . . .	16,452	100.0	98.0	2.0	53.8	26.4	16.8	1.7	0.3
15-19 years . . . . .	18,141	100.0	96.9	3.1	49.1	27.5	19.6	2.7	0.4
20-24 years . . . . .	19,017	100.0	95.5	4.5	42.3	31.4	21.3	3.9	0.6
25-29 years . . . . .	21,372	100.0	95.8	4.2	43.8	31.1	20.6	3.7	0.5
30-34 years . . . . .	20,890	100.0	94.4	5.6	42.7	31.1	20.2	4.6	0.9
35-39 years . . . . .	18,428	100.0	93.5	6.5	41.1	31.4	20.8	5.0	1.5
40-44 years . . . . .	15,322	100.0	90.8	9.2	38.7	28.9	22.9	7.0	2.2
45-49 years . . . . .	12,264	100.0	87.9	12.1	33.0	29.2	25.2	8.8	3.2
50-54 years . . . . .	10,869	100.0	84.3	15.7	28.6	27.1	28.3	10.6	5.0
55-59 years . . . . .	10,887	100.0	80.8	19.2	25.9	25.1	29.4	12.8	6.2
60-64 years . . . . .	10,954	100.0	76.9	23.1	20.6	23.8	32.1	14.6	8.5
65-69 years . . . . .	9,753	100.0	74.6	25.4	18.1	21.7	34.4	17.7	7.6
70-74 years . . . . .	7,559	100.0	68.2	31.8	14.7	21.1	31.8	22.2	9.3
75-79 years . . . . .	5,459	100.0	67.3	32.7	13.3	20.6	33.0	22.1	10.5
80-84 years . . . . .	3,215	100.0	63.0	37.0	14.2	18.4	30.0	25.9	10.9
85-89 years . . . . .	1,549	100.0	61.3	38.7	12.5	19.3	28.9	23.2	15.1
90-94 years . . . . .	510	100.0	67.5	32.5	11.8	18.6	35.9	21.6	10.6
95 years and over . . . . .	108	100.0	66.7	*33.3	*10.2	*24.1	*33.3	*17.6	*15.7
Male									
All ages . . . . .	115,451	100.0	91.0	9.0	42.2	27.3	21.0	6.3	2.7
Under 5 years . . . . .	9,301	100.0	97.1	2.9	53.2	26.6	16.3	2.6	*0.3
5-9 years . . . . .	9,017	100.0	97.3	2.6	52.0	27.8	16.7	2.3	*0.3
10-14 years . . . . .	8,425	100.0	98.2	1.8	55.2	25.5	16.4	1.4	*0.3
15-19 years . . . . .	9,144	100.0	97.3	2.7	52.6	25.8	18.3	2.3	*0.4
20-24 years . . . . .	9,216	100.0	96.3	3.7	46.6	29.9	19.3	3.2	0.5
25-29 years . . . . .	10,483	100.0	96.8	3.2	48.4	29.9	18.3	2.7	0.5
30-34 years . . . . .	10,289	100.0	95.5	4.6	47.4	30.2	17.6	3.8	0.7
35-39 years . . . . .	8,888	100.0	94.5	5.5	44.3	30.4	19.4	4.2	1.3
40-44 years . . . . .	7,573	100.0	91.9	8.1	41.5	29.0	21.0	5.9	2.2
45-49 years . . . . .	5,956	100.0	89.0	11.0	36.1	29.6	22.9	7.7	3.2
50-54 years . . . . .	5,244	100.0	85.4	14.6	31.3	28.1	25.6	9.7	4.9
55-59 years . . . . .	5,248	100.0	82.4	17.6	28.6	26.4	27.0	11.1	6.4
60-64 years . . . . .	5,016	100.0	75.7	24.3	22.0	24.1	29.2	14.0	10.2
65-69 years . . . . .	4,413	100.0	74.2	25.8	18.6	21.6	33.8	17.6	8.2
70-74 years . . . . .	3,250	100.0	66.9	33.1	15.2	20.7	30.3	21.6	11.2
75-79 years . . . . .	2,099	100.0	66.3	33.7	12.8	19.7	33.6	22.6	10.9
80-84 years . . . . .	1,163	100.0	60.5	39.5	15.1	14.0	30.9	26.4	12.9
85-89 years . . . . .	544	100.0	62.0	38.0	13.4	18.6	29.8	23.2	14.7
90-94 years . . . . .	160	100.0	65.6	34.4	*15.0	*18.1	30.0	*22.5	*10.0
95 years and over . . . . .	*20	*100.0	*70.0	*30.0	*10.0	*30.0	*35.0	*10.0	*20.0
Female									
All ages . . . . .	123,099	100.0	89.1	10.9	36.1	28.1	24.3	8.1	2.8
Under 5 years . . . . .	8,875	100.0	97.7	2.3	53.7	27.6	15.4	1.9	*0.4
5-9 years . . . . .	8,607	100.0	97.7	2.3	54.0	26.7	16.1	2.1	*0.2
10-14 years . . . . .	8,027	100.0	97.7	2.3	52.3	27.2	17.3	2.0	*0.2
15-19 years . . . . .	8,996	100.0	96.5	3.5	45.5	29.3	21.0	3.2	*0.4
20-24 years . . . . .	9,801	100.0	94.7	5.3	38.2	32.9	23.2	4.6	0.6
25-29 years . . . . .	10,888	100.0	94.7	5.3	39.4	32.2	22.9	4.7	0.6
30-34 years . . . . .	10,601	100.0	93.4	6.6	38.1	32.0	22.8	5.4	1.1
35-39 years . . . . .	9,540	100.0	92.6	7.4	38.1	32.3	22.1	5.8	1.6
40-44 years . . . . .	7,749	100.0	89.7	10.3	35.9	28.9	24.7	8.0	2.3
45-49 years . . . . .	6,308	100.0	86.9	13.1	30.1	28.7	27.5	9.8	3.2
50-54 years . . . . .	5,625	100.0	83.4	16.6	26.1	26.2	30.8	11.5	5.0
55-59 years . . . . .	5,639	100.0	79.4	20.6	23.5	23.9	31.7	14.5	6.1

See footnotes at end of table.

**Table 1. Number of persons by sex and age and percent distribution of persons by respondent-assessed health status, according to sex and age: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Sex and age	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
Female—Con.		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
60–64 years	5,938	100.0	77.8	22.2	19.3	23.5	34.6	15.1	7.0
65–69 years	5,340	100.0	74.9	25.1	17.7	21.9	34.9	17.9	7.1
70–74 years	4,308	100.0	69.2	30.8	14.3	21.5	33.0	22.7	7.9
75–79 years	3,360	100.0	67.8	32.2	13.6	21.3	32.7	21.8	10.2
80–84 years	2,052	100.0	64.4	35.6	13.6	20.9	29.4	25.6	9.7
85–89 years	1,066	100.0	61.0	39.1	12.0	19.7	28.4	23.3	15.3
90–94 years	350	100.0	68.1	31.9	*10.3	18.6	38.6	20.9	*10.9
95 years and over	88	100.0	65.9	*34.1	*10.2	*22.7	*33.0	*19.3	*15.9

<sup>1</sup>Excludes persons with health status not assessed.

<sup>2</sup>Includes persons with health status not assessed.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 2. Number of persons by age, sex, and race and percent distribution of persons by respondent-assessed health status, according to age, sex, and race: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age, sex, and race	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
All ages		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
Both sexes:									
All races	238,550	100.0	90.0	10.0	39.0	27.7	22.7	7.2	2.7
White	201,858	100.0	90.7	9.3	40.4	28.2	21.7	6.7	2.5
Black	28,947	100.0	84.8	15.2	30.2	24.7	29.2	10.9	4.1
Other	7,745	100.0	91.8	8.2	38.0	27.4	25.6	6.2	1.9
Male:									
All races	115,451	100.0	91.0	9.0	42.2	27.3	21.0	6.3	2.7
White	98,201	100.0	91.5	8.5	43.3	27.7	20.0	5.9	2.5
Black	13,484	100.0	86.8	13.2	34.0	24.9	27.1	9.1	4.0
Other	3,766	100.0	93.3	6.7	41.7	27.3	23.7	4.7	2.0
Female:									
All races	123,099	100.0	89.1	10.9	36.1	28.1	24.3	8.1	2.8
White	103,657	100.0	89.9	10.1	37.6	28.6	23.2	7.5	2.6
Black	15,463	100.0	83.1	16.9	27.0	24.5	31.1	12.5	4.3
Other	3,979	100.0	90.4	9.6	34.5	27.5	27.4	7.5	1.9
Under 18 years									
Both sexes:									
All races	63,279	100.0	97.5	2.5	53.0	26.8	16.8	2.1	0.3
White	51,371	100.0	97.9	2.1	55.6	27.0	14.5	1.8	0.3
Black	9,717	100.0	95.7	4.3	40.8	25.0	28.5	3.8	0.5
Other	2,191	100.0	97.2	2.8	47.7	28.3	19.6	2.3	*0.5
Male:									
All races	32,373	100.0	97.5	2.5	53.5	26.4	16.7	2.1	0.3
White	26,302	100.0	97.8	2.2	56.0	26.5	14.6	1.8	0.3
Black	4,921	100.0	95.6	4.4	41.5	25.2	27.5	3.9	*0.4
Other	1,150	100.0	98.0	*2.0	47.7	30.9	18.7	*1.7	*0.3
Female:									
All races	30,906	100.0	97.5	2.5	52.6	27.1	16.9	2.1	0.3
White	25,069	100.0	97.9	2.1	55.1	27.6	14.3	1.8	0.3
Black	4,795	100.0	95.8	4.2	40.1	24.7	29.6	3.7	*0.5
Other	1,041	100.0	96.4	*3.6	47.8	25.6	20.7	*2.9	*0.7

See footnotes at end of table.

**Table 2. Number of persons by age, sex, and race and percent distribution of persons by respondent-assessed health status, according to age, sex, and race: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age, sex, and race	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
<b>18–44 years</b>		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
<b>Both sexes:</b>									
All races	102,143	100.0	94.3	5.7	42.1	30.8	21.0	4.6	1.0
White	85,945	100.0	95.2	4.8	43.9	31.3	19.7	3.9	0.9
Black	12,321	100.0	88.8	11.2	31.3	27.6	29.5	9.0	2.1
Other	3,877	100.0	93.3	6.7	38.3	29.8	24.7	5.6	1.1
<b>Male:</b>									
All races	49,963	100.0	95.3	4.7	46.2	29.7	19.0	3.7	1.0
White	42,564	100.0	95.9	4.1	47.6	30.0	17.9	3.3	0.8
Black	5,579	100.0	91.0	9.0	36.8	27.3	26.3	6.8	2.2
Other	1,821	100.0	94.8	5.2	43.5	28.2	22.6	4.1	*1.1
<b>Female:</b>									
All races	52,180	100.0	93.4	6.6	38.2	31.9	23.0	5.4	1.1
White	43,382	100.0	94.5	5.5	40.2	32.5	21.4	4.5	1.0
Black	6,742	100.0	87.1	12.9	26.7	27.8	32.2	10.9	2.0
Other	2,057	100.0	92.0	8.1	33.6	31.3	26.6	7.0	*1.1
<b>45–64 years</b>		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
<b>Both sexes:</b>									
All races	44,975	100.0	82.6	17.4	27.2	26.4	28.7	11.6	5.6
White	39,134	100.0	84.3	15.6	28.5	27.2	28.2	10.5	5.0
Black	4,558	100.0	67.1	32.9	15.9	20.5	30.3	21.7	11.1
Other	1,283	100.0	86.0	14.1	26.7	22.3	36.0	8.9	5.1
<b>Male:</b>									
All races	21,465	100.0	83.4	16.6	29.8	27.1	26.0	10.5	6.0
White	18,816	100.0	84.8	15.2	30.9	27.9	25.6	9.7	5.4
Black	2,036	100.0	69.2	30.8	19.2	21.9	27.8	18.9	11.7
Other	613	100.0	87.5	12.5	31.8	21.7	33.4	7.7	*4.7
<b>Female:</b>									
All races	23,509	100.0	81.9	18.1	24.8	25.6	31.1	12.7	5.3
White	20,318	100.0	83.9	16.1	26.4	26.5	30.7	11.4	4.7
Black	2,521	100.0	65.4	34.6	13.2	19.5	32.4	23.9	10.6
Other	670	100.0	84.5	15.5	21.9	22.8	38.4	10.0	*5.4
<b>65 years and over</b>		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
<b>Both sexes:</b>									
All races	28,153	100.0	69.2	30.8	15.3	20.8	32.6	21.1	9.5
White	25,408	100.0	70.7	29.3	15.9	21.3	33.1	20.3	8.8
Black	2,352	100.0	53.6	46.4	8.8	16.5	28.0	29.5	16.6
Other	393	100.0	66.4	33.6	17.8	15.0	33.1	24.7	*8.4
<b>Male:</b>									
All races	11,649	100.0	68.7	31.3	15.9	20.1	32.2	20.8	10.3
White	10,520	100.0	70.0	30.0	16.4	20.5	32.6	20.1	9.8
Black	947	100.0	54.7	45.3	10.5	15.9	27.9	28.7	16.3
Other	182	100.0	67.8	32.2	*19.2	*14.8	33.0	*20.3	*11.5
<b>Female:</b>									
All races	16,504	100.0	69.6	30.4	14.9	21.3	32.9	21.3	8.9
White	14,888	100.0	71.2	28.8	15.6	21.8	33.4	20.4	8.2
Black	1,405	100.0	52.9	47.1	7.7	16.8	28.1	30.0	16.9
Other	211	100.0	65.6	34.4	*17.1	*15.2	33.2	28.4	*5.7

<sup>1</sup>Excludes persons with health status not assessed.

<sup>2</sup>Includes persons with health status not assessed.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 3. Number of persons by age and family income and percent distribution of persons by respondent-assessed health status, according to age and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and family income	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
All ages		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
All incomes <sup>3</sup>	238,550	100.0	90.0	10.0	39.0	27.7	22.7	7.2	2.7
Less than \$5,000	11,996	100.0	79.3	20.7	26.4	24.7	27.7	13.8	6.7
\$5,000–\$9,999	19,233	100.0	77.4	22.6	24.0	23.1	29.9	14.8	7.7
\$10,000–\$19,999	44,488	100.0	86.3	13.7	31.7	27.0	27.2	10.0	3.6
\$20,000–\$34,999	61,689	100.0	93.3	6.7	41.1	29.5	22.3	5.2	1.4
\$35,000–\$49,999	37,522	100.0	95.6	4.4	48.1	29.4	17.7	3.5	0.9
\$50,000 or more	31,647	100.0	96.4	3.6	54.2	27.6	14.0	2.8	0.8
Under 18 years									
All incomes <sup>3</sup>	63,279	100.0	97.5	2.5	53.0	26.8	16.8	2.1	0.3
Less than \$5,000	3,311	100.0	94.1	5.9	37.3	24.6	31.2	5.3	*0.5
\$5,000–\$9,999	5,208	100.0	94.7	5.3	37.7	26.3	29.8	4.7	*0.5
\$10,000–\$19,999	11,680	100.0	96.4	3.6	45.9	28.8	21.0	3.1	0.5
\$20,000–\$34,999	17,302	100.0	98.4	1.6	55.2	28.1	14.5	1.3	0.2
\$35,000–\$49,999	10,575	100.0	98.8	1.2	62.2	25.4	10.4	0.8	*0.3
\$50,000 or more	8,118	100.0	99.0	1.0	69.0	21.8	7.1	0.7	*0.2
18–44 years									
All incomes <sup>3</sup>	102,143	100.0	94.3	5.7	42.1	30.8	21.0	4.6	1.0
Less than \$5,000	5,398	100.0	86.6	13.4	29.9	30.7	25.8	10.1	3.2
\$5,000–\$9,999	6,430	100.0	86.7	13.3	27.4	29.0	30.1	10.1	3.2
\$10,000–\$19,999	17,865	100.0	92.2	7.8	35.1	30.7	26.1	6.3	1.5
\$20,000–\$34,999	28,194	100.0	95.9	4.1	43.3	31.9	20.4	3.5	0.6
\$35,000–\$49,999	17,708	100.0	96.9	3.1	48.2	31.9	16.6	2.7	0.4
\$50,000 or more	14,397	100.0	97.9	2.1	55.2	29.1	13.2	1.8	*0.2
45–64 years									
All incomes <sup>3</sup>	44,975	100.0	82.6	17.4	27.2	26.4	28.7	11.6	5.6
Less than \$5,000	1,413	100.0	48.2	51.7	10.5	11.7	25.7	27.3	24.1
\$5,000–\$9,999	2,683	100.0	55.5	44.5	12.2	15.8	27.4	24.2	20.2
\$10,000–\$19,999	7,158	100.0	73.9	26.1	18.7	22.2	32.6	17.3	8.7
\$20,000–\$34,999	10,966	100.0	86.5	13.5	24.9	27.5	33.8	10.2	3.2
\$35,000–\$49,999	7,603	100.0	91.3	8.7	34.4	30.1	26.4	6.7	2.0
\$50,000 or more	7,782	100.0	93.2	6.8	41.1	31.3	20.6	5.1	1.7
65 years and over									
All incomes <sup>3</sup>	28,153	100.0	69.2	30.8	15.3	20.8	32.6	21.1	9.5
Less than \$5,000	1,875	100.0	55.5	44.5	8.9	17.6	28.7	29.3	14.9
\$5,000–\$9,999	4,912	100.0	58.8	41.2	11.5	16.1	30.9	26.5	14.5
\$10,000–\$19,999	7,786	100.0	69.0	31.0	14.4	20.2	34.1	22.2	8.7
\$20,000–\$34,999	5,226	100.0	76.8	23.2	16.6	24.8	34.8	17.0	6.1
\$35,000–\$49,999	1,636	100.0	79.1	20.9	19.2	24.0	35.6	15.8	5.1
\$50,000 or more	1,350	100.0	82.8	17.2	30.7	26.1	25.9	11.8	5.3

<sup>1</sup>Excludes persons with health status not assessed

<sup>2</sup>Includes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown family income.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 4. Number of persons 18 years of age and over by age and years of education completed and percent distribution of persons 18 years of age and over by respondent-assessed health status, according to age and years of education completed: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and years of education	All persons in thousands	Respondent-assessed health status								
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor	
18 years of age and over			Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
All levels of education <sup>3</sup>	175,271	100.0	87.3	12.7	34.0	28.1	24.9	9.1	3.6	
8 years or less	17,934	100.0	64.0	36.0	14.3	17.8	31.5	22.8	13.0	
9–11 years	22,129	100.0	79.3	20.7	22.9	24.1	32.0	14.9	5.7	
12 years	68,059	100.0	89.5	10.5	32.0	30.1	27.1	8.0	2.5	
13–15 years	33,900	100.0	93.0	7.0	41.5	30.7	20.6	5.3	1.6	
16 years or more	31,437	100.0	95.7	4.3	50.1	29.7	15.6	3.4	0.9	
18–44 years of age										
All levels of education <sup>3</sup>	102,143	100.0	94.3	5.7	42.1	30.8	21.0	4.6	1.0	
8 years or less	4,041	100.0	82.8	17.2	25.0	23.1	34.2	12.0	5.1	
9–11 years	11,271	100.0	88.1	11.9	29.7	27.2	30.8	9.7	2.2	
12 years	41,271	100.0	94.3	5.7	37.8	32.5	23.6	4.8	0.9	
13–15 years	24,076	100.0	96.1	3.9	46.5	31.9	17.3	3.3	0.7	
16 years or more	20,659	100.0	98.3	1.7	56.3	29.5	12.3	1.4	0.3	
45–64 years of age										
All levels of education <sup>3</sup>	44,975	100.0	82.6	17.4	27.2	26.4	28.7	11.6	5.6	
8 years or less	5,638	100.0	61.3	38.7	13.1	16.7	30.9	22.9	15.4	
9–11 years	6,374	100.0	72.7	27.3	18.3	21.5	32.7	18.1	9.1	
12 years	18,023	100.0	85.8	14.2	25.9	28.0	31.5	10.1	4.0	
13–15 years	6,690	100.0	88.9	11.1	34.0	28.2	26.4	7.7	3.4	
16 years or more	7,768	100.0	93.8	6.2	42.2	32.3	19.0	4.9	1.3	
65 years of age and over										
All levels of education <sup>3</sup>	28,153	100.0	69.2	30.8	15.3	20.8	32.6	21.1	9.5	
8 years or less	8,255	100.0	56.7	43.3	9.8	16.0	30.5	28.0	15.1	
9–11 years	4,484	100.0	66.7	33.3	12.4	20.0	33.9	23.4	9.7	
12 years	8,765	100.0	74.8	25.2	16.9	22.9	34.7	18.2	6.8	
13–15 years	3,134	100.0	78.9	21.1	18.4	26.3	34.0	15.6	5.4	
16 years or more	3,010	100.0	83.0	17.0	28.0	24.9	29.6	12.6	4.3	

<sup>1</sup>Excludes persons with health status not assessed.

<sup>2</sup>Includes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown years of education.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 5. Number of persons 18 years of age and over by family income and years of education completed and percent distribution of persons 18 years of age and over by respondent-assessed health status, according to family income and years of education completed: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Family income and years of education	All persons in thousands	Respondent-assessed health status							
		All health statuses	Excellent to good	Fair or poor	Excellent	Very good	Good	Fair	Poor
All incomes		Percent distribution <sup>1</sup>			Percent distribution <sup>2</sup>				
All levels of education <sup>3</sup>	175,271	100.0	87.3	12.7	34.0	28.1	24.9	9.1	3.6
8 years or less	17,934	100.0	64.0	36.0	14.3	17.8	31.5	22.8	13.0
9-11 years	22,129	100.0	79.3	20.7	22.9	24.1	32.0	14.9	5.7
12 years	68,059	100.0	89.5	10.5	32.0	30.1	27.1	8.0	2.5
13-15 years	33,900	100.0	93.0	7.0	41.5	30.7	20.6	5.3	1.6
16 years or more	31,437	100.0	95.7	4.3	50.1	29.7	15.6	3.4	0.9
Less than \$5,000									
All levels of education <sup>3</sup>	8,685	100.0	73.7	26.3	22.2	24.8	26.4	17.1	9.1
8 years or less	2,147	100.0	52.3	47.7	8.0	14.5	29.5	28.9	18.5
9-11 years	1,698	100.0	65.9	34.1	14.5	17.6	33.6	22.9	11.1
12 years	2,657	100.0	82.5	17.5	25.2	30.8	26.3	12.7	4.7
13-15 years	1,745	100.0	90.6	9.4	39.1	33.5	17.8	6.2	3.2
16 years or more	384	100.0	88.8	11.2	38.5	32.0	18.2	*6.3	*5.2
\$5,000-\$9,999									
All levels of education <sup>3</sup>	14,026	100.0	71.0	29.0	18.9	22.0	29.9	18.5	10.4
8 years or less	3,767	100.0	54.0	46.0	9.3	14.9	29.4	27.5	18.3
9-11 years	3,114	100.0	71.0	29.0	17.6	20.4	32.7	19.5	9.4
12 years	4,551	100.0	77.4	22.6	20.1	25.2	32.0	15.1	7.5
13-15 years	1,774	100.0	83.9	16.0	31.0	29.4	23.4	11.0	5.1
16 years or more	736	100.0	89.2	10.8	37.1	28.0	23.9	6.3	*4.5
\$10,000-\$19,999									
All levels of education <sup>3</sup>	32,808	100.0	82.7	17.3	26.6	26.4	29.4	12.5	4.8
8 years or less	4,946	100.0	67.0	33.0	15.0	18.7	32.9	21.4	11.4
9-11 years	5,933	100.0	77.4	22.6	20.9	22.2	34.0	16.5	6.0
12 years	13,945	100.0	86.2	13.8	27.6	28.8	29.5	10.5	3.3
13-15 years	5,115	100.0	89.7	10.3	33.7	29.7	26.0	7.8	2.4
16 years or more	2,702	100.0	92.4	7.6	42.3	30.9	18.9	6.3	*1.3
\$20,000-\$34,999									
All levels of education <sup>3</sup>	44,387	100.0	91.3	8.7	35.6	30.0	25.4	6.8	1.9
8 years or less	2,662	100.0	76.0	24.0	19.0	21.5	34.9	17.4	6.4
9-11 years	5,274	100.0	86.0	14.0	26.9	28.3	30.5	11.4	2.7
12 years	19,967	100.0	92.3	7.7	33.4	31.2	27.4	6.1	1.6
13-15 years	9,175	100.0	93.7	6.3	40.8	31.0	21.6	5.0	1.3
16 years or more	7,156	100.0	95.7	4.4	47.8	30.1	17.3	3.3	1.1
\$35,000-\$49,999									
All levels of education <sup>3</sup>	26,948	100.0	94.3	5.7	42.5	30.9	20.5	4.6	1.1
8 years or less	784	100.0	79.3	20.7	22.8	22.6	33.0	15.1	5.5
9-11 years	1,850	100.0	87.1	12.8	31.6	26.6	28.6	9.7	3.1
12 years	10,557	100.0	93.9	6.1	38.1	32.3	23.2	5.2	0.9
13-15 years	6,572	100.0	96.1	3.9	45.7	31.9	18.4	3.1	0.7
16 years or more	7,107	100.0	96.8	3.2	51.4	30.3	15.0	2.5	0.6
\$50,000 or more									
All levels of education <sup>3</sup>	23,529	100.0	95.5	4.5	49.1	29.7	16.4	3.5	1.0
8 years or less	412	100.0	74.6	25.4	27.9	20.4	25.7	16.7	*8.5
9-11 years	889	100.0	89.6	10.3	33.9	28.1	27.2	6.5	*3.7
12 years	6,600	100.0	94.2	5.8	41.8	30.7	21.4	4.5	1.3
13-15 years	5,481	100.0	95.9	4.1	49.6	30.5	15.6	3.3	0.8
16 years or more	10,086	100.0	97.5	2.5	55.8	29.0	12.2	2.1	0.4

<sup>1</sup>Excludes persons with health status not assessed.

<sup>2</sup>Includes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown years of education.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 6. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, poverty status, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Poverty status, sex, race, and family income	Under 18		18-44 years of age				45-64 years of age				65 years of age and over		
	All ages	years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
	Percent <sup>2</sup>												
All poverty statuses <sup>3</sup> . . . . .	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
In poverty . . . . .	17.9	5.4	14.0	21.3	12.1	6.9	49.5	56.4	38.2	33.7	48.3	50.4	39.4
Not in poverty . . . . .	8.2	1.7	4.2	9.2	4.7	2.6	14.1	26.7	12.5	7.7	28.2	37.3	21.6
Sex													
Male:													
In poverty . . . . .	15.3	5.4	11.9	18.8	9.6	5.3	50.5	57.9	33.8	*36.1	52.1	53.3	45.8
Not in poverty . . . . .	7.6	1.7	3.6	8.1	4.0	2.1	13.7	25.0	12.9	7.3	29.0	39.2	21.7
Female:													
In poverty . . . . .	19.8	5.4	15.4	23.1	13.4	8.0	49.0	55.4	40.1	32.1	46.7	49.2	37.0
Not in poverty . . . . .	8.8	1.7	4.8	10.6	5.4	3.0	14.4	28.5	12.3	8.1	27.5	35.8	21.5
Race													
White:													
In poverty . . . . .	17.6	5.4	12.2	19.9	10.7	5.0	48.2	55.1	37.9	35.1	45.0	46.9	38.6
Not in poverty . . . . .	7.9	1.6	3.8	9.2	4.3	2.2	13.2	25.7	12.0	7.1	27.4	36.5	21.4
Black:													
In poverty . . . . .	19.3	5.1	18.8	24.8	15.2	13.3	56.1	61.6	40.9	*49.0	59.1	60.4	*45.7
Not in poverty . . . . .	11.7	3.1	7.5	10.4	8.0	5.7	24.5	34.5	19.7	15.9	38.3	44.0	27.1
Family income													
Less than \$20,000:													
In poverty . . . . .	17.9	5.4	13.9	21.3	12.0	6.9	49.5	56.5	38.1	33.5	48.3	50.4	39.4
Not in poverty . . . . .	16.6	3.4	7.6	12.0	7.8	4.4	28.2	36.7	23.0	18.3	33.4	39.2	26.4
\$20,000 or more:													
Not in poverty . . . . .	5.3	1.3	3.3	7.7	3.7	2.3	10.1	19.8	9.9	6.3	21.8	33.1	17.9
	Number of persons in thousands												
All poverty statuses <sup>3</sup> . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
In poverty . . . . .	27,571	10,508	11,382	3,969	4,369	2,960	2,914	1,876	752	273	2,767	2,150	589
Not in poverty . . . . .	192,384	48,693	84,285	9,708	34,188	40,132	38,096	8,708	15,738	13,491	21,310	8,675	12,481
Sex													
Male:													
In poverty . . . . .	11,681	5,283	4,503	1,638	1,552	1,263	1,094	734	240	108	801	637	155
Not in poverty . . . . .	95,289	25,032	42,278	5,361	16,419	20,337	18,626	4,556	6,555	7,423	9,353	3,883	5,409
Female:													
In poverty . . . . .	15,890	5,224	6,879	2,331	2,818	1,697	1,821	1,142	513	165	1,966	1,513	434
Not in poverty . . . . .	97,095	23,661	42,007	4,346	17,769	19,795	19,470	4,152	9,183	6,068	11,958	4,792	7,072
Race													
White:													
In poverty . . . . .	17,745	6,110	7,654	2,557	2,824	2,213	1,905	1,179	530	194	2,076	1,561	499
Not in poverty . . . . .	169,492	42,399	73,427	8,170	29,922	35,143	33,959	7,285	14,317	12,255	19,706	7,653	11,921
Black:													
In poverty . . . . .	8,519	3,948	3,074	1,215	1,360	480	863	608	193	51	634	551	70
Not in poverty . . . . .	17,046	4,740	7,898	1,215	3,445	3,192	3,098	1,159	1,122	766	1,309	859	437
Family income													
Less than \$20,000:													
In poverty . . . . .	27,516	10,482	11,359	3,961	4,357	2,957	2,909	1,874	751	272	2,765	2,148	589
Not in poverty . . . . .	48,171	9,687	18,333	3,747	8,575	5,959	8,344	3,580	3,333	1,378	11,808	6,294	5,439
\$20,000 or more:													
Not in poverty . . . . .	130,791	35,957	60,277	5,338	23,200	31,589	26,347	4,501	10,937	10,827	8,211	2,023	6,129

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown poverty status, family income, and persons in poverty in families with \$20,000 or more annual income.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 7. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, Hispanic origin, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Hispanic origin, sex, race, and family income	All ages	18-44 years of age					45-64 years of age				65 years of age and over		
		Under 18 years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>													
All Hispanic origins <sup>3</sup>	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
Hispanic	9.4	4.2	7.7	10.2	8.1	4.1	21.2	29.4	13.7	10.5	35.2	42.5	20.8
Puerto Rican	11.7	5.3	9.6	12.8	11.4	*3.3	27.3	39.8	*10.3	*10.4	*37.5	*43.1	*14.3
Cuban	13.6	*2.0	*6.2	*15.3	*5.0	*3.1	*17.2	*25.3	*12.5	*8.1	47.7	64.5	*21.7
Mexican	8.2	3.5	6.7	8.4	6.8	*3.1	23.0	29.3	*13.2	*14.8	32.0	37.2	*15.5
Other	9.9	5.5	9.2	13.6	9.7	6.0	15.9	22.0	*16.1	*8.0	31.9	38.7	*24.1
Non-Hispanic	10.1	2.3	5.5	14.0	5.5	2.9	17.1	33.1	14.2	8.4	30.6	39.7	22.7
Sex													
Male:													
Hispanic	7.9	3.8	6.5	8.7	6.4	*3.2	18.1	25.2	13.8	*8.2	34.0	39.5	*24.3
Puerto Rican	10.3	*4.0	8.6	*10.9	*12.0	*-	25.5	*41.9	*11.6	*10.0	*43.5	*45.5	*-
Cuban	11.7	*3.9	*7.8	*16.7	*4.3	*3.6	*9.5	*8.7	*17.4	*8.5	*46.3	*62.2	*11.8
Mexican	7.0	3.3	5.6	7.1	*4.7	*3.1	20.1	25.7	*15.7	*6.9	27.4	33.1	*6.3
Other	7.9	4.7	7.0	*11.5	*7.3	*4.2	*12.5	*16.5	*12.2	*8.3	*35.6	*32.3	*38.6
Non-Hispanic	9.1	2.3	4.5	11.3	4.6	2.3	16.5	31.2	14.2	8.2	31.2	41.6	22.5
Female:													
Hispanic	10.9	4.6	8.9	11.8	9.6	5.0	24.0	32.7	13.7	*13.2	36.0	44.4	*18.6
Puerto Rican	12.9	*7.0	10.3	*14.5	*10.9	*5.4	29.1	38.5	*11.1	*11.1	*34.7	*38.9	*15.4
Cuban	15.2	*-	*5.2	*10.8	*5.7	*2.8	*23.8	*39.6	*9.8	*7.4	48.5	*64.3	*25.6
Mexican	9.4	3.7	7.9	9.8	8.6	*3.0	25.7	32.7	*11.1	*25.4	35.4	39.7	*21.6
Other	11.9	6.5	11.3	15.9	12.0	*7.7	18.7	*25.7	*19.5	*7.8	29.8	*42.0	*11.9
Non-Hispanic	11.0	2.2	6.4	16.9	6.3	3.4	17.7	34.9	14.2	8.8	30.1	38.3	22.8
Race													
White:													
Hispanic	9.3	4.1	7.5	10.1	7.6	3.8	21.2	30.0	13.2	*9.2	36.2	44.0	20.5
Non-Hispanic	9.3	1.8	4.5	12.7	4.7	2.3	15.3	30.2	13.3	7.9	29.0	37.7	22.3
Black:													
Hispanic	13.3	*5.8	12.9	*10.3	*16.5	*12.1	*31.7	*25.4	*27.3	*66.7	*27.1	*27.1	*-
Non-Hispanic	15.3	4.3	11.1	19.2	10.3	6.5	32.9	45.6	24.7	17.1	46.8	51.7	32.1
Family income													
Less than \$20,000:													
Hispanic	13.5	6.2	11.4	12.0	12.9	6.8	34.8	38.3	*21.9	*22.4	40.2	45.6	*22.1
Puerto Rican	15.6	7.8	14.1	14.7	*17.5	*5.6	48.2	51.8	*20.0	*40.0	*31.7	*35.1	*-
Cuban	26.4	*3.6	*13.4	*19.4	*10.5	*4.9	*28.6	*27.5	*16.7	*40.0	58.6	65.4	*33.3
Mexican	11.6	5.3	9.5	9.9	11.5	*3.3	35.3	38.8	*23.0	*28.6	38.6	39.9	*26.5
Other	14.2	8.0	13.8	15.1	*13.0	*12.9	26.4	30.3	*21.9	*8.7	*31.4	*45.5	*15.1
Non-Hispanic	17.6	4.1	9.8	18.2	8.9	5.1	33.6	44.3	25.8	20.7	36.1	41.9	27.8
\$20,000 or more:													
Hispanic	5.5	2.0	4.7	7.0	4.7	3.5	12.1	15.1	11.8	*9.2	25.0	*29.4	*21.1
Puerto Rican	6.2	*0.9	*4.1	*4.1	*5.8	*2.8	*11.6	*18.2	*13.7	*3.4	*48.3	*63.2	*20.0
Cuban	*6.7	*2.2	*4.6	*14.0	*2.2	*3.4	*9.9	*15.8	*9.3	*6.6	*24.2	*50.0	*16.0
Mexican	4.4	*1.7	4.0	*5.6	*3.3	*3.2	12.4	*15.6	*7.9	*13.2	*16.7	*21.7	*10.8
Other	7.0	*3.2	6.5	*15.0	*7.9	*4.0	13.2	*11.9	*17.9	*9.6	*25.3	*16.2	*32.0
Non-Hispanic	5.3	1.2	3.2	7.8	3.7	2.2	10.0	20.4	9.8	6.2	21.7	33.3	17.8

See footnotes at end of table.

**Table 7. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, Hispanic origin, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Hispanic origin, sex, race, and family income	Under 18		18–44 years of age				45–64 years of age				65 years of age and over		
	All ages	years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands													
All Hispanic origins . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
Hispanic . . . . .	18,788	6,978	8,513	3,086	2,908	2,440	2,436	1,262	657	489	861	578	274
Puerto Rican . . . . .	2,582	859	1,266	498	416	340	385	217	78	77	72	58	*14
Cuban . . . . .	1,104	210	502	85	159	254	239	99	64	74	153	93	60
Mexican . . . . .	10,316	4,168	4,600	1,941	1,611	1,005	1,153	690	302	149	395	306	84
Other . . . . .	4,786	1,741	2,146	562	722	841	659	256	213	189	240	121	116
Non-Hispanic . . . . .	217,501	55,130	93,005	12,163	38,203	42,153	42,260	10,726	17,305	13,925	27,107	12,130	14,588
Sex													
Male:													
Hispanic . . . . .	9,198	3,559	4,150	1,558	1,379	1,163	1,160	571	304	269	329	220	107
Puerto Rican . . . . .	1,214	439	564	234	192	133	189	87	43	50	*23	*22	*1
Cuban . . . . .	508	106	232	48	70	110	116	46	*23	47	54	*37	*17
Mexican . . . . .	5,108	2,077	2,299	1,005	753	512	568	336	140	87	164	130	*32
Other . . . . .	2,368	937	1,055	271	363	409	288	102	98	86	87	*31	57
Non-Hispanic . . . . .	105,176	28,237	45,519	6,266	17,783	21,200	20,174	5,360	7,059	7,598	11,247	5,024	6,070
Female:													
Hispanic . . . . .	9,590	3,419	4,363	1,528	1,528	1,276	1,275	691	353	219	532	358	167
Puerto Rican . . . . .	1,367	420	702	264	223	207	196	130	*36	*27	49	*36	*13
Cuban . . . . .	595	104	270	*37	88	145	122	53	41	*27	99	56	43
Mexican . . . . .	5,208	2,092	2,301	936	858	493	585	354	162	63	231	176	51
Other . . . . .	2,419	803	1,091	291	359	432	372	154	115	103	153	90	59
Non-Hispanic . . . . .	112,325	26,893	47,486	5,896	20,420	20,954	22,086	5,366	10,246	6,328	15,860	7,106	8,517
Race													
White:													
Hispanic . . . . .	17,453	6,535	7,874	2,896	2,687	2,216	2,268	1,176	632	438	776	513	259
Non-Hispanic . . . . .	182,361	43,796	77,510	8,973	31,856	36,310	36,598	8,318	15,500	12,588	24,457	10,282	13,850
Black:													
Hispanic . . . . .	741	277	334	117	109	107	82	59	*11	12	48	48	*-
Non-Hispanic . . . . .	28,031	9,325	11,940	2,682	5,385	3,789	4,467	2,042	1,472	851	2,298	1,653	592
Family income													
Less than \$20,000:													
Hispanic . . . . .	8,216	3,308	3,556	1,820	1,101	618	854	648	130	67	498	384	113
Puerto Rican . . . . .	1,356	539	639	348	196	91	137	114	*10	*10	41	*37	*4
Cuban . . . . .	364	84	112	*31	*38	41	70	51	*12	*5	99	78	*21
Mexican . . . . .	4,699	2,010	2,008	1,109	619	276	444	337	74	*28	236	203	*34
Other . . . . .	1,797	675	798	332	249	211	203	146	*34	*23	121	66	53
Non-Hispanic . . . . .	66,979	16,561	26,018	5,854	11,775	8,277	10,364	4,797	3,935	1,579	14,036	8,037	5,898
\$20,000 or more:													
Hispanic . . . . .	8,180	2,811	3,906	807	1,481	1,598	1,231	451	407	362	232	109	123
Puerto Rican . . . . .	947	223	514	100	192	218	182	67	51	58	*29	*19	*10
Cuban . . . . .	578	97	307	43	89	174	141	*38	43	61	*33	*8	*25
Mexican . . . . .	4,303	1,635	2,020	552	827	629	564	263	190	106	84	46	*37
Other . . . . .	2,352	856	1,065	112	373	577	344	84	123	137	87	*37	50
Non-Hispanic . . . . .	121,886	32,631	56,219	4,517	21,673	29,905	25,072	4,047	10,512	10,445	7,963	1,910	5,995

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons of unknown origin, unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 8. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, usual major activity, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Usual major activity, sex, race, and family income	All persons	18-44 years of age				45-64 years of age				65 years of age and over			
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more	
						Percent <sup>2</sup>							
All major activities <sup>3</sup> . . . . .	12.7	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7	
Working . . . . .	5.9	3.9	8.7	4.3	2.3	10.0	19.7	8.9	5.5	14.1	21.7	10.7	
Keeping house . . . . .	20.4	10.7	20.5	9.6	4.2	24.6	40.4	18.3	11.8	28.7	36.3	21.3	
Going to school . . . . .	3.8	3.4	6.2	3.3	2.4	*9.2	*35.1	*6.2	*4.2	*21.9	*18.6	*26.9	
Something else . . . . .	36.7	27.2	31.1	24.3	25.2	44.3	58.5	38.4	28.7	36.3	46.2	26.8	
Sex													
Male:													
Working . . . . .	5.5	3.4	7.3	3.9	1.7	9.5	18.2	8.6	5.1	14.7	22.9	10.9	
Keeping house . . . . .	30.2	19.4	*31.6	*18.4	*4.0	45.0	53.2	*44.6	*32.9	30.3	33.2	27.4	
Going to school . . . . .	3.2	2.9	5.8	*2.2	2.0	*6.1	*22.2	*-	*2.9	*25.4	*17.6	*39.1	
Something else . . . . .	35.8	26.0	30.3	21.5	24.5	45.0	58.1	38.7	28.6	34.7	44.6	25.1	
Female:													
Working . . . . .	6.5	4.6	11.3	4.8	3.1	10.7	22.2	9.2	6.2	13.3	20.0	10.3	
Keeping house . . . . .	20.0	10.5	20.1	9.4	4.1	23.9	39.8	17.8	11.0	28.6	36.5	21.0	
Going to school . . . . .	4.3	3.8	6.8	4.3	2.8	*10.8	*47.4	*9.3	*3.5	*20.8	*18.9	*20.5	
Something else . . . . .	38.8	30.0	33.8	30.0	26.7	42.7	59.9	37.6	29.0	39.7	49.9	30.1	
Race													
White:													
Working . . . . .	5.3	3.4	8.1	3.8	2.0	9.0	17.9	8.2	5.0	12.8	18.8	10.6	
Keeping house . . . . .	18.8	9.0	18.2	8.4	3.1	22.1	37.7	17.2	10.9	27.2	34.3	21.1	
Going to school . . . . .	3.0	2.6	5.2	2.8	1.9	*5.7	*18.5	*4.8	*2.9	*22.9	*19.7	*27.3	
Something else . . . . .	35.1	26.6	34.1	21.4	24.0	41.1	55.5	36.1	27.5	34.6	44.4	26.1	
Black:													
Working . . . . .	11.1	7.4	12.1	7.6	5.1	19.8	29.0	15.7	12.5	25.6	30.8	*14.0	
Keeping house . . . . .	34.4	21.9	30.1	17.0	*15.5	46.7	53.8	37.7	*30.7	44.4	49.8	28.3	
Going to school . . . . .	7.7	7.1	*10.2	*5.8	*5.0	*36.7	*87.5	*15.4	*11.1	*-	*-	*-	
Something else . . . . .	48.4	28.8	28.0	28.8	31.3	67.1	72.5	66.3	*42.1	55.5	59.4	42.0	
Family income													
Less than \$20,000:													
Working . . . . .	10.0	6.6	10.1	6.6	4.0	19.5	26.5	15.9	11.0	17.9	23.1	12.9	
Keeping house . . . . .	29.4	17.7	23.6	14.7	9.8	39.7	49.0	28.3	28.1	33.7	38.6	26.7	
Going to school . . . . .	4.9	4.6	10.8	4.9	3.1	*12.5	*38.1	*5.9	*4.9	*17.6	*14.7	*23.5	
Something else . . . . .	42.7	30.2	31.0	28.5	29.3	54.8	62.9	49.2	37.4	41.9	48.6	31.4	
\$20,000 or more:													
Working . . . . .	4.2	2.8	6.6	3.2	2.0	7.2	14.4	7.0	4.7	10.2	*17.1	8.9	
Keeping house . . . . .	10.4	5.2	12.1	5.4	3.1	14.6	28.6	13.4	7.7	17.2	27.4	14.3	
Going to school . . . . .	2.9	2.4	*3.1	*1.7	2.2	*8.5	*33.3	*8.6	*1.8	*26.2	*6.7	*45.2	
Something else . . . . .	27.4	21.1	24.5	19.4	20.3	29.6	42.5	27.4	24.1	27.9	39.9	23.1	

See footnotes at end of table.

**Table 8. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, usual major activity, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Usual major activity, sex, race, and family income	All persons	18-44 years of age				45-64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands												
All major activities <sup>3</sup> . . . . .	175,271	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
Working . . . . .	106,237	73,641	8,848	30,550	33,683	29,535	6,416	11,823	11,003	3,061	947	2,084
Keeping house . . . . .	33,981	13,499	3,368	6,131	3,931	9,372	3,236	4,081	1,964	11,110	5,269	5,696
Going to school . . . . .	10,964	10,569	1,522	2,903	6,057	240	*37	81	120	155	86	67
Something else . . . . .	22,477	3,842	1,494	1,469	799	5,629	2,265	1,950	1,320	13,005	6,038	6,676
Sex												
Male:												
Working . . . . .	60,190	41,369	5,706	16,637	18,702	17,005	4,036	5,966	6,826	1,816	559	1,234
Keeping house . . . . .	1,300	387	117	159	100	278	126	74	76	635	320	306
Going to school . . . . .	5,345	5,204	870	1,341	2,949	82	*18	*27	*35	59	*34	*23
Something else . . . . .	15,584	2,707	1,116	992	552	3,997	1,737	1,270	930	8,880	4,226	4,501
Female:												
Working . . . . .	46,047	32,272	3,143	13,914	14,981	12,530	2,380	5,858	4,178	1,246	389	849
Keeping house . . . . .	32,681	13,112	3,251	5,971	3,831	9,094	3,110	4,006	1,888	10,475	4,949	5,391
Going to school . . . . .	5,619	5,365	652	1,562	3,108	158	*19	54	85	96	53	44
Something else . . . . .	6,893	1,135	378	477	247	1,632	527	680	390	4,125	1,812	2,175
Race												
White:												
Working . . . . .	91,702	63,175	7,271	26,141	29,294	25,807	5,137	10,538	9,901	2,720	727	1,965
Keeping house . . . . .	29,602	11,359	2,575	5,214	3,515	8,184	2,541	3,754	1,823	10,058	4,516	5,415
Going to school . . . . .	8,664	8,326	1,100	2,182	4,976	194	*27	62	105	144	76	66
Something else . . . . .	19,166	2,628	930	982	645	4,778	1,760	1,758	1,196	11,759	5,176	6,338
Black:												
Working . . . . .	11,176	8,020	1,295	3,740	2,923	2,863	1,082	1,063	663	293	198	93
Keeping house . . . . .	3,505	1,654	657	752	233	910	564	239	88	942	691	237
Going to school . . . . .	1,517	1,478	345	534	586	*30	*8	*13	*9	*8	*7	*1
Something else . . . . .	2,814	1,066	481	441	134	726	440	160	95	1,022	739	246
Family income												
Less than \$20,000:												
Working . . . . .	23,558	17,224	3,886	8,273	4,984	5,190	2,171	2,104	889	1,145	550	590
Keeping house . . . . .	15,046	5,226	2,153	2,410	656	3,267	1,801	1,149	301	6,553	3,819	2,706
Going to school . . . . .	4,993	4,846	620	1,376	2,822	96	*21	*34	41	51	*34	*17
Something else . . . . .	11,328	2,208	1,009	787	393	2,655	1,437	782	412	6,466	3,827	2,570
\$20,000 or more:												
Working . . . . .	68,674	47,692	3,622	18,427	25,550	19,669	3,160	7,785	8,670	1,313	212	1,100
Keeping house . . . . .	13,878	6,828	781	3,089	2,957	4,523	890	2,262	1,356	2,527	566	1,949
Going to school . . . . .	4,692	4,525	686	1,193	2,617	106	*15	*35	56	61	*30	*31
Something else . . . . .	6,980	974	243	413	301	1,927	410	802	702	4,079	1,126	2,912

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown major activity, unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 9. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, marital status, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Marital status, sex, race, and family income	All persons 18 years of age and over	18-44 years of age				45-64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>												
All marital statuses <sup>3</sup>	12.7	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
Married	11.9	5.1	12.5	5.2	2.7	15.6	30.1	13.2	7.5	30.5	41.6	22.4
Never married	6.9	5.1	11.0	5.4	2.6	21.6	38.7	14.9	12.3	27.7	36.6	21.0
Widowed	29.4	12.6	*25.6	*8.8	*7.6	26.3	39.1	20.3	13.9	31.2	37.3	23.4
Separated or divorced	16.5	10.8	22.7	10.1	5.8	22.4	39.7	18.3	11.8	33.5	42.8	23.6
Sex												
Male:												
Married	12.2	4.4	10.5	4.5	2.3	15.5	29.2	13.5	7.7	30.9	41.7	22.3
Never married	6.0	4.5	10.1	4.2	2.1	23.8	39.2	*14.0	14.3	30.0	42.7	*17.8
Widowed	31.7	*9.7	*31.8	*-	*-	30.7	44.9	*27.2	*8.0	33.1	38.1	26.3
Separated or divorced	15.0	8.8	16.2	9.5	4.7	20.1	31.7	19.0	10.0	34.8	47.3	21.1
Female:												
Married	11.7	5.8	14.4	5.7	3.1	15.7	31.2	12.9	7.2	30.0	41.5	22.5
Never married	7.9	5.9	12.6	6.9	3.1	19.5	37.9	15.7	*10.2	26.7	33.2	22.3
Widowed	29.0	13.1	*24.2	*9.4	*10.4	25.6	38.0	19.5	15.2	30.8	37.2	22.9
Separated or divorced	17.4	12.0	26.1	10.4	6.5	23.9	45.7	17.9	13.1	32.6	39.9	25.2
Race												
White:												
Married	11.3	4.6	11.9	4.7	2.2	14.5	28.7	12.6	6.9	29.4	40.4	22.1
Never married	5.7	3.9	9.1	4.0	2.1	18.8	35.6	13.4	11.8	26.8	34.7	21.2
Widowed	27.2	*8.9	*20.6	*7.4	*3.9	22.5	33.7	18.4	13.1	29.2	34.9	22.7
Separated or divorced	14.4	9.4	20.4	9.0	4.9	19.5	35.3	17.2	11.1	30.4	39.6	22.9
Black:												
Married	19.9	9.8	17.3	9.0	7.2	28.9	39.2	23.1	16.8	46.2	51.5	32.3
Never married	12.5	10.3	15.7	10.7	3.9	40.5	51.4	*25.9	*24.4	*42.4	*56.6	*20.5
Widowed	45.2	*23.9	*35.4	*11.1	*26.1	45.7	56.7	34.0	*25.4	47.5	50.6	33.9
Separated or divorced	25.9	17.4	31.8	13.4	11.7	35.0	50.3	24.3	*16.9	45.4	49.5	*31.8
Family income												
Less than \$20,000:												
Married	23.5	10.1	15.6	8.7	5.4	33.9	43.0	26.3	18.2	38.8	44.8	30.0
Never married	10.4	7.6	13.9	8.1	3.7	33.4	48.8	20.8	19.5	29.2	34.9	24.1
Widowed	33.3	*13.4	*22.5	*7.5	*15.8	34.7	41.8	27.1	28.3	33.7	39.1	25.2
Separated or divorced	23.6	15.9	26.3	13.6	9.8	32.6	44.5	24.4	22.7	36.9	43.0	28.5
\$20,000 or more:												
Married	7.0	3.4	8.6	3.8	2.3	10.1	19.8	10.0	6.1	20.9	32.4	17.6
Never married	3.2	2.7	5.3	3.0	1.8	8.1	*8.7	*6.1	*9.0	*19.3	*41.7	*12.3
Widowed	19.9	*5.9	*12.5	*4.5	*5.3	12.1	25.6	10.9	*7.3	24.9	32.6	20.4
Separated or divorced	7.0	4.8	*10.6	5.3	3.5	9.6	22.8	9.1	6.5	21.1	*42.1	*15.0

See footnotes at end of table.

**Table 9. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, marital status, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Marital status, sex, race, and family income	All persons 18 years of age and over	18–44 years of age				45–64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands												
All marital statuses <sup>3</sup>	175,271	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
Married	112,766	61,915	8,482	25,703	27,389	34,863	8,748	14,357	11,455	15,988	6,556	9,204
Never married	33,079	29,960	4,903	11,357	13,474	1,995	642	589	739	1,124	487	625
Widowed	12,919	448	117	196	134	2,968	1,135	1,174	626	9,503	4,969	4,352
Separated or divorced	15,819	9,403	1,780	3,939	3,651	4,985	1,473	1,857	1,620	1,431	718	702
Sex												
Male:												
Married	57,031	29,760	4,181	11,497	13,893	18,082	4,740	6,432	6,737	9,189	3,971	5,081
Never married	17,899	16,572	3,044	6,305	7,093	978	376	242	352	349	173	174
Widowed	2,016	74	*22	*15	*36	424	189	116	113	1,518	820	667
Separated or divorced	5,835	3,364	595	1,379	1,371	1,911	634	574	683	560	284	268
Female:												
Married	55,735	32,155	4,301	14,206	13,497	16,781	4,008	7,925	4,718	6,799	2,585	4,123
Never married	15,179	13,388	1,860	5,052	6,380	1,017	266	347	387	774	314	451
Widowed	10,902	375	95	180	98	2,543	946	1,058	514	7,984	4,149	3,685
Separated or divorced	9,984	6,039	1,185	2,560	2,281	3,073	839	1,283	936	871	433	434
Race												
White:												
Married	100,316	54,486	7,189	22,831	24,186	31,086	7,269	13,151	10,439	14,745	5,724	8,822
Never married	25,914	23,287	3,334	8,553	11,221	1,611	435	494	671	1,016	427	577
Widowed	11,109	315	63	148	104	2,384	816	1,005	542	8,410	4,163	4,097
Separated or divorced	12,564	7,514	1,330	3,090	3,070	3,910	984	1,504	1,396	1,140	504	632
Black:												
Married	8,831	5,091	932	2,251	1,872	2,739	1,182	932	560	1,002	719	264
Never married	5,769	5,359	1,401	2,427	1,494	317	182	81	41	92	53	*40
Widowed	1,603	118	48	46	*23	506	282	147	67	979	730	221
Separated or divorced	2,932	1,686	406	768	506	975	453	317	196	271	198	66
Family income												
Less than \$20,000:												
Married	26,903	13,200	3,939	6,349	2,859	6,498	3,311	2,381	762	7,205	4,196	2,964
Never married	13,234	11,678	2,467	4,407	4,736	860	399	240	215	696	339	353
Widowed	7,418	238	80	120	*38	1,530	747	582	193	5,650	3,328	2,273
Separated or divorced	7,907	4,538	1,207	2,047	1,278	2,357	995	878	477	1,012	576	431
\$20,000 or more:												
Married	70,770	42,088	3,387	16,536	22,098	22,761	3,953	9,626	9,117	5,921	1,287	4,614
Never married	15,222	14,246	1,594	5,259	7,323	772	129	230	413	204	48	156
Widowed	2,871	138	*16	44	78	915	173	394	344	1,819	629	1,156
Separated or divorced	5,943	3,783	344	1,369	2,062	1,896	246	684	953	265	59	202

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown marital status, unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 10. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, living arrangements, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Living arrangements, sex, race, and family income	All ages	Under 18		18-44 years of age			45-64 years of age				65 years of age and over		
		years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>													
All living arrangements <sup>3</sup> . . .	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
Living alone . . . . .	17.1	*-	4.9	19.1	6.2	2.7	21.6	38.9	16.9	11.8	28.0	35.4	20.7
Living with nonrelatives . . .	6.1	*-	2.5	*4.8	*3.2	1.9	19.3	33.8	*16.7	*11.1	39.8	63.8	*20.8
Living with spouse . . . . .	11.9	*4.2	5.0	12.3	5.1	2.7	15.6	29.9	13.2	7.5	30.4	41.5	22.3
Living with other relatives . . . . .	6.4	2.5	7.8	14.6	7.1	4.1	25.4	40.6	19.7	12.7	38.8	42.3	31.8
Sex													
Male:													
Living alone . . . . .	12.9	*-	4.9	16.6	6.5	2.4	19.9	34.4	15.4	11.4	30.0	37.3	22.4
Living with nonrelatives . . . . .	5.0	*-	1.9	*5.8	*1.4	*1.4	19.7	*32.5	*15.3	*11.1	*43.3	*71.9	*25.9
Living with spouse . . . . .	12.1	*-	4.3	10.2	4.4	2.3	15.5	29.1	13.6	7.7	30.8	41.8	22.2
Living with other relatives . . . . .	4.6	2.5	6.1	11.2	5.3	2.7	25.5	39.1	21.6	*8.4	38.8	44.7	28.5
Female:													
Living alone . . . . .	19.7	*-	4.8	25.1	5.8	3.0	22.7	42.5	17.6	12.1	27.4	34.8	20.3
Living with nonrelatives . . . . .	7.5	*-	3.2	*1.7	*5.7	*2.5	18.8	*35.7	*16.7	*11.0	37.7	*60.7	*17.3
Living with spouse . . . . .	11.6	*5.0	5.7	14.4	5.7	3.1	15.6	30.8	12.8	7.2	29.9	41.2	22.5
Living with other relatives . . . . .	7.9	2.5	9.3	18.0	8.7	5.1	25.5	41.2	19.1	14.5	38.8	41.7	32.6
Race													
White:													
Living alone . . . . .	16.0	*-	4.2	18.9	5.3	2.3	19.3	35.5	15.8	11.5	26.2	33.0	20.1
Living with nonrelatives . . . . .	5.2	*-	2.2	*4.4	*3.2	*1.6	15.8	*25.3	*14.4	*11.7	36.4	*60.6	*21.4
Living with spouse . . . . .	11.2	*4.5	4.6	11.8	4.7	2.2	14.4	28.4	12.5	6.9	29.3	40.4	22.0
Living with other relatives . . . . .	5.4	2.1	6.2	12.5	5.6	3.3	21.9	36.3	18.3	11.5	37.1	40.3	32.0
Black:													
Living alone . . . . .	26.6	*-	8.5	*19.9	10.2	*4.0	37.1	53.0	25.4	*17.3	44.8	49.5	32.3
Living with nonrelatives . . . . .	17.7	*-	*5.1	*12.0	*1.6	*5.5	*39.7	*50.0	*28.6	*-	*57.9	*69.2	*10.0
Living with spouse . . . . .	19.7	*-	9.5	16.3	8.7	7.1	29.1	39.3	23.6	16.8	45.8	50.8	32.2
Living with other relatives . . . . .	11.1	4.3	13.3	20.1	11.8	7.1	38.8	51.7	27.1	*22.2	48.9	51.9	32.0
Family income													
Less than \$20,000:													
Living alone . . . . .	22.1	*-	6.5	22.7	6.8	3.8	32.2	44.5	23.8	22.7	31.1	37.1	23.8
Living with nonrelatives . . . . .	7.4	*-	3.0	*5.8	*4.1	*2.0	28.1	*37.6	*23.9	*20.2	41.8	61.6	*23.8
Living with spouse . . . . .	23.4	*4.6	10.0	15.4	8.6	5.4	33.8	42.9	26.3	18.5	38.7	44.8	30.0
Living with other relatives . . . . .	10.7	4.4	13.9	18.5	12.3	9.5	36.0	45.3	26.9	23.7	44.5	46.1	37.8
\$20,000 or more:													
Living alone . . . . .	4.9	*-	2.1	*1.0	*4.3	1.5	5.9	*5.6	*7.2	5.2	12.9	*14.4	12.7
Living with nonrelatives . . . . .	*2.7	*-	*1.8	*-	*0.9	*2.3	*3.1	*-	*4.0	*2.9	*31.3	*100.0	*15.4
Living with spouse . . . . .	7.0	*-	3.4	8.5	3.8	2.3	10.1	19.6	10.0	6.1	20.9	32.5	17.6
Living with other relatives . . . . .	3.2	1.3	3.6	6.9	3.6	2.5	14.5	29.0	11.0	10.7	33.1	37.7	28.3

See footnotes at end of table.

**Table 10. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, living arrangements, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Living arrangements, sex, race, and family income	All ages	Under 18			18–44 years of age			45–64 years of age			65 years of age and over		
		years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands													
All living arrangements <sup>3</sup> . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
Living alone . . . . .	23,491	*26	9,607	602	3,043	5,881	5,152	1,510	1,782	1,808	8,705	4,178	4,401
Living with nonrelatives . . . . .	4,599	*33	3,857	374	977	2,480	471	139	132	192	238	95	130
Living with spouse . . . . .	111,446	122	61,103	8,269	25,381	27,114	34,482	8,625	14,242	11,321	15,740	6,442	9,073
Living with other relatives . . . . .	99,015	63,098	27,577	6,067	11,870	9,260	4,870	1,738	1,867	1,137	3,470	2,023	1,306
Sex													
Male:													
Living alone . . . . .	9,248	*7	5,446	431	1,712	3,243	2,066	672	559	809	1,729	877	832
Living with nonrelatives . . . . .	2,604	*22	2,244	257	573	1,400	246	83	59	99	92	*34	54
Living with spouse . . . . .	56,456	*20	29,440	4,087	11,394	13,772	17,908	4,691	6,384	6,664	9,088	3,913	5,040
Living with other relatives . . . . .	47,144	32,324	12,835	3,078	5,552	4,019	1,245	499	382	321	740	427	270
Female:													
Living alone . . . . .	14,243	*19	4,161	171	1,330	2,638	3,086	838	1,222	999	6,977	3,302	3,568
Living with nonrelatives . . . . .	1,995	*11	1,613	118	404	1,080	225	56	72	93	146	61	75
Living with spouse . . . . .	54,990	102	31,663	4,183	13,987	13,342	16,573	3,933	7,858	4,657	6,651	2,529	4,033
Living with other relatives . . . . .	51,871	30,774	14,742	2,989	6,317	5,241	3,625	1,239	1,486	816	2,730	1,597	1,036
Race													
White:													
Living alone . . . . .	20,352	*21	8,096	436	2,515	5,070	4,353	1,131	1,541	1,636	7,882	3,583	4,177
Living with nonrelatives . . . . .	4,116	*26	3,494	341	887	2,245	400	95	118	180	196	68	117
Living with spouse . . . . .	99,334	113	53,895	7,030	22,593	23,996	30,802	7,182	13,070	10,329	14,524	5,628	8,700
Living with other relatives . . . . .	78,056	51,211	20,460	4,125	8,681	7,338	3,579	1,105	1,464	922	2,806	1,545	1,154
Black:													
Living alone . . . . .	2,595	*5	1,139	148	433	555	694	340	209	139	757	556	199
Living with nonrelatives . . . . .	324	*6	217	*25	62	128	63	42	*14	*6	*38	*26	*10
Living with spouse . . . . .	8,583	*3	4,924	886	2,184	1,817	2,675	1,158	908	547	981	703	259
Living with other relatives . . . . .	17,445	9,703	6,040	1,741	2,837	1,407	1,126	564	352	172	576	419	128
Family income													
Less than \$20,000:													
Living alone . . . . .	13,695	*22	5,065	415	1,981	2,648	2,640	1,106	965	566	5,967	3,301	2,645
Living with nonrelatives . . . . .	2,939	*22	2,482	277	656	1,541	276	109	71	96	159	75	80
Living with spouse . . . . .	26,360	67	12,860	3,809	6,225	2,772	6,374	3,239	2,352	739	7,059	4,110	2,905
Living with other relatives . . . . .	32,724	20,088	9,286	3,207	4,069	1,956	1,963	1,001	696	249	1,388	956	397
\$20,000 or more:													
Living alone . . . . .	6,507	*–	3,711	99	799	2,813	1,739	177	540	1,016	1,057	134	923
Living with nonrelatives . . . . .	1,183	*–	1,021	48	220	749	130	*11	50	69	*32	*6	*26
Living with spouse . . . . .	70,218	*32	41,738	3,345	16,383	21,942	22,582	3,929	9,570	9,020	5,866	1,274	4,572
Living with other relatives . . . . .	52,951	35,962	13,829	1,854	5,812	6,088	1,902	386	779	724	1,258	611	608

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown family income and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 11. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, family size, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Family size, sex, race, and family income	All ages	18-44 years of age					45-64 years of age				65 years of age and over		
		Under 18 years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>													
All family sizes <sup>3</sup> . . . . .	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
1 person . . . . .	15.3	*-	4.2	13.4	5.5	2.5	21.4	38.4	16.9	11.7	28.3	36.1	20.7
2 persons . . . . .	16.2	3.8	5.5	13.7	6.1	3.1	17.3	31.3	15.1	8.6	30.8	41.8	22.7
3 persons . . . . .	8.5	2.3	5.6	13.3	5.4	3.0	16.7	35.3	12.0	7.9	35.0	40.7	26.8
4 persons . . . . .	5.5	2.3	5.4	13.2	5.0	2.9	14.0	28.1	12.5	6.0	39.7	45.2	33.3
5 persons or more . . . . .	6.4	2.7	7.1	13.2	6.8	3.2	18.4	30.6	14.7	8.4	35.1	40.3	24.3
Sex													
Male:													
1 person . . . . .	11.2	*-	4.1	12.5	5.3	2.2	19.9	34.1	15.9	11.3	30.8	38.7	22.6
2 persons . . . . .	16.1	3.9	4.4	12.0	4.9	2.0	17.0	30.2	14.5	8.8	30.6	41.7	22.1
3 persons . . . . .	7.9	2.1	4.5	10.2	4.3	2.4	16.3	34.3	12.7	7.4	34.3	43.1	24.3
4 persons . . . . .	5.0	2.3	4.4	10.6	4.0	2.4	13.4	25.7	13.8	6.1	38.5	46.4	30.3
5 persons or more . . . . .	5.8	2.7	6.1	10.3	5.8	3.0	16.6	27.2	15.4	7.0	33.4	40.5	*20.3
Female:													
1 person . . . . .	18.2	*-	4.3	15.5	5.7	2.9	22.4	42.1	17.5	12.1	27.7	35.3	20.2
2 persons . . . . .	16.3	3.8	6.5	15.6	7.2	4.1	17.5	32.3	15.4	8.4	31.1	41.9	23.3
3 persons . . . . .	9.2	2.4	6.6	16.3	6.3	3.5	17.1	36.3	11.5	8.6	35.7	38.8	29.6
4 persons . . . . .	6.1	2.3	6.3	15.9	5.9	3.4	14.7	30.8	11.3	6.0	41.0	44.3	36.5
5 persons or more . . . . .	6.9	2.6	8.2	15.9	7.5	3.4	20.4	34.2	14.2	10.4	36.3	39.7	27.5
Race													
White:													
1 person . . . . .	14.1	*-	3.6	12.3	4.8	2.1	19.0	34.7	15.8	11.5	26.5	33.5	20.2
2 persons . . . . .	15.6	3.6	4.6	12.2	5.0	2.5	16.2	29.5	14.6	8.0	29.5	40.1	22.3
3 persons . . . . .	7.8	2.0	5.0	12.5	4.8	2.6	14.8	31.9	11.3	7.5	33.9	39.2	26.8
4 persons . . . . .	4.8	2.0	4.7	12.2	4.4	2.3	12.1	26.2	11.1	5.3	40.1	47.5	32.5
5 persons or more . . . . .	5.3	2.2	6.0	11.6	5.9	2.6	15.0	28.1	11.9	6.5	33.9	40.1	25.3
Black:													
1 person . . . . .	25.5	*-	7.8	*18.7	9.1	*4.3	37.3	52.4	26.2	*16.4	45.2	50.3	31.0
2 persons . . . . .	23.4	*4.2	13.0	21.8	13.7	7.9	31.9	45.2	24.6	18.3	49.1	54.0	34.4
3 persons . . . . .	14.2	4.0	10.5	18.8	9.6	6.3	32.7	50.1	21.7	*12.7	44.0	49.3	*25.4
4 persons . . . . .	10.8	4.4	10.9	18.4	9.8	7.6	30.7	38.4	28.4	*16.1	41.3	*41.3	*37.1
5 persons or more . . . . .	10.9	4.4	12.0	18.1	9.9	6.4	32.2	37.8	24.6	*33.7	45.7	49.1	*25.0
Family income													
Less than \$20,000:													
1 person . . . . .	19.5	*-	5.3	15.9	6.1	3.1	31.8	43.7	23.8	22.3	31.4	37.7	23.8
2 persons . . . . .	25.9	4.7	10.8	17.7	9.5	7.7	32.7	42.2	26.4	18.2	38.8	44.5	30.4
3 persons . . . . .	14.3	3.8	11.0	17.0	9.5	6.4	38.0	51.0	27.6	*14.6	43.6	48.0	31.0
4 persons . . . . .	10.5	4.5	11.9	17.8	9.4	7.2	34.4	39.0	24.5	*39.2	41.3	40.8	*38.7
5 persons or more . . . . .	10.3	4.7	13.0	15.5	12.2	6.7	36.0	40.8	25.4	*26.9	51.4	51.3	*51.2
\$20,000 or more:													
1 person . . . . .	4.5	*-	2.0	*0.7	*3.5	1.7	5.7	*5.3	7.2	5.0	13.4	*18.1	12.7
2 persons . . . . .	9.1	*1.1	2.9	*6.3	3.8	2.0	10.5	19.5	10.3	7.0	20.8	33.2	17.7
3 persons . . . . .	5.1	1.3	3.2	8.2	3.3	2.1	9.9	21.8	8.4	6.4	26.1	31.3	22.0
4 persons . . . . .	3.7	1.4	3.4	8.6	3.3	2.5	9.5	20.9	9.8	4.5	39.8	50.0	33.3
5 persons or more . . . . .	4.0	1.3	4.3	7.7	4.7	2.8	12.8	20.8	13.5	7.0	27.2	33.2	*18.9

See footnotes at end of table.

**Table 11. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, family size, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Family size, sex, race, and family income	Under 18		18-44 years of age				45-64 years of age				65 years of age and over		
	All ages	years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands													
All family sizes <sup>3</sup> . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
1 person . . . . .	28,196	88	13,510	988	4,035	8,380	5,639	1,651	1,925	2,001	8,958	4,285	4,534
2 persons . . . . .	56,705	2,866	19,367	2,198	7,488	9,532	19,285	4,961	8,149	5,981	15,186	6,234	8,715
3 persons . . . . .	46,858	12,100	22,620	3,446	9,808	9,211	9,820	2,468	4,127	3,139	2,319	1,241	1,024
4 persons . . . . .	55,515	22,639	26,225	3,915	11,223	10,863	5,844	1,410	2,314	2,055	808	438	333
5 persons or more . . . . .	51,276	25,586	20,422	4,766	8,717	6,749	4,386	1,522	1,508	1,283	882	540	302
Sex													
Male:													
1 person . . . . .	11,904	52	7,708	692	2,291	4,652	2,321	757	626	908	1,823	913	887
2 persons . . . . .	26,985	1,441	8,923	1,130	3,350	4,371	8,671	2,403	3,142	3,041	7,949	3,341	4,490
3 persons . . . . .	22,968	6,211	10,710	1,724	4,460	4,450	4,921	1,246	1,784	1,844	1,126	570	540
4 persons . . . . .	28,087	11,780	12,727	1,987	5,133	5,496	3,211	744	1,142	1,289	369	192	152
5 persons or more . . . . .	25,508	12,890	9,895	2,319	3,999	3,467	2,341	796	690	811	382	234	128
Female:													
1 person . . . . .	16,292	*36	5,802	296	1,744	3,729	3,318	894	1,299	1,093	7,136	3,372	3,647
2 persons . . . . .	29,720	1,425	10,443	1,068	4,138	5,162	10,614	2,559	5,007	2,940	7,237	2,893	4,226
3 persons . . . . .	23,890	5,889	11,909	1,722	5,349	4,761	4,899	1,222	2,343	1,295	1,192	671	484
4 persons . . . . .	27,428	10,859	13,498	1,928	6,090	5,367	2,632	665	1,172	766	439	246	181
5 persons or more . . . . .	25,768	12,696	10,527	2,447	4,718	3,282	2,046	726	818	472	500	306	174
Race													
White:													
1 person . . . . .	24,551	66	11,629	789	3,411	7,333	4,767	1,227	1,668	1,815	8,089	3,660	4,296
2 persons . . . . .	50,537	2,125	16,603	1,752	6,423	8,305	17,710	4,339	7,661	5,564	14,099	5,510	8,377
3 persons . . . . .	39,719	9,961	19,304	2,789	8,397	7,984	8,485	1,932	3,687	2,810	1,970	993	935
4 persons . . . . .	47,484	19,310	22,582	3,204	9,710	9,486	4,959	1,064	2,044	1,798	633	322	289
5 persons or more . . . . .	39,566	19,909	15,827	3,399	6,733	5,540	3,213	951	1,132	1,079	617	339	251
Black:													
1 person . . . . .	2,939	*21	1,360	173	496	684	760	382	225	146	799	583	211
2 persons . . . . .	4,999	652	2,135	373	927	821	1,291	556	399	289	921	648	251
3 persons . . . . .	5,668	1,808	2,550	531	1,190	809	1,013	432	343	212	298	221	67
4 persons . . . . .	6,128	2,628	2,737	576	1,255	875	625	284	206	125	138	92	*35
5 persons or more . . . . .	9,213	4,609	3,539	1,146	1,647	718	869	450	311	92	197	159	*32
Family income													
Less than \$20,000:													
1 person . . . . .	16,669	56	7,563	692	2,643	4,199	2,918	1,216	1,036	662	6,132	3,378	2,728
2 persons . . . . .	19,635	1,875	5,736	1,262	2,693	1,758	4,873	2,278	1,933	631	7,151	4,152	2,951
3 persons . . . . .	13,016	4,478	5,946	1,703	2,914	1,310	1,734	884	634	205	858	600	242
4 persons . . . . .	12,120	5,768	5,296	1,784	2,601	885	834	484	273	74	223	152	62
5 persons or more . . . . .	14,277	8,022	5,151	2,267	2,081	765	894	592	209	78	210	160	43
\$20,000 or more:													
1 person . . . . .	7,725	*13	4,747	153	1,018	3,570	1,877	188	598	1,085	1,089	140	949
2 persons . . . . .	28,670	760	11,381	634	3,854	6,861	11,264	1,900	4,808	4,531	5,265	1,063	4,192
3 persons . . . . .	27,536	6,269	13,853	1,238	5,633	6,961	6,432	1,068	2,869	2,473	982	394	576
4 persons . . . . .	36,743	14,549	17,820	1,626	7,257	8,902	3,982	682	1,596	1,687	392	164	210
5 persons or more . . . . .	30,184	14,404	12,498	1,695	5,451	5,298	2,798	664	1,068	1,053	485	264	203

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown family income and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 12. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, current employment status, sex, race, family income, and labor force status: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Current employment status, sex, race, family income, and labor force status	All persons	18-44 years of age				45-64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>												
All labor force and current employment statuses <sup>3</sup> . . . . .	12.7	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
In the labor force . . . . .	6.0	4.1	9.0	4.6	2.4	10.1	20.2	8.8	5.6	15.3	23.4	11.4
Currently employed . . . . .	5.8	3.8	8.6	4.3	2.3	9.8	19.8	8.5	5.4	14.9	23.0	11.1
Unemployed . . . . .	11.0	8.8	12.3	9.5	5.0	19.0	28.0	16.9	*11.1	21.9	*33.9	*17.5
Not in the labor force . . . . .	26.5	12.6	22.4	11.1	6.3	33.0	48.2	26.0	19.5	33.1	41.5	24.8
Sex												
Male:												
In the labor force . . . . .	5.5	3.4	7.2	3.8	1.8	9.7	18.9	8.6	5.2	15.3	24.6	11.1
Currently employed . . . . .	5.3	3.2	6.9	3.6	1.7	9.4	18.4	8.4	5.0	14.7	23.4	10.8
Unemployed . . . . .	10.4	7.6	9.8	7.3	*5.6	19.0	27.6	*12.9	*14.0	*31.0	*58.3	*20.3
Not in the labor force . . . . .	33.2	18.1	29.2	17.1	9.1	45.6	56.9	41.4	29.3	34.9	43.9	26.0
Female:												
In the labor force . . . . .	6.7	5.0	12.1	5.4	3.1	10.6	22.3	9.1	6.1	15.3	22.1	11.8
Currently employed . . . . .	6.4	4.6	11.5	5.0	3.0	10.3	21.9	8.7	6.1	15.3	22.4	11.6
Unemployed . . . . .	11.5	9.9	16.4	11.4	*4.5	19.0	*27.9	20.5	*8.0	*15.2	*18.4	*14.7
Not in the labor force . . . . .	23.3	10.9	20.0	9.7	5.3	27.9	43.7	21.6	14.9	31.9	39.9	24.1
Race												
White:												
In the labor force . . . . .	5.4	3.6	8.2	4.1	2.0	9.1	18.6	8.2	5.1	14.0	21.6	11.0
Currently employed . . . . .	5.2	3.4	8.0	3.8	1.9	8.9	18.2	8.0	5.0	13.6	20.7	10.8
Unemployed . . . . .	10.1	8.1	9.8	9.9	4.7	16.2	28.0	13.6	*9.2	*22.6	*43.9	*15.7
Not in the labor force . . . . .	25.0	10.9	21.4	9.2	5.3	30.0	45.0	24.4	18.1	31.5	39.6	24.4
Black:												
In the labor force . . . . .	11.0	7.7	13.2	7.8	5.1	19.7	29.0	15.6	12.0	27.1	31.0	*19.4
Currently employed . . . . .	10.7	7.4	12.3	7.7	5.0	18.6	28.5	14.2	11.2	28.2	31.8	*20.9
Unemployed . . . . .	13.6	10.2	16.1	*7.6	*6.7	37.7	*35.4	*39.3	*36.4	*13.0	*18.8	*-
Not in the labor force . . . . .	39.8	22.7	27.2	20.2	16.7	57.9	63.2	51.3	42.4	49.4	53.9	34.5
Family income												
Less than \$20,000:												
In the labor force . . . . .	10.1	6.9	10.8	7.2	3.8	19.6	27.5	15.0	11.5	20.1	25.5	15.3
Currently employed . . . . .	9.5	6.2	9.9	6.4	3.6	19.0	26.8	14.5	10.7	19.7	25.4	14.2
Unemployed . . . . .	14.7	12.1	15.0	12.8	*6.3	28.6	35.5	*22.6	*22.2	*27.5	*26.3	*29.6
Not in the labor force . . . . .	33.9	18.1	26.0	15.4	10.0	47.8	55.8	38.7	35.5	38.0	43.6	29.5
\$20,000 or more:												
In the labor force . . . . .	4.2	2.8	6.3	3.4	2.0	7.2	14.7	7.2	4.6	10.2	16.7	8.9
Currently employed . . . . .	4.1	2.8	6.4	3.3	1.9	7.1	14.8	7.0	4.5	10.0	*14.8	8.9
Unemployed . . . . .	6.4	4.5	*4.4	*4.8	*4.1	11.3	*11.3	*13.6	*8.1	*14.5	*71.4	*7.3
Not in the labor force . . . . .	16.3	6.6	13.1	6.0	4.6	19.8	32.6	17.7	14.1	24.4	35.6	20.2

See footnotes at end of table.

**Table 12. Percent of persons 18 years of age and over assessed by respondents as being in fair or poor health and number of persons 18 years of age and over, by age, years of education completed, current employment status, sex, race, family income, and labor force status: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Current employment status, sex, race, family income, and labor force status	18-44 years of age					45-64 years of age				65 years of age and over		
	All persons	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands												
All labor force and current employment statuses <sup>3</sup> . . . . .	175,271	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
In the labor force . . . . .	118,124	83,700	10,432	33,990	38,679	30,751	6,683	12,354	11,419	3,673	1,199	2,436
Currently employed . . . . .	112,082	78,924	9,212	31,933	37,192	29,683	6,325	11,959	11,112	3,475	1,135	2,310
Unemployed . . . . .	6,041	4,776	1,220	2,056	1,488	1,068	358	395	307	198	64	126
Not in the labor force . . . . .	57,147	18,443	4,881	7,282	6,056	14,224	5,329	5,669	3,039	24,480	11,540	12,472
Sex												
Male:												
In the labor force . . . . .	65,060	45,566	6,567	17,883	20,773	17,353	4,116	6,126	6,930	2,141	662	1,453
Currently employed . . . . .	62,040	43,202	5,805	16,914	20,145	16,781	3,899	5,935	6,773	2,057	638	1,395
Unemployed . . . . .	3,020	2,364	762	969	628	572	217	190	157	84	*24	59
Not in the labor force . . . . .	18,018	4,398	1,285	1,349	1,661	4,112	1,829	1,259	962	9,508	4,588	4,744
Female:												
In the labor force . . . . .	53,063	38,134	3,865	16,107	17,906	13,398	2,566	6,228	4,488	1,531	537	983
Currently employed . . . . .	50,042	35,722	3,407	15,019	17,047	12,902	2,426	6,023	4,338	1,418	497	915
Unemployed . . . . .	3,021	2,412	458	1,088	860	496	141	205	150	114	*40	68
Not in the labor force . . . . .	39,130	14,045	3,595	5,933	4,394	10,112	3,500	4,410	2,077	14,972	6,951	7,729
Race												
White:												
In the labor force . . . . .	101,474	71,319	8,405	28,862	33,547	26,877	5,354	11,022	10,269	3,278	946	2,304
Currently employed . . . . .	97,019	67,866	7,612	27,387	32,371	26,034	5,115	10,695	9,997	3,120	905	2,189
Unemployed . . . . .	4,455	3,453	793	1,476	1,176	844	239	327	272	159	41	115
Not in the labor force . . . . .	49,012	14,626	3,527	5,812	5,101	12,256	4,159	5,170	2,797	22,130	9,877	11,845
Black:												
In the labor force . . . . .	12,803	9,504	1,676	4,351	3,410	2,979	1,120	1,103	699	320	219	98
Currently employed . . . . .	11,473	8,360	1,304	3,835	3,158	2,816	1,037	1,047	677	297	203	91
Unemployed . . . . .	1,330	1,144	372	516	252	163	83	56	*22	*23	*16	*7
Not in the labor force . . . . .	6,428	2,817	1,124	1,163	497	1,578	984	380	165	2,032	1,485	497
Family income												
Less than \$20,000:												
In the labor force . . . . .	28,436	21,327	4,686	9,656	6,895	5,625	2,359	2,230	1,011	1,485	720	763
Currently employed . . . . .	25,487	18,851	3,862	8,548	6,358	5,243	2,175	2,105	939	1,394	682	710
Unemployed . . . . .	2,949	2,476	824	1,108	537	382	184	124	72	91	*38	54
Not in the labor force . . . . .	27,083	8,366	3,022	3,275	2,021	5,629	3,095	1,855	639	13,089	7,722	5,265
\$20,000 or more:												
In the labor force . . . . .	74,359	52,579	4,195	20,089	28,186	20,276	3,205	8,117	8,895	1,504	266	1,237
Currently employed . . . . .	71,997	50,828	3,921	19,399	27,401	19,727	3,081	7,894	8,697	1,442	259	1,182
Unemployed . . . . .	2,362	1,751	274	690	785	549	124	223	198	62	*7	55
Not in the labor force . . . . .	20,504	7,720	1,150	3,124	3,406	6,076	1,297	2,822	1,934	6,708	1,758	4,893

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown labor force or employment status, unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 13. Percent of currently employed persons 18 years of age and over assessed by respondents as being in fair or poor health and number of currently employed persons 18 years of age and over, by age, years of education completed, type of occupation, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II.]

Type of occupation, sex, race, and family income	All persons 18 years of age and over	18-44 years of age				45-64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>												
All occupations <sup>3</sup> . . . . .	5.8	3.8	8.6	4.3	2.3	9.8	19.8	8.5	5.4	14.9	23.0	11.1
Managerial . . . . .	3.4	2.1	9.0	3.1	1.7	5.9	18.2	7.2	4.5	9.0	*15.7	8.2
Technical . . . . .	4.9	3.5	7.2	4.1	2.6	7.9	17.4	7.3	6.1	13.9	22.7	11.7
Service . . . . .	9.3	6.1	10.5	5.8	3.7	16.8	22.9	14.6	*8.1	16.9	19.4	*13.5
Farming . . . . .	8.9	4.7	8.5	*3.9	*1.8	13.3	22.3	*8.1	*6.8	20.2	25.4	*14.6
Craft . . . . .	6.2	4.3	7.7	4.1	2.2	11.3	17.6	8.5	*5.5	*12.1	*16.0	*8.9
Operators . . . . .	7.6	5.0	8.2	4.4	3.0	14.0	19.9	8.5	10.6	21.6	34.4	*9.8
Sex												
Male:												
Managerial . . . . .	3.2	1.7	*6.9	3.1	1.2	5.7	16.0	6.7	4.5	8.1	*17.9	*6.8
Technical . . . . .	4.1	2.2	*4.2	2.7	1.8	7.5	13.7	9.2	4.6	16.1	*31.5	12.8
Service . . . . .	7.1	4.2	7.5	4.2	*2.4	15.7	21.3	16.0	*6.9	*11.5	*12.2	*10.8
Farming . . . . .	9.2	4.6	*8.2	*4.0	*1.0	*14.1	23.1	*7.8	*7.8	20.9	26.2	*14.8
Craft . . . . .	5.8	3.9	6.3	3.8	2.2	10.8	17.3	8.0	*5.2	*12.6	*18.8	*7.8
Operators . . . . .	6.8	4.3	7.0	3.8	2.6	13.4	19.3	7.5	*10.9	24.5	*37.5	*13.3
Female:												
Managerial . . . . .	3.7	2.7	*11.9	3.1	2.2	6.3	*24.8	8.0	4.6	*11.0	*10.7	*11.4
Technical . . . . .	5.4	4.2	8.8	4.6	3.2	8.2	19.7	6.6	7.5	11.7	*15.2	10.8
Service . . . . .	10.7	7.4	12.4	6.7	5.1	17.4	23.7	13.9	*9.5	20.1	23.3	*15.7
Farming . . . . .	7.8	*5.3	*10.7	*3.1	*3.8	*10.1	*16.7	*8.0	*4.2	*16.7	*20.0	*13.3
Craft . . . . .	10.6	8.7	*19.5	*6.8	*2.1	15.1	*20.3	*12.4	*8.5	*8.7	*-	*20.0
Operators . . . . .	9.8	7.2	11.3	6.0	*4.7	15.5	21.1	10.7	*10.6	*14.5	*27.5	*-
Race												
White:												
Managerial . . . . .	3.2	1.9	8.1	2.9	1.5	5.6	17.4	7.1	4.2	7.7	*11.4	7.4
Technical . . . . .	4.7	3.3	7.5	3.9	2.3	7.5	16.8	6.8	5.8	14.0	*21.9	12.0
Service . . . . .	7.6	4.8	8.8	4.7	2.6	15.0	20.2	13.9	*6.0	13.8	*15.2	*12.3
Farming . . . . .	8.5	4.0	*7.8	*3.5	*0.9	13.2	22.9	*8.3	*6.4	19.5	24.8	*14.4
Craft . . . . .	5.9	3.8	7.1	3.7	*1.8	11.1	17.8	8.6	*4.7	*12.1	*15.9	*9.1
Operators . . . . .	6.6	4.4	8.2	3.6	*2.2	12.2	17.2	7.5	10.7	*17.2	*29.0	*8.3
Black:												
Managerial . . . . .	6.7	5.0	*18.0	*5.1	4.4	9.8	*20.0	*8.6	*9.1	*30.0	*36.4	*33.3
Technical . . . . .	7.1	5.2	*4.6	5.8	4.9	15.9	*25.4	*15.9	*13.1	*15.2	*33.3	*4.8
Service . . . . .	16.2	11.0	17.3	10.9	*5.8	24.0	32.1	17.6	*15.6	*28.1	*27.7	*26.9
Farming . . . . .	*16.5	*14.3	*14.9	*10.7	*22.2	*18.2	*21.1	*-	*100.0	*29.2	*27.3	*50.0
Craft . . . . .	9.7	8.4	*13.9	*7.1	*6.3	*12.8	*16.5	*10.5	*10.8	*12.5	*16.7	*-
Operators . . . . .	13.0	8.3	*8.9	8.6	*5.6	24.2	31.0	*15.9	*7.7	*38.3	*50.0	*21.1
Family income												
Less than \$20,000:												
Managerial . . . . .	6.1	3.7	*12.1	*4.7	2.7	14.6	*32.1	*14.1	*9.5	*14.1	*12.8	*14.7
Technical . . . . .	7.9	5.5	*7.5	7.3	3.1	15.8	26.1	13.6	13.1	17.3	*25.5	*13.8
Service . . . . .	12.7	8.5	10.1	8.9	6.0	22.6	28.5	19.5	*7.9	18.3	22.7	*11.1
Farming . . . . .	11.7	6.5	*12.0	*3.8	*4.0	16.9	24.1	*8.6	*13.2	26.8	*29.1	*21.0
Craft . . . . .	8.8	5.8	9.5	4.7	*3.0	19.0	22.4	*16.3	*5.4	*16.0	*17.0	*14.3
Operators . . . . .	9.8	6.6	9.6	5.0	*5.0	20.8	27.0	*8.8	*9.7	*25.5	*37.3	*8.5
\$20,000 or more:												
Managerial . . . . .	2.9	1.9	*9.6	2.5	1.5	4.8	16.2	5.9	3.8	*6.4	*14.8	*6.0
Technical . . . . .	3.8	2.8	6.2	3.0	2.3	6.3	12.4	6.3	5.0	9.8	*14.0	*9.3
Service . . . . .	5.8	3.6	8.6	3.3	*2.1	11.4	16.1	10.1	*7.4	*17.6	*7.6	*28.8
Farming . . . . .	4.7	*2.3	*2.2	*3.3	*0.7	*8.0	*15.5	*7.2	*1.1	*12.0	*16.2	*9.5
Craft . . . . .	5.0	3.3	4.8	3.7	*1.9	9.4	14.6	7.9	*5.4	*7.7	*14.3	*4.1
Operators . . . . .	6.1	4.0	6.1	4.0	*2.5	10.9	15.0	7.5	*10.1	*16.8	*28.2	*12.3

See footnotes at end of table

**Table 13. Percent of currently employed persons 18 years of age and over assessed by respondents as being in fair or poor health and number of currently employed persons 18 years of age and over, by age, years of education completed, type of occupation, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Type of occupation, sex, race, and family income	All persons 18 years of age and over	18-44 years of age				45-64 years of age				65 years of age and over		
		Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Number of persons in thousands												
All occupations <sup>3</sup> . . . . .	112,082	78,924	9,212	31,933	37,192	29,683	6,325	11,959	11,112	3,475	1,135	2,310
Managerial . . . . .	29,584	20,118	595	3,512	15,959	8,654	503	2,031	6,096	813	83	730
Technical . . . . .	33,668	24,408	1,378	10,524	12,449	8,264	851	4,284	3,109	996	198	798
Service . . . . .	13,475	9,454	1,808	4,576	3,000	3,418	1,344	1,534	506	603	350	252
Farming . . . . .	3,273	1,957	543	913	492	960	359	400	182	356	193	158
Craft . . . . .	12,970	9,358	1,805	5,086	2,436	3,406	1,156	1,616	604	206	94	112
Operators . . . . .	16,579	12,013	2,884	6,759	2,308	4,302	1,983	1,845	444	264	128	133
Sex												
Male:												
Managerial . . . . .	16,587	10,652	350	1,628	8,642	5,369	373	1,112	3,871	567	56	511
Technical . . . . .	12,070	8,578	475	2,873	5,212	3,020	339	1,181	1,492	472	89	383
Service . . . . .	5,361	3,910	679	1,658	1,537	1,215	414	512	274	236	125	111
Farming . . . . .	2,693	1,615	469	752	386	777	315	311	134	302	168	128
Craft . . . . .	11,806	8,573	1,615	4,689	2,246	3,050	1,032	1,436	557	183	80	103
Operators . . . . .	12,206	9,007	2,095	5,030	1,835	3,012	1,370	1,262	357	188	88	98
Female:												
Managerial . . . . .	12,997	9,466	245	1,885	7,318	3,285	129	919	2,225	246	*28	219
Technical . . . . .	21,598	15,830	903	7,651	7,237	5,244	512	3,103	1,618	524	109	415
Service . . . . .	8,114	5,544	1,129	2,918	1,463	2,203	931	1,022	232	366	225	140
Farming . . . . .	580	342	75	161	106	183	44	89	48	54	*25	*30
Craft . . . . .	1,164	785	190	397	190	356	124	180	47	*23	*14	*10
Operators . . . . .	4,373	3,006	789	1,729	472	1,290	612	583	87	76	*40	*35
Race												
White:												
Managerial . . . . .	26,746	18,046	520	3,201	14,286	7,924	452	1,888	5,561	776	70	706
Technical . . . . .	29,577	21,064	1,155	9,151	10,707	7,559	764	3,981	2,800	954	186	767
Service . . . . .	10,490	7,527	1,410	3,619	2,456	2,518	930	1,191	386	444	225	219
Farming . . . . .	2,990	1,775	463	838	467	892	314	390	177	323	165	153
Craft . . . . .	11,563	8,358	1,548	4,612	2,171	3,007	993	1,463	527	198	88	110
Operators . . . . .	13,619	9,864	2,369	5,577	1,867	3,551	1,565	1,578	389	203	93	109
Black:												
Managerial . . . . .	1,827	1,339	50	255	1,028	458	*35	116	308	*30	*11	*18
Technical . . . . .	3,029	2,509	174	1,161	1,169	488	67	230	184	*33	*12	*21
Service . . . . .	2,456	1,518	348	790	364	797	373	307	96	142	114	*26
Farming . . . . .	217	136	70	56	*9	56	*40	*8	*1	*24	*22	*2
Craft . . . . .	1,026	729	166	369	192	289	121	124	*37	*8	*6	*2
Operators . . . . .	2,499	1,808	450	1,048	302	643	375	221	*39	47	*28	*19
Family income												
Less than \$20,000:												
Managerial . . . . .	3,190	2,488	140	619	1,721	553	84	194	275	149	*39	109
Technical . . . . .	7,093	5,454	534	2,523	2,387	1,284	245	685	352	355	108	247
Service . . . . .	5,506	3,736	899	1,801	1,013	1,383	664	574	139	386	242	144
Farming . . . . .	1,379	856	280	400	173	344	174	128	*38	179	117	62
Craft . . . . .	2,886	2,205	674	1,084	436	586	326	199	56	94	53	42
Operators . . . . .	5,004	3,885	1,273	2,028	561	1,014	651	296	64	106	59	47
\$20,000 or more:												
Managerial . . . . .	23,423	15,917	378	2,496	13,011	6,992	325	1,543	5,107	513	*27	486
Technical . . . . .	22,651	16,414	660	6,768	8,963	5,769	484	2,960	2,318	468	52	416
Service . . . . .	6,223	4,577	653	2,243	1,671	1,522	459	742	311	125	66	59
Farming . . . . .	1,330	838	180	390	268	391	112	183	95	100	*37	63
Craft . . . . .	8,407	6,026	847	3,382	1,787	2,303	632	1,177	483	78	*28	49
Operators . . . . .	9,307	6,639	1,167	3,972	1,479	2,555	1,030	1,196	320	113	*39	73

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown type of occupation, unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 14. Percent of currently employed persons 18 years of age and over assessed by respondents as being in fair or poor health and number of currently employed persons 18 years of age and over, by age, industry, sex, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Industry, sex, and family income	Age							
	18 years and over	18-44 years	45-64 years	65 years and over	18 years and over	18-44 years	45-64 years	65 years and over
	Percent <sup>1</sup>				Number in thousands <sup>2</sup>			
All industries <sup>2</sup> . . . . .	5.8	3.8	9.8	14.9	112,082	78,924	29,683	3,475
Agriculture, forestry, and fisheries . . . . .	8.0	3.9	12.0	19.9	3,334	1,979	1,003	351
Mining . . . . .	5.6	*3.4	*11.6	*-	864	624	232	*8
Construction . . . . .	6.2	4.1	11.9	*13.3	7,192	5,296	1,762	135
Manufacturing . . . . .	6.2	4.0	11.1	*13.5	21,759	15,267	6,202	290
Transportation, communication, and other public utilities . . . . .	4.6	3.0	8.1	*14.8	7,948	5,522	2,311	115
Wholesale trade . . . . .	4.5	2.5	8.0	*19.8	3,732	2,644	958	131
Retail trade . . . . .	5.9	4.4	10.1	15.0	17,158	13,049	3,555	554
Finance, insurance, and real estate . . . . .	4.4	3.3	5.9	*13.6	7,697	5,349	2,046	302
Business and repair services . . . . .	6.5	4.8	10.3	*14.5	6,659	4,805	1,632	223
Personal services . . . . .	10.2	6.4	17.6	17.3	4,159	2,730	1,176	254
Entertainment and recreational services . . . . .	4.2	*3.3	*6.4	*9.2	1,231	931	233	67
Professional and related services . . . . .	4.9	3.3	8.4	11.0	22,421	15,527	6,183	712
Public administration . . . . .	5.3	3.3	9.5	*9.1	5,366	3,598	1,658	110
Sex								
Male:								
Agriculture, forestry, and fisheries . . . . .	8.3	3.7	13.2	20.1	2,616	1,567	756	293
Mining . . . . .	*5.4	*2.7	*12.5	*-	720	515	200	*4
Construction . . . . .	6.1	4.0	11.8	*14.3	6,499	4,783	1,589	126
Manufacturing . . . . .	5.5	3.4	10.2	*12.3	14,802	10,229	4,368	205
Transportation, communication, and other public utilities . . . . .	4.3	2.5	7.9	*16.5	5,803	3,953	1,759	91
Wholesale trade . . . . .	4.6	*2.0	8.7	*24.5	2,633	1,851	684	98
Retail trade . . . . .	4.9	3.1	9.8	17.4	8,189	6,352	1,572	264
Finance, insurance, and real estate . . . . .	4.8	2.4	7.6	*16.7	3,236	2,055	984	198
Business and repair services . . . . .	6.1	4.7	9.5	*12.3	4,018	2,880	983	155
Personal services . . . . .	7.9	5.6	13.3	*10.9	1,164	791	309	64
Entertainment and recreational services . . . . .	*3.8	*2.8	*6.1	*9.1	691	534	114	44
Professional and related services . . . . .	3.7	2.0	7.0	*7.7	7,229	4,782	2,095	352
Public administration . . . . .	4.7	2.6	9.1	*6.0	3,173	2,113	992	67
Female:								
Agriculture, forestry, and fisheries . . . . .	7.1	*4.6	*8.6	*19.0	718	412	247	58
Mining . . . . .	*6.3	*6.4	*6.3	*-	144	109	*32	*4
Construction . . . . .	6.7	*4.9	*12.1	*-	693	513	173	*8
Manufacturing . . . . .	7.6	5.3	13.3	*16.5	6,957	5,038	1,834	85
Transportation, communication, and other public utilities . . . . .	5.5	4.3	8.5	*8.3	2,145	1,569	552	*24
Wholesale trade . . . . .	4.3	*3.5	*6.2	*6.1	1,099	793	273	*33
Retail trade . . . . .	6.9	5.6	10.3	*12.5	8,970	6,697	1,983	290
Finance, insurance, and real estate . . . . .	4.1	3.9	4.4	*7.7	4,461	3,294	1,063	104
Business and repair services . . . . .	6.9	4.8	11.6	*21.5	2,642	1,925	649	68
Personal services . . . . .	11.1	6.7	19.1	*20.0	2,995	1,938	867	190
Entertainment and recreational services . . . . .	*4.8	*4.0	*6.7	*14.3	540	397	119	*23
Professional and related services . . . . .	5.5	3.8	9.1	14.1	15,192	10,744	4,088	360
Public administration . . . . .	6.1	4.2	9.8	*14.0	2,194	1,485	666	43
Family income								
Less than \$20,000:								
Agriculture, forestry, and fisheries . . . . .	10.8	5.5	16.5	27.0	1,324	846	315	163
Mining . . . . .	*11.9	*6.0	*33.3	*-	126	100	*27	*-
Construction . . . . .	8.4	5.5	18.5	*18.5	1,829	1,412	352	65
Manufacturing . . . . .	10.0	6.5	22.2	*19.0	4,256	3,283	887	86
Transportation, communication, and other public utilities . . . . .	7.6	*4.2	19.5	*17.4	1,106	863	221	*23
Wholesale trade . . . . .	9.7	*5.9	*15.7	*32.4	648	458	153	*37
Retail trade . . . . .	8.3	6.2	15.5	18.9	5,186	4,082	837	267
Finance, insurance, and real estate . . . . .	8.3	5.5	*15.3	*18.1	1,197	872	254	72
Business and repair services . . . . .	10.5	7.7	19.5	*12.9	1,810	1,322	403	85
Personal services . . . . .	14.5	8.9	25.7	*19.4	1,712	1,072	475	165
Entertainment and recreational services . . . . .	*7.5	*5.6	*15.1	*13.3	333	250	53	*30
Professional and related services . . . . .	8.4	5.7	16.9	*14.7	4,829	3,579	996	253
Public administration . . . . .	11.2	*6.0	23.9	*25.0	705	500	176	*28

See footnotes at end of table.

**Table 14. Percent of currently employed persons 18 years of age and over assessed by respondents as being in fair or poor health and number of currently employed persons 18 years of age and over, by age, industry, sex, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Industry, sex, and family income	Age							
	18 years and over	18-44 years	45-64 years	65 years and over	18 years and over	18-44 years	45-64 years	65 years and over
Family income—Con.								
\$20,000 or more:	Percent <sup>1</sup>				Number in thousands <sup>2</sup>			
Agriculture, forestry, and fisheries . . . . .	4.1	*2.5	*5.5	*10.8	1,460	907	442	111
Mining . . . . .	*5.0	*3.4	*9.7	*—	655	470	176	*8
Construction . . . . .	5.0	3.3	9.9	*8.0	4,399	3,212	1,137	50
Manufacturing . . . . .	4.8	3.1	8.7	*8.7	14,733	10,226	4,358	150
Transportation, communication, and other public utilities . . . . .	3.8	2.6	6.2	*16.0	5,912	4,116	1,720	75
Wholesale trade . . . . .	3.2	*1.8	6.3	*11.3	2,692	1,934	687	71
Retail trade . . . . .	4.5	3.2	8.2	*13.5	9,774	7,446	2,134	193
Finance, insurance, and real estate . . . . .	3.2	2.5	4.1	*10.8	5,655	3,980	1,508	166
Business and repair services . . . . .	4.1	3.0	5.7	*18.9	4,024	2,936	996	93
Personal services . . . . .	5.3	3.8	*8.4	*13.0	1,830	1,312	464	54
Entertainment and recreational services . . . . .	*3.7	*3.0	*5.6	*9.5	712	563	126	*23
Professional and related services . . . . .	3.5	2.3	6.1	*4.5	15,379	10,573	4,472	333
Public administration . . . . .	4.1	2.6	7.5	*4.2	4,111	2,756	1,283	71

<sup>1</sup>Excludes persons with health status not assessed.

<sup>2</sup>Includes persons with unknown family income and unknown industry.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 15. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, geographic region, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Geographic region, sex, race, and family income	All ages	Under 18 years of age	18-44 years of age				45-64 years of age				65 years of age and over		
			Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>													
All geographic regions <sup>3</sup> . . . . .	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
Northeast . . . . .	9.0	2.2	4.6	11.8	4.7	2.4	14.2	26.8	12.0	7.3	26.5	32.1	21.7
Midwest . . . . .	9.3	2.4	5.3	14.2	5.6	2.6	15.8	30.1	13.5	6.8	29.0	36.0	22.4
South . . . . .	12.2	3.0	6.8	15.2	6.3	3.1	22.5	38.7	17.5	10.6	37.0	47.2	25.2
West . . . . .	8.2	2.1	5.3	9.8	5.9	3.4	14.2	28.0	12.9	8.4	27.1	39.8	20.5
Sex													
Male:													
Northeast . . . . .	8.0	2.4	4.1	9.9	4.3	2.0	12.9	24.0	12.1	5.9	27.2	34.0	22.2
Midwest . . . . .	8.5	2.4	4.3	10.9	4.5	2.2	16.0	28.2	15.0	6.7	29.2	35.7	22.3
South . . . . .	10.9	3.0	5.4	12.1	5.0	2.2	21.5	36.9	16.8	10.4	37.9	49.0	25.3
West . . . . .	7.4	1.9	4.6	8.8	5.1	2.9	13.3	26.5	11.8	8.5	27.4	43.2	19.5
Female:													
Northeast . . . . .	9.8	1.9	5.1	13.8	4.9	2.8	15.3	29.3	12.0	8.9	26.1	31.0	21.3
Midwest . . . . .	10.1	2.4	6.2	17.8	6.6	3.1	15.5	32.3	12.4	6.8	28.9	36.2	22.5
South . . . . .	13.4	2.9	8.1	18.5	7.4	4.1	23.5	40.3	18.0	11.0	36.4	45.9	25.2
West . . . . .	9.0	2.4	5.9	10.8	6.6	3.8	15.0	29.4	13.8	8.3	26.9	37.4	21.2

See footnotes at end of table.

**Table 15. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, geographic region, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Geographic region, sex, race, and family income	Under 18 years of age		18–44 years of age				45–64 years of age				65 years of age and over		
	All ages	18 years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
<b>Race</b>													
Percent <sup>2</sup>													
<b>White:</b>													
Northeast . . . . .	8.6	2.0	4.2	11.4	4.4	2.0	13.0	24.7	11.3	6.9	25.7	31.2	21.3
Midwest . . . . .	8.6	2.0	4.5	12.6	5.0	2.1	14.3	27.9	12.5	6.1	27.9	34.6	21.8
South . . . . .	11.2	2.5	5.5	13.9	4.8	2.5	20.0	36.2	16.3	9.8	35.0	45.7	24.6
West . . . . .	7.9	2.0	4.9	9.0	5.6	3.0	13.4	26.6	12.8	7.9	26.0	37.9	20.5
<b>Black:</b>													
Northeast . . . . .	12.1	3.0	8.4	14.4	7.0	6.0	25.1	37.6	19.6	*13.8	38.3	40.3	33.9
Midwest . . . . .	15.9	5.4	12.5	21.1	10.8	8.3	33.6	44.9	28.9	*19.0	46.7	51.3	36.0
South . . . . .	16.4	4.6	12.2	19.7	11.5	6.7	36.8	46.3	27.7	18.8	49.1	52.9	32.9
West . . . . .	12.3	*2.7	7.9	*19.0	*8.6	*4.7	28.0	57.4	*18.0	*19.5	43.5	58.0	*18.6
<b>Family income</b>													
<b>Less than \$20,000:</b>													
Northeast . . . . .	16.6	4.4	9.7	17.8	8.5	3.9	31.6	41.5	22.9	23.0	29.5	32.8	24.9
Midwest . . . . .	15.9	4.2	8.6	16.5	8.3	4.6	31.0	41.5	24.2	17.6	33.9	38.2	28.0
South . . . . .	19.6	5.0	11.5	18.7	9.8	5.8	39.2	47.5	30.3	22.6	43.9	49.7	32.2
West . . . . .	14.0	3.6	9.1	11.7	9.9	6.2	27.8	36.9	22.9	20.3	32.7	42.3	24.2
<b>\$20,000 or more:</b>													
Northeast . . . . .	5.0	1.2	2.8	5.7	3.1	2.1	8.6	14.7	8.9	5.4	21.0	31.0	17.5
Midwest . . . . .	4.9	1.3	3.5	9.5	4.3	1.9	9.1	18.5	8.8	5.1	20.8	31.3	16.6
South . . . . .	6.0	1.4	3.5	8.8	3.5	2.3	13.0	24.2	12.1	8.5	23.4	35.7	19.2
West . . . . .	5.0	1.3	3.4	6.2	3.9	2.7	8.9	19.7	9.5	5.3	21.3	34.0	17.9
<b>Number of persons in thousands</b>													
All geographic regions <sup>3</sup> . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
Northeast . . . . .	50,111	12,179	20,956	2,819	8,332	9,652	10,152	2,504	4,457	3,126	6,824	3,016	3,726
Midwest . . . . .	57,337	15,347	24,360	2,687	10,514	10,773	2,693	4,828	3,101	6,856	3,222	3,453	4,476
South . . . . .	81,372	22,079	34,794	6,633	14,226	13,689	15,032	4,936	5,407	4,509	9,467	4,808	4,476
West . . . . .	49,730	13,674	22,033	3,174	7,755	10,880	9,018	1,880	3,331	3,722	5,006	1,693	3,253
<b>Sex</b>													
<b>Male:</b>													
Northeast . . . . .	23,980	6,195	10,298	1,429	3,864	4,925	4,753	1,195	1,825	1,702	2,734	1,134	1,569
Midwest . . . . .	27,984	7,843	12,079	1,415	5,317	5,238	5,220	1,446	2,019	1,672	2,842	1,382	1,388
South . . . . .	39,129	11,262	16,827	3,399	6,460	6,833	7,111	2,378	2,147	2,496	3,928	2,014	1,843
West . . . . .	24,359	7,073	10,759	1,609	3,591	5,438	4,382	926	1,393	2,022	2,145	721	1,397
<b>Female:</b>													
Northeast . . . . .	26,131	5,984	10,658	1,390	4,468	4,727	5,399	1,309	2,633	1,425	4,090	1,882	2,157
Midwest . . . . .	29,352	7,504	12,281	1,272	5,642	5,276	5,553	1,246	2,809	1,429	4,014	1,840	2,065
South . . . . .	42,244	10,817	17,966	3,234	7,766	6,856	7,921	2,558	3,260	2,013	5,539	2,795	2,633
West . . . . .	25,371	6,601	11,274	1,565	4,164	5,442	4,636	954	1,938	1,699	2,861	973	1,856
<b>Race</b>													
<b>White:</b>													
Northeast . . . . .	43,453	10,146	17,969	2,150	7,255	8,440	8,970	2,072	3,981	2,866	6,369	2,727	3,568
Midwest . . . . .	50,982	13,157	21,640	2,152	9,806	9,513	9,776	2,311	4,491	2,842	6,408	2,929	3,310
South . . . . .	64,648	16,467	27,562	4,887	10,924	11,555	12,553	3,597	4,732	4,111	8,066	3,746	4,178
West . . . . .	42,774	11,600	18,774	2,744	6,690	9,140	7,835	1,532	2,988	3,247	4,565	1,421	3,093
<b>Black:</b>													
Northeast . . . . .	5,410	1,686	2,316	574	937	784	1,003	371	424	196	405	276	123
Midwest . . . . .	5,423	1,908	2,265	465	1,036	743	847	352	306	169	403	271	125
South . . . . .	15,643	5,345	6,637	1,637	3,087	1,864	2,308	1,287	620	336	1,353	1,037	277
West . . . . .	2,471	778	1,103	123	455	515	400	94	133	164	191	119	70

See footnotes at end of table.

**Table 15. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, geographic region, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Geographic region, sex, race, and family income	All ages	Under 18 years of age	18–44 years of age				45–64 years of age				65 years of age and over		
			Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Family income													
Number of persons in thousands													
Less than \$20,000:													
Northeast . . . . .	13,947	3,440	4,939	1,319	2,070	1,517	2,132	997	858	274	3,436	1,913	1,507
Midwest . . . . .	18,033	4,684	6,988	1,325	3,303	2,331	2,704	1,177	1,162	353	3,657	2,084	1,556
South . . . . .	29,228	8,140	11,584	3,510	5,083	2,940	4,331	2,455	1,362	478	5,174	3,363	1,756
West . . . . .	14,509	3,935	6,182	1,554	2,476	2,129	2,087	825	702	546	2,306	1,083	1,209
\$20,000 or more:													
Northeast . . . . .	28,311	7,091	13,073	1,029	5,016	6,991	6,150	1,032	2,739	2,365	1,997	511	1,466
Midwest . . . . .	32,435	9,319	14,920	1,026	6,555	7,309	6,419	1,082	2,945	2,363	1,777	498	1,266
South . . . . .	40,340	11,203	18,598	2,101	7,139	9,305	8,053	1,563	3,108	3,357	2,486	612	1,860
West . . . . .	29,771	8,381	13,708	1,188	4,503	7,986	5,730	826	2,148	2,743	1,953	403	1,538

<sup>1</sup>Includes persons with unknown education.  
<sup>2</sup>Excludes persons with health status not assessed.  
<sup>3</sup>Includes persons with unknown family income and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

**Table 16. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, place of residence, sex, race, and family income: United States, 1987**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Place of residence, sex, race, and family income	All ages	Under 18 years of age	18–44 years of age				45–64 years of age				65 years of age and over		
			Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Percent <sup>2</sup>													
All places of residence <sup>3</sup> . . . . .	10.0	2.5	5.7	13.3	5.7	2.9	17.4	32.6	14.2	8.5	30.8	39.8	22.7
In MSA . . . . .	9.4	2.5	5.3	12.6	5.6	2.8	16.4	31.8	13.8	8.4	29.8	38.9	22.5
Central city . . . . .	11.0	3.3	6.5	14.1	7.1	3.2	20.1	35.4	16.9	9.8	30.4	38.7	23.1
Not central city . . . . .	8.3	1.9	4.5	11.1	4.7	2.5	14.1	28.7	12.1	7.6	29.3	39.0	22.1
Not in MSA . . . . .	12.0	2.5	6.9	15.5	6.0	3.7	20.5	34.7	15.4	9.1	33.4	42.0	23.1
Nonfarm . . . . .	12.1	2.5	7.1	16.0	6.1	3.6	21.4	35.7	16.4	9.3	33.4	42.4	22.7
Farm . . . . .	10.5	*2.4	4.4	*6.1	*3.9	*4.1	11.2	20.1	*7.7	*6.9	33.1	36.2	28.8
Sex													
Male:													
In MSA . . . . .	8.3	2.4	4.4	10.4	4.6	2.3	15.3	29.4	13.7	7.6	30.1	40.6	22.5
Central city . . . . .	9.5	3.2	5.2	11.8	5.7	2.5	18.5	33.2	16.2	8.5	30.8	40.9	23.0
Not central city . . . . .	7.5	1.9	3.9	9.1	4.0	2.1	13.3	26.3	12.3	7.0	29.6	40.4	22.1
Not in MSA . . . . .	11.2	2.7	5.7	12.2	5.2	2.8	20.9	33.5	15.4	11.2	34.6	43.1	22.8
Nonfarm . . . . .	11.2	2.7	5.8	12.6	5.3	2.7	21.9	34.8	16.7	11.4	34.4	43.6	21.8
Farm . . . . .	10.8	*2.6	*4.2	*4.2	*4.1	*4.5	10.6	*18.0	*6.6	*8.8	36.2	38.1	*33.7
Female:													
In MSA . . . . .	10.4	2.5	6.2	14.9	6.5	3.3	17.4	34.1	13.9	9.3	29.6	37.7	22.6
Central city . . . . .	12.3	3.4	7.6	16.3	8.2	3.9	21.4	37.3	17.4	11.1	30.2	37.5	23.2
Not central city . . . . .	9.1	2.0	5.2	13.4	5.4	2.9	14.8	31.1	11.9	8.3	29.1	38.0	22.1
Not in MSA . . . . .	12.8	2.4	8.1	19.1	6.8	4.6	20.2	35.9	15.4	6.8	32.6	41.0	23.3
Nonfarm . . . . .	12.9	2.4	8.3	19.5	6.9	4.6	20.9	36.7	16.1	6.9	32.7	41.4	23.2
Farm . . . . .	10.1	*2.6	*4.6	*10.1	*3.8	*3.7	11.8	*23.0	*8.6	*5.3	29.7	*32.7	*24.3

See footnotes at end of table.

**Table 16. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, place of residence, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II.]

Place of residence, sex, race, and family income	All ages	Under	18–44 years of age				45–64 years of age				65 years of age and over		
		18 years of age	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
<b>Race</b>													
<b>White:</b>													
In MSA . . . . .	8.7	2.0	4.9	11.1	4.8	2.3	14.6	29.1	12.7	7.7	28.4	37.2	22.0
Central city . . . . .	10.0	2.8	5.1	12.2	5.9	2.5	17.0	31.8	14.9	8.5	28.1	36.0	22.3
Not central city . . . . .	8.0	1.7	4.1	10.4	4.2	2.2	13.3	27.2	11.7	7.3	28.6	37.9	21.8
Not in MSA . . . . .	11.3	2.4	6.1	14.9	5.4	2.9	19.0	32.5	15.1	8.8	31.7	39.9	23.0
Nonfarm . . . . .	11.3	2.4	6.2	15.4	5.5	2.8	19.8	33.7	16.1	9.0	31.7	40.2	22.6
Farm . . . . .	10.3	*2.4	4.2	*5.3	*3.6	*4.1	11.2	20.2	*7.7	*6.9	32.5	35.3	28.7
<b>Black:</b>													
In MSA . . . . .	14.3	4.4	10.5	18.5	9.9	6.1	31.0	43.5	24.4	17.3	45.1	49.9	32.3
Central city . . . . .	15.1	4.3	11.3	18.8	10.5	6.7	32.9	45.4	26.2	17.6	43.8	48.0	32.7
Not central city . . . . .	12.5	4.4	8.8	17.8	8.8	5.0	26.8	39.0	19.7	16.9	49.3	55.8	*30.9
Not in MSA . . . . .	19.7	4.1	14.9	20.0	12.5	*12.4	42.7	50.0	27.2	*28.0	50.6	53.8	*30.3
Nonfarm . . . . .	19.7	4.0	15.0	20.1	12.5	*12.6	42.9	50.2	27.5	*28.0	50.4	53.9	*28.0
Farm . . . . .	*20.0	*4.3	*12.9	*16.7	*13.3	*—	*25.0	*33.3	*—	*—	*61.5	*54.5	*100.0
<b>Percent<sup>2</sup></b>													
<b>Family income</b>													
<b>Less than \$20,000:</b>													
In MSA . . . . .	16.5	4.7	9.7	15.9	9.3	4.9	33.1	42.0	25.8	23.0	35.3	40.9	27.8
Central city . . . . .	16.7	5.2	10.4	16.6	10.7	5.1	35.9	43.5	29.6	24.7	35.7	40.7	28.6
Not central city . . . . .	16.2	4.1	8.8	15.1	7.8	4.6	30.2	40.1	22.7	21.4	35.0	41.1	27.2
Not in MSA . . . . .	18.5	3.7	11.0	19.0	9.2	6.4	35.1	46.9	25.8	14.5	38.2	44.4	27.3
Nonfarm . . . . .	18.8	3.8	11.2	19.3	9.5	6.5	36.8	48.2	27.8	14.3	38.4	45.1	26.6
Farm . . . . .	14.2	*2.6	*5.3	*10.0	*3.1	*5.8	18.5	*28.6	*10.3	*12.8	35.1	32.1	*41.7
<b>\$20,000 or more:</b>													
In MSA . . . . .	5.3	1.3	3.3	7.9	3.8	2.3	10.1	20.9	9.9	6.4	21.8	33.0	18.0
Central city . . . . .	5.9	1.3	3.5	8.1	4.3	2.4	11.4	22.6	10.8	7.1	21.5	31.2	17.8
Not central city . . . . .	5.0	1.3	3.2	7.7	3.5	2.2	9.4	19.7	9.4	6.0	22.0	34.1	18.1
Not in MSA . . . . .	5.4	1.4	3.4	7.3	3.5	2.3	10.1	16.7	9.9	5.7	21.8	33.4	17.5
Nonfarm . . . . .	5.3	1.3	3.4	7.7	3.5	2.3	10.3	17.1	10.2	5.9	21.2	33.2	17.2
Farm . . . . .	6.5	*2.1	*3.4	*—	*5.2	*2.8	*6.9	*11.1	*7.4	*3.6	*27.8	*35.4	*22.2
<b>Number of persons in thousands</b>													
All places of residence <sup>3</sup> . . . . .	238,550	63,279	102,143	15,312	41,271	44,735	44,975	12,012	18,023	14,458	28,153	12,739	14,908
In MSA . . . . .	184,482	48,429	80,819	11,546	31,014	37,566	34,522	8,506	13,583	12,069	20,711	8,813	11,504
Central city . . . . .	74,787	19,084	33,249	5,607	11,860	15,467	13,411	3,928	4,970	4,360	9,043	4,037	4,832
Not central city . . . . .	109,695	29,345	47,571	5,939	19,154	22,100	21,112	4,578	8,612	7,709	11,667	4,776	6,672
Not in MSA . . . . .	54,068	14,850	21,324	3,766	10,257	7,169	10,452	3,506	4,440	2,389	7,442	3,926	3,404
Nonfarm . . . . .	50,888	14,152	20,277	3,602	9,746	6,801	9,516	3,263	3,940	2,214	6,943	3,654	3,192
Farm . . . . .	3,180	697	1,047	164	511	368	936	243	500	174	500	272	212
<b>Sex</b>													
<b>Male:</b>													
In MSA . . . . .	89,123	24,792	39,370	5,910	14,245	18,826	16,457	4,159	5,485	6,632	8,505	3,474	4,875
Central city . . . . .	35,355	9,782	15,882	2,754	5,309	7,641	6,187	1,832	1,962	2,321	3,505	1,476	1,957
Not central city . . . . .	53,768	15,010	23,488	3,156	8,936	11,185	10,270	2,327	3,524	4,312	5,000	1,998	2,918
Not in MSA . . . . .	26,328	7,581	10,594	1,942	4,987	3,609	5,009	1,786	1,899	1,260	3,144	1,776	1,322
Nonfarm . . . . .	24,682	7,228	10,047	1,847	4,715	3,431	4,531	1,643	1,655	1,181	2,876	1,618	1,221
Farm . . . . .	1,646	353	547	95	273	177	477	143	243	80	268	159	101
<b>Female:</b>													
In MSA . . . . .	95,359	23,637	41,450	5,636	16,769	18,741	18,066	4,347	8,097	5,437	12,206	5,339	6,629
Central city . . . . .	39,432	9,303	17,367	2,853	6,551	7,826	7,224	2,096	3,009	2,040	5,539	2,562	2,875
Not central city . . . . .	55,926	14,335	24,083	2,783	10,218	10,915	10,842	2,251	5,089	3,397	6,667	2,778	3,755
Not in MSA . . . . .	27,740	7,268	10,730	1,824	5,270	3,560	5,444	1,720	2,541	1,128	4,298	2,149	2,082
Nonfarm . . . . .	26,206	6,924	10,230	1,755	5,032	3,370	4,985	1,620	2,285	1,034	4,066	2,037	1,972
Farm . . . . .	1,535	344	500	69	238	191	459	100	257	95	232	113	111

See footnotes at end of table.

**Table 16. Percent of persons assessed by respondents as being in fair or poor health and number of persons, by age, years of education completed, place of residence, sex, race, and family income: United States, 1987—Con.**

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Place of residence, sex, race, and family income	All ages	Under 18 years of age	18–44 years of age				45–64 years of age				65 years of age and over		
			Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years	More than 12 years	Total education <sup>1</sup>	Less than 12 years	12 years or more
Race													
White:													
Number of persons in thousands													
In MSA . . . . .	153,739	38,532	66,993	8,826	25,615	31,971	29,615	6,598	11,981	10,762	18,599	7,429	10,833
Central city . . . . .	55,021	12,652	24,572	3,617	8,424	12,281	10,284	2,635	3,885	3,662	7,513	3,015	4,358
Not central city . . . . .	98,718	25,880	42,421	5,209	17,191	19,690	19,331	3,963	8,096	7,099	11,086	4,414	6,475
Not in MSA . . . . .	48,119	12,839	18,952	3,106	9,060	6,677	9,519	2,914	4,211	2,304	6,808	3,394	3,316
Nonfarm . . . . .	45,018	12,166	17,936	2,954	8,564	6,314	8,591	2,677	3,713	2,130	6,324	3,135	3,108
Farm . . . . .	3,101	673	1,016	152	496	364	928	237	498	174	484	259	209
Black:													
In MSA . . . . .	24,278	8,120	10,516	2,250	4,588	3,592	3,828	1,622	1,315	815	1,813	1,256	519
Central city . . . . .	16,770	5,649	7,075	1,695	3,044	2,288	2,661	1,150	953	513	1,385	946	408
Not central city . . . . .	7,508	2,472	3,441	555	1,544	1,305	1,167	472	362	302	428	309	111
Not in MSA . . . . .	4,669	1,596	1,805	550	927	314	729	483	169	50	539	448	76
Nonfarm . . . . .	4,592	1,572	1,773	538	912	310	721	476	167	50	526	436	75
Farm . . . . .	77	*24	*31	*12	*15	*4	*8	*6	*2	*—	*13	*11	*2
Family income													
Less than \$20,000:													
In MSA . . . . .	53,974	14,500	21,591	5,640	9,058	6,777	7,789	3,712	2,785	1,242	10,094	5,641	4,380
Central city . . . . .	28,386	7,900	11,781	3,147	4,607	3,963	3,859	1,991	1,254	596	4,845	2,753	2,049
Not central city . . . . .	25,588	6,600	9,809	2,493	4,450	2,814	3,930	1,721	1,531	646	5,248	2,888	2,331
Not in MSA . . . . .	21,744	5,699	8,101	2,069	3,874	2,139	3,464	1,743	1,299	408	4,480	2,802	1,648
Nonfarm . . . . .	20,527	5,428	7,723	1,988	3,680	2,035	3,149	1,624	1,144	370	4,227	2,635	1,564
Farm . . . . .	1,217	271	378	80	194	104	314	119	155	*39	253	166	84
\$20,000 or more:													
In MSA . . . . .	105,852	28,452	49,625	4,212	18,090	27,191	21,167	3,393	8,505	9,206	6,607	1,603	4,950
Central city . . . . .	36,781	9,075	17,651	1,632	5,840	10,121	7,537	1,353	2,931	3,220	2,517	644	1,855
Not central city . . . . .	69,071	19,377	31,974	2,581	12,250	17,069	13,630	2,040	5,574	5,986	4,090	959	3,095
Not in MSA . . . . .	25,006	7,542	10,674	1,133	5,123	4,401	5,185	1,110	2,434	1,623	1,606	421	1,179
Nonfarm . . . . .	23,566	7,216	10,142	1,074	4,871	4,181	4,735	1,029	2,175	1,512	1,473	373	1,098
Farm . . . . .	1,441	326	531	59	252	220	450	81	259	111	133	48	81

<sup>1</sup>Includes persons with unknown education.

<sup>2</sup>Excludes persons with health status not assessed.

<sup>3</sup>Includes persons with unknown family income, and races other than white or black.

NOTE: The standard errors of the estimates shown in this table can be computed using the appropriate formulas and parameters found in appendix I.

# Appendixes

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# Appendix I

## Technical notes on methods

### Background

This report is one of a series of statistical reports published by the staff of the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households included in the National Health Interview Survey (NHIS). Data are obtained on the personal, sociodemographic, and health characteristics of the family members and unrelated individuals living in these households.

Field operations for the survey are conducted by the U.S. Bureau of the Census under specifications established by NCHS. The U.S. Bureau of the Census participates in the survey planning, selects the sample, and conducts the interviews. The data are then transmitted to NCHS for preparation, processing, and analysis.

Summary reports and reports on special topics for each year's data are prepared by the staff of the Division of Health Interview Statistics for publication in Series 10 publications of NCHS. Data are also tabulated for other reports published by NCHS staff and for use by other organizations and by researchers within and outside the Government. Since 1969, public use tapes have been prepared for each year of data collection.

It should be noted that the health characteristics described by NHIS estimates pertain only to the resident, civilian noninstitutionalized population of the United States living at the time of the interview. The sample does not include persons residing in nursing homes, members of the armed forces, institutionalized persons, or U.S. nationals living abroad.

### Statistical design of NHIS

#### General design

Data from NHIS have been collected continuously since 1957. The sample design of the survey has undergone changes following each decennial census. This periodic redesign of the NHIS sample allows the incorporation of the latest population information and statistical methodology into the survey design. The data presented in this report are from an NHIS sample design first used in 1985. It is anticipated that this design will be used until 1995.

The sample design plan of NHIS follows a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target population, and the weekly samples are additive over time. This design permits estimates for high-frequency measures or for

large population groups to be produced from a short period of data collection. Estimates for low-frequency measures or for smaller population subgroups can be obtained from a longer period of data collection. The annual sample is designed so that tabulations can be provided for each of the four major geographic regions. Because interviewing is done throughout the year, there is no seasonal bias for annual estimates.

The continuous data collection also has administrative and operational advantages because fieldwork can be handled on a continuing basis with an experienced, stable staff.

#### Sample selection

The target population for NHIS is the civilian noninstitutionalized population residing in the United States. For the first stage of the sample design, the United States is considered to be a universe composed of approximately 1,900 geographically defined primary sampling units (PSU's). A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia. The 52 largest PSU's are selected into the sample with certainty and are referred to as self-representing PSU's. The other PSU's in the universe are referred to as non-self-representing PSU's. These PSU's are clustered into 73 strata, and 2 sample PSU's are chosen from each stratum with probability proportional to population size. This gives a total of 198 PSU's selected in the first stage.

Within a PSU, two types of second stage units are used: area segments and permit area segments. Area segments are defined geographically and contain an expected eight households. Permit area segments cover geographical areas containing housing units built after the 1980 census. The permit area segments are defined using updated lists of building permits issued in the PSU since 1980 and contain an expected four households.

Within each segment all occupied households are targeted for interview. On occasion, a sample segment may contain a large number of households. In this situation the households are subsampled to provide a manageable interviewer workload.

The sample was designed so that a typical NHIS sample for the data collection years 1985 to 1995 will consist of approximately 7,500 segments containing about 59,000 assigned households. Of these households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000 occupied households will yield a probability sample of about 127,000 persons.

## Features of the NHIS sample redesign

Starting in 1985, the NHIS design incorporated several new design features. The major changes include the following:

1. *The use of an all-area frame.* The NHIS sample is now designed so that it can serve as a sample frame for other NCHS population-based surveys. In previous NHIS designs about two-thirds of the sample was obtained from lists of addresses compiled at the time of the decennial census; that is, a list frame. Due to U.S. Bureau of the Census confidentiality restrictions, these sample addresses could be used only for those surveys being conducted by the U.S. Bureau of the Census. The methodology used to obtain addresses in the 1985 NHIS area frame does not use the census address lists. The sample addresses thus obtained can be used as a sampling frame for other NCHS surveys.
2. *The NHIS as four panels.* Four national subdesigns, or panels, constitute the full NHIS. Each panel contains a representative sample of the U.S. civilian noninstitutionalized population. Each of the four panels has the same sampling properties, and any combination of panels defines a national design. Panels were constructed to facilitate the linkage of NHIS to other surveys, and also to efficiently make large reductions in the size of the sample by eliminating panels from the survey.

In 1987 the sample consisted of 8,282 segments containing 61,009 assigned households. Of the 49,569 households eligible for interview, 47,240 households were actually interviewed, resulting in a sample of 122,859 persons.
3. *The oversampling of black persons.* One of the goals in designing the current NHIS was to improve the precision of estimates for black persons. This was accomplished by the use of differential sampling rates in PSU's with between about 5 and 50 percent black populations. Sampling rates for selection of segments were increased in areas known to have the highest concentrations of black persons. Segment sampling rates were decreased in other areas within the PSU to ensure that the total sample in each PSU was the same size as it would have been without oversampling black persons.
4. *The reduction of the number of sampled PSU's.* Interviewer travel to sample PSU's constitutes a large component of the total field costs for the NHIS. The previous NHIS design included 376 PSU's. Research showed that reducing the number of sample PSU's while increasing the sample size within PSU's would reduce travel costs and also maintain the reliability of health estimates (4). The design now contains 198 PSU's.
5. *The selection of two PSU's per non-self-representing stratum.* In the previous design, one PSU was selected from each non-self-representing stratum. This feature necessitated the use of less efficient variance estimation procedures; the selection of two PSU's allows more efficient variance estimation methodology (4).

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NOTE: A list of references follows the text.

## Collection and processing of data

The NHIS questionnaire contains two major parts: The first consists of topics that remain relatively the same from year to year. Among these topics are the incidence of acute conditions, the prevalence of chronic conditions, persons limited in activity due to chronic conditions, restriction in activity due to impairment or health problems, and utilization of health care services involving physician care and short-stay hospitalization. The second part consists of special topics added as supplements to each year's questionnaire.

Careful procedures are followed to ensure the quality of data collected in the interview. Most households in the sample are contacted by mail before the interviewers arrive. Potential respondents are informed of the importance of the survey and assured that all information obtained in the interview will be held in strict confidence. Interviewers make repeated trips to a household when a respondent is not immediately found. The success of these procedures is indicated by the response rate for the survey, which has been between 96 and 98 percent over the years.

When contact is made, the interviewer attempts to have all family members of the household 19 years of age and over present during the interview. When this is not possible, proxy responses for absent adult family members are accepted. In most situations, proxy respondents are used for persons under 19 years of age. Persons 17 and 18 years of age may respond for themselves, however.

Interviewers undergo extensive training and retraining. The quality of their work is checked by means of periodic observation and by reinterview. Their work is also evaluated by statistical studies of the data they obtain in their interviews. A field edit is performed on all completed interviews so that if there are any problems with the information on the questionnaire, respondents may be recontacted to solve the problem.

Completed questionnaires are sent from the U.S. Bureau of the Census field offices to NCHS for coding and editing. To ensure the accuracy of coding, a 5-percent sample of all questionnaires is recoded and keyed by other coders. A 100-percent verification procedure is used if certain error tolerances are exceeded. Staff of the Division of Health Interview Statistics then edit the files to remove impossible and inconsistent codes.

The interview, fieldwork, and data processing procedures summarized above are described in detail in Series 1, No. 18 (5).

## Estimation procedures

Because the design of NHIS is a complex multistage probability sample, it is necessary to reflect these complex procedures in the derivation of estimates. The estimates presented in this report are based upon 1987 sample person counts weighted to produce national estimates. The weight for each sample person is the product of four component weights:

1. *Probability of selection.* The basic weight for each person is obtained by multiplying the reciprocals of the prob-

abilities of selection at each step in the design: PSU, segment, and household.

2. *Household nonresponse adjustment within segment.* In NHIS, interviews are completed in about 96 percent of all eligible households. Because of household nonresponse, a weighting adjustment is required. The nonresponse adjustment weight is a ratio with the number of households in a sample segment as the numerator and the number of households actually interviewed in that segment as the denominator. This adjustment reduces bias in an estimate to the extent that persons in the noninterviewed households have the same characteristics as the persons in the interviewed households in the same segment.
3. *First-stage ratio adjustment.* The weight for persons in the non-self-representing PSU's is ratio-adjusted to the 1980 population within four race-residence classes of the non-self-representing strata within each geographic region.
4. *Poststratification by age-sex-race.* Within each of 60 age-sex-race cells (table I), a weight is constructed each quarter to ratio adjust the first-stage population estimate based on the NHIS to an independent estimate of the population of each cell. These independent estimates are prepared by the U.S. Bureau of the Census and are updated quarterly.

The main effect of the ratio-estimating process is to make the sample more closely representative of the target population by age, sex, race, and residence. The poststratification adjustment helps to reduce the component of bias resulting from sampling frame undercoverage; furthermore, this adjustment frequently reduces sampling variance.

As noted, NHIS data were collected on a weekly basis, with each week's sample representing the resident, civilian noninstitutionalized population of the United States living during that week. The weekly samples are consolidated to produce quarterly files (each consisting of data for 13 weeks). Weights to adjust the data to represent the U.S. population are assigned to each of the four quarterly files. These quarterly files are later consolidated to produce the annual file, which is the basis of most tabulations of NHIS data.

**Table I. The 60 poststratification age-sex-race cells in the National Health Interview Survey**

Age	Black		All other	
	Male	Female	Male	Female
Under 1 year	X	X	X	X
1-4 years	X	X	X	X
5-9 years	X	X	X	X
10-14 years	X	X	X	X
15-17 years	X	X	X	X
18-19 years	X	X	X	X
20-24 years	X	X	X	X
25-29 years	X	X	X	X
30-34 years	X	X	X	X
35-44 years	X	X	X	X
45-49 years	X	X	X	X
50-54 years	X	X	X	X
55-64 years	X	X	X	X
65-74 years	X	X	X	X
75 years and over	X	X	X	X

NOTE: A list of references follows the text.

## Reliability of the estimates

Because NHIS estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey and processing procedures. There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling errors. To the extent possible, these types of errors are kept to a minimum by methods built into the survey procedures described earlier (6). Although it is very difficult to measure the extent of bias in NHIS, several studies have been conducted to examine this problem. The results have been published in several reports (7-10).

## Nonsampling errors

*Interviewing process*—Information, such as the number of days of restricted activity caused by the condition, can be obtained more accurately from household members than from any other source because only the persons concerned are in a position to report this information. However, there are limitations to the accuracy of diagnostic and other information collected in household interviews. For example, for diagnostic information, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. Furthermore, a respondent may not answer a question in the intended manner because he or she has not properly understood the question, has forgotten the event, does not know, or does not wish to divulge the answer. Regardless of the type of measure, all NHIS data are estimates of known reported morbidity, disability, and so forth.

*Population estimates*—Some of the published tables include population figures for specified categories. Except for overall totals for the 60 age, sex, and race groups, which are adjusted to independent estimates, these figures are based on the sample of households in NHIS. They are given primarily to provide denominators for rate computation, and for this purpose they are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and race mentioned above, the population figures may differ from figures (which are derived from different sources) published in reports of the U.S. Bureau of the Census. Official population estimates are presented in the U.S. Bureau of the Census reports in Series P-20, P-25, and P-60.

*Rounding of numbers*—In published tables, the figures are rounded to the nearest thousand, although they are not necessarily accurate to that detail. Derived statistics, such as rates and percent distributions, are computed after the estimates on which these are based have been rounded to the nearest thousand.

*Combining data years*—To reduce sampling error, data for a number of years may be combined. However, in so doing, the questionnaire for each of the years should be checked, because even a small change in the questionnaire design may lead to large changes in the derived estimates. This caution also applies to using NHIS data on health measures

where changes in other events, such as legislative changes, have occurred over time.

### Sampling errors

The standard error is primarily a measure of sampling error, that is, the variations that might occur by chance because only a sample of the population is surveyed. The chances are about 68 in 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 in 100 that the difference would be less than twice the standard error and about 99 in 100 that it would be less than 2½ times as large.

Individual standard errors were not computed for each estimate in this report. Instead, standard errors were computed for a broad spectrum of estimates. Regression techniques were then applied to produce equations from which a standard error for any estimate can be approximated. The regression equations, represented by parameters *a* and *b*, are presented in table II. Rules explaining their use are presented in the section below.

The reader is cautioned that this procedure will give an approximate standard error of an estimate rather than the precise standard error. The reader is further cautioned that particular care should be exercised when the denominator is small.

### General rules for determining standard errors

To produce approximate standard errors for NHIS estimates, the reader must first determine the type of characteristic to be estimated, that is, the parameter set in table II 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 three 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 any combination of the poststratification age-sex-race cells in table I, then its value has been adjusted to official U.S. Bureau of the Census figures and its standard error is assumed to be 0.0. This corresponds to parameter

set XI in table II. As an example, this would be the case for the number of persons in the U.S. target population or the number of black persons in the 18–44 year age group. Although the race class “white” is not specifically adjusted to U.S. Bureau of the Census figures, it dominates the poststratification “all other” race class; consequently, age-sex-“all other” race combinations of table I can be treated as age-sex-white combinations for the purpose of approximating standard errors.

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 by using the parameters provided in table II and formula 1 below.

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

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

**Rule 2. For rates, proportions, and percents when the denominator is generated by the poststratification age-sex-race classes (table I)**—In this case, the denominator has no sampling error. For example, rule 2 would apply to the estimated number of persons in fair or poor health for black persons 65 years of age and over because the denominator is a combination of the poststratification cells. Approximate standard errors for such estimates can be computed using table II *a* and *b* parameters associated with the numerator characteristic 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

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

**Table II. Estimated standard error parameters for the National Health Interview Survey, 1987**

Parameter set	Characteristic	Estimated parameters	
		a	b
I	Number of acute conditions . . . . .	0.000225	67,800
II	Days of restricted activity or bed days . . . . .	0.000363	475,000
III	Days lost from work or school . . . . .	0.000217	355,000
IV	Number of episodes of persons injured . . . . .	0.000769	62,100
V	Prevalence of chronic conditions . . . . .	0.0000893	12,200
VI	Number of physician contacts based on a 2-week reference period . . . . .	0.0000282	166,000
VII	Hospital days based on a 12-month reference period . . . . .	0.000320	54,300
VIII	Hospital discharges based on a 6-month reference period . . . . .	0.000187	6,220
IX	Hospital discharge days based on a 6-month reference period . . . . .	0.00194	82,300
X	Population estimates for demographic, socioeconomic, and health characteristics . . . . .	0.0000307	3,640
XI	Age-sex-race population based upon combining the poststratification cells of table I . . . . .	0.0	0.0

NOTE: The 1987 NHIS was based on a full sample. Therefore, 47,240 households were interviewed, resulting in a sample of 122,859 persons.

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 II associated with the 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

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

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

Rule 4. *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:

$$SE(x_1 - x_2) = \sqrt{SE(x_1)^2 + SE(x_2)^2 - 2rSE(x_1)SE(x_2)} \quad (4)$$

where  $SE(x_1)$  and  $SE(x_2)$  are computed using rules 1–3 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.

#### Relative standard errors

Prior to 1985, relative standard error (RSE) curves were presented in *Current estimates* 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

*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 groups according to race—“white,” “black,” and “all other races.” The “all other races” category includes American Indian, Chinese, Japanese, Hawaiian, and all other races. Mexican, Puerto Rican, and Cuban persons are included with “white” unless definitely known to be Indian or of another race.

*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 is included, for example, wages, salaries, rents from property, pensions, and help from relatives.

*Usual major activity*—All persons in the population are classified according to their usual activity during the 12-month period prior to the week of interview. The “usual” activity, in case more than one is reported, is the one at which the person spent the most time during the 12-month period. Children under 5 years of age are classified as “preschool.” All persons 5–17 years of age are classified as “school age.”

The categories of usual activity used in this report for persons 18 years of age and over are *usually working*, *usually going to school*, *usually keeping house*, and *something else*. For several reasons these categories are not comparable with somewhat similarly named categories in official Federal labor force statistics. First, the responses concerning usual activity are accepted without detailed questioning since the objective of the question is not to estimate the numbers of persons in labor force categories but to identify crudely certain population groups that may have differing health problems. Second, the figures represent the usual activity status over the period of an entire year, whereas official labor force statistics relate to a much shorter period, usually 1 week. Third, the minimum age for usually working persons is 18 in the National Health Interview Survey, and the official labor force categories include all persons aged 14 or older. Finally, in the definitions of specific categories that follow, certain marginal groups are classified differently to simplify procedures.

*Usually working* categorizes persons 18 years of age and over who are paid employees; self-employed in their own business, profession, or in farming; or unpaid employees in a family business or farm. Work around the house or volunteer or unpaid work such as for a church is not counted as working.

*Usually going to school* designates persons 18 years of age and over whose major activity is going to school.

*Usually keeping house* signifies persons 18 years of age and over whose major activity is described as “keeping house” and who cannot be classified as “working.”

*Something else* takes in all persons 18 years of age and over not classified as “working,” “retired,” or “going to school,” and women 18 years of age and over not classified as “keeping house.”

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

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

*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.

*Metropolitan statistical area*—The definitions 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.

The definition of an individual MSA involves two considerations: first, a city or cities of specified population that constitute the central city and identify the county in which it is located as the central county; second, economic and

social relationships with contiguous counties (except in New England) that are metropolitan in character so that the periphery of the specific metropolitan area may be determined. MSA's are not limited by State boundaries. In New England MSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on MSA's as defined in the 1970 census and does not include any subsequent additions or changes.

*Central city*—Each MSA must include at least one central city. The complete title of an MSA identifies the central city or cities. If only one central city is designated, then it must have 50,000 inhabitants or more. The area title may include, in addition to the largest city, up to two city names on the basis and in the order of the following criteria: (1) the additional city has at least 250,000 inhabitants or (2) the additional city has a population of one-third or more of that of the largest city and a minimum population of 25,000. An exception occurs where two cities (the smaller of which must have a population of at least 15,000) have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000.

*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 as 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 (1) persons receiving revenue from an enterprise but not participating in its operation, (2) persons doing housework or charity work for which they received no pay, (3) seasonal workers during the portion of the year they were not working, and (4) persons who were not working, even though having a job or business, but were on layoff or looking for work.

The number of currently employed persons estimated from the National Health Interview Survey (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, and CPS estimates are for persons 16 years of age and over; (2) NHIS uses a 2-week reference period, whereas CPS uses a 1-week reference period; (3) NHIS is a continuing survey with separate samples taken weekly, whereas CPS is a monthly sample taken for the survey week that 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 18, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

*Occupation*—A person's occupation may be defined as his or her principal job or business. For the purposes of this survey, the principal job or business is defined in one of the following ways. If someone worked during the 2-week reference period of the interview, or had a job or business, the question concerning occupation applies to his or her job during that period. If the respondent held more than one job, the question is directed to the one at which he or she spent the most time. For the unemployed, this question refers to their last full-time civilian job. Those who have a job to which they have not yet reported, if they have never had a previous job or business, are classified as "new workers."

The classification of occupations presented in this report is based on the *Classified Index of Occupations and Industries* of the U.S. Bureau of the Census.

*Industry*—The industry in which a person was reportedly working is classified by the major activity of the establishment in which he or she worked. The only exceptions, the few establishments classified according to the major activity of the parent organization, are as follows: laboratories, warehouses, repair shops, and storage facilities.

The classification of industry presented in this report is based on the *Classified Index of Occupations and Industries*, U.S. Bureau of the Census, and the *Standard Industrial Classification Manual*, U.S. Office of Management and Budget.

*Marital status*—Marital status is classified by the following four categories:

*Current married*—includes all persons not separated from their spouses for reasons of marital discord. Persons living apart due to circumstances of their employment are considered married. Persons living together as husband and wife are considered married, regardless of legal status.

*Separated and divorced*—includes persons who are legally separated or divorced or who are living apart for reasons of marital discord.

*Widowed*—includes persons who have lost their spouse due to death.

*Never married*—includes persons who were never married and persons whose only marriage was annulled.

*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, other Spanish. Respondents make this determination by looking at a flashcard that

contains the above-listed Hispanic groups and deciding if any of them are the person's national origin or ancestry. The Hispanic population includes all Hispanic people regardless of race.

*Non-Hispanic*—For this report, persons not classified as Hispanic are non-Hispanic. This includes persons whose Hispanic status is unknown.

*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 sizes and compositions. 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 categories rather than in specific amounts of money, the NHIS estimates of persons living in poverty will vary slightly from the Current Population Survey estimates.

*Education*—The categories of educational status show the years of school completed. Only years completed in regular schools, 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 schools outside the regular school system is not counted in determining the highest grade of school completed.

*Family size*—Family size refers to the number of persons who are related by blood, marriage, or adoption who are living together in the same household. Although the usual household contains only the primary family, a household can contain secondary families as well as individuals related to the family. A lodger and his family who are not related to the head of the household or a resident employee and his wife living in are considered a secondary family and not part of the primary family. However, if the son of the head of the household and the son's wife and children are members of the household, this subfamily is treated as part of the primary family.



**L. DEMOGRAPHIC BACKGROUND PAGE**

<p><b>L1</b></p>	<p>Refer to age.</p>	<p><b>L1</b></p>	<p><input type="checkbox"/> Under 5 (NP)  <input type="checkbox"/> 5-17 (2)  <input type="checkbox"/> 18 and over (1)</p>
<p><b>1 a. Did -- EVER serve on active duty in the Armed Forces of the United States?</b></p> <hr/> <p><b>b. When did -- serve?</b></p> <p>Mark box in descending order of priority.          Thus, if person served in Vietnam and in Korea mark VN.</p> <p>Vietnam Era (Aug. '64 to April '75) . . . . . VN          Korean War (June '50 to Jan. '55) . . . . . KW          World War II (Sept. '40 to July '47) . . . . . WWII          World War I (April '17 to Nov. '18) . . . . . WWI          Post Vietnam (May '75 to present) . . . . . PVN          Other Service (all other periods) . . . . . OS</p> <p><b>c. Was -- EVER an active member of a National Guard or military reserve unit?</b></p> <hr/> <p><b>d. Was ALL of -- active duty service related to National Guard or military reserve training?</b></p>		<p><b>1 a.</b></p>	<p>1 <input type="checkbox"/> Yes          2 <input type="checkbox"/> No (2)</p> <hr/> <p><b>b.</b></p> <p>1 <input type="checkbox"/> VN                      5 <input type="checkbox"/> PVN          2 <input type="checkbox"/> KW                      8 <input type="checkbox"/> OS          3 <input type="checkbox"/> WWII                    9 <input type="checkbox"/> DK          4 <input type="checkbox"/> WWI</p> <hr/> <p><b>c.</b></p> <p><input type="checkbox"/> Yes   2 <input type="checkbox"/> No (2)   7 <input type="checkbox"/> DK (2)</p> <hr/> <p><b>d.</b></p> <p>1 <input type="checkbox"/> Yes   3 <input type="checkbox"/> No            9 <input type="checkbox"/> DK</p>
<p><b>2 a. What is the highest grade or year of regular school -- has ever attended?</b></p> <hr/> <p><b>b. Did -- finish the (number in 2a) [grade/year]?</b></p>		<p><b>2 a.</b></p>	<p>00 <input type="checkbox"/> Never attended or kindergarten (NP)</p> <p>Elem: 1 2 3 4 5 6 7 8          High: 9 10 11 12          College: 1 2 3 4 5 6 +</p> <hr/> <p><b>b.</b></p> <p>1 <input type="checkbox"/> Yes   2 <input type="checkbox"/> No</p>
<p>Hand Card R. Ask first alternative for first person; ask second alternative for other persons.</p> <p><b>3 a. What is the number of the group or groups which represents -- race?</b>          [What is -- race?]</p> <p>Circle all that apply</p> <p>1 - Aleut, Eskimo, or American Indian                      4 - White          2 - Asian or Pacific Islander                                      5 - Another group not listed - Specify          3 - Black</p> <p>Ask if multiple entries:</p> <p><b>b. Which of those groups; that is, (entries in 3a) would you say BEST represents -- race?</b></p> <hr/> <p><b>c. Mark observed race of respondent(s) only.</b></p>		<p><b>3 a.</b></p>	<p>1   2   3   4   5   <input checked="" type="checkbox"/></p> <p>_____</p> <p>(Specify)</p> <hr/> <p><b>b.</b></p> <p>1   2   3   4   5   <input checked="" type="checkbox"/></p> <p>_____</p> <p>(Specify)</p> <hr/> <p><b>c.</b></p> <p>1 <input type="checkbox"/> W   2 <input type="checkbox"/> B            3 <input type="checkbox"/> O</p>
<p>Hand Card O.</p> <p><b>4 a. Are any of those groups -- national origin or ancestry? (Where did -- ancestors come from?)</b></p> <hr/> <p><b>b. Please give me the number of the group.</b>          Circle all that apply.</p> <p>1 - Puerto Rican    5 - Chicano          2 - Cuban    6 - Other Latin American          3 - Mexican/Mexicano    7 - Other Spanish          4 - Mexican American</p>		<p><b>4 a.</b></p>	<p>1 <input type="checkbox"/> Yes (Mark "Hispanic" box, THEN 4b)          2 <input type="checkbox"/> No (NP)</p> <hr/> <p><b>b.</b></p> <p>1   2   3   4   5   6   7</p>

**L. DEMOGRAPHIC BACKGROUND PAGE, Continued**

<b>L2</b>	Refer to "Age" and "Wa/Wb" boxes in C1.	<b>L2</b>	0 <input type="checkbox"/> Under 18 (NP) 1 <input type="checkbox"/> Wa box marked (6a) 2 <input type="checkbox"/> Wb box marked (5a) 3 <input type="checkbox"/> Neither box marked (5b)
	<b>5a. Earlier you said that — has a job or business but did not work last week or the week before. Was — looking for work or on layoff from a job during those 2 weeks?</b> ----- <b>b. Earlier you said that — didn't have a job or business last week or the week before. Was — looking for work or on layoff from a job during those 2 weeks?</b> ----- <b>c. Which, looking for work or on layoff from a job?</b>	<b>5a.</b> 1 <input type="checkbox"/> Yes (5c)      2 <input type="checkbox"/> No (6b) <b>b.</b> 1 <input type="checkbox"/> Yes              2 <input type="checkbox"/> No (NP) <b>c.</b> 1 <input type="checkbox"/> Looking (6c)    3 <input type="checkbox"/> Both (6b) 2 <input type="checkbox"/> Layoff (6b)	
	<b>6a. Earlier you said that — worked last week or the week before. Ask 6b.</b> ----- <b>b. For whom did — work? Enter name of company, business, organization, or other employer.</b> ----- <b>c. For whom did — work at — last full-time job or business lasting 2 consecutive weeks or more? Enter name of company, business, organization, or other employer, or mark "NEV" or "AF" box in person's column.</b> ----- <b>d. What kind of business or industry is this? For example, TV and radio manufacturing, retail shoe store, State Labor Department, farm.</b> ----- If "AF" in 6b/c, mark "AF" box in person's column without asking. <b>e. What kind of work was — doing? For example, electrical engineer, stock clerk, typist, farmer.</b> ----- <b>f. What were — most important activities or duties at that job? For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete.</b> ----- Complete from entries in 6b—f. If not clear, ask: <b>g. Was —</b> An employee of a PRIVATE company, business or individual for wages, salary, or commission . . . . . P A FEDERAL government employee? . . . . . F A STATE government employee? . . . . . S A LOCAL government employee? . . . . . L  Self-employed in OWN business, professional practice, or farm? Ask: Is the business incorporated? . . . . . I Yes . . . . . I No . . . . . SE Working WITHOUT PAY in family business or farm? . . . . . WP — NEVER WORKED or never worked at a full-time job lasting 2 weeks or more . . . . . NEV	<b>6b. and c.</b> Employer <input type="checkbox"/> NEV (6g) <input type="checkbox"/> AF (6e)  <b>d.</b> Industry  <b>e.</b> Occupation <input type="checkbox"/> AF (NP)  <b>f.</b> Duties  <b>g.</b> Class of worker 1 <input type="checkbox"/> P                      5 <input type="checkbox"/> I 2 <input type="checkbox"/> F                      6 <input type="checkbox"/> SE 3 <input type="checkbox"/> S                      7 <input type="checkbox"/> WP 4 <input type="checkbox"/> L                      8 <input type="checkbox"/> NEV	
FOOTNOTES			

**L.DEMOGRAPHIC BACKGROUND PAGE, Continued**

<p>Mark box if under 14. If "Married" refer to household composition and mark accordingly.</p> <p><b>7. Is — now married, widowed, divorced, separated, or has — never been married?</b></p>		<p><b>7.</b></p> <p>0 <input type="checkbox"/> Under 14          1 <input type="checkbox"/> Married — spouse in HH          2 <input type="checkbox"/> Married — spouse not in HH          3 <input type="checkbox"/> Widowed          4 <input type="checkbox"/> Divorced          5 <input type="checkbox"/> Separated          6 <input type="checkbox"/> Never married</p>																														
<p><b>8a. Was the total combined FAMILY income during the past 12 months — that is, yours, (read names, including Armed Forces members living at home) 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.</b></p> <p><i>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.</i></p> <p><i>Read parenthetical phrase if Armed Forces member living at home or if necessary.</i></p> <p><b>b. Of those income groups, which letter best represents the total combined FAMILY income during the past 12 months (that is, yours, (read names, including Armed Forces members living at home))? Include wages, salaries, and other items we just talked about.</b></p> <p><i>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.</i></p>		<p><b>8a.</b></p> <p>1 <input type="checkbox"/> \$20,000 or more (Hand Card I)          2 <input type="checkbox"/> Less than \$20,000 (Hand Card J)</p> <p><b>b.</b></p> <table border="0"> <tr> <td>00 <input type="checkbox"/> A</td> <td>10 <input type="checkbox"/> K</td> <td>20 <input type="checkbox"/> U</td> </tr> <tr> <td>01 <input type="checkbox"/> B</td> <td>11 <input type="checkbox"/> L</td> <td>21 <input type="checkbox"/> V</td> </tr> <tr> <td>02 <input type="checkbox"/> C</td> <td>12 <input type="checkbox"/> M</td> <td>22 <input type="checkbox"/> W</td> </tr> <tr> <td>03 <input type="checkbox"/> D</td> <td>13 <input type="checkbox"/> N</td> <td>23 <input type="checkbox"/> X</td> </tr> <tr> <td>04 <input type="checkbox"/> E</td> <td>14 <input type="checkbox"/> O</td> <td>24 <input type="checkbox"/> Y</td> </tr> <tr> <td>05 <input type="checkbox"/> F</td> <td>15 <input type="checkbox"/> P</td> <td>25 <input type="checkbox"/> Z</td> </tr> <tr> <td>06 <input type="checkbox"/> G</td> <td>16 <input type="checkbox"/> Q</td> <td>26 <input type="checkbox"/> ZZ</td> </tr> <tr> <td>07 <input type="checkbox"/> H</td> <td>17 <input type="checkbox"/> R</td> <td></td> </tr> <tr> <td>08 <input type="checkbox"/> I</td> <td>18 <input type="checkbox"/> S</td> <td></td> </tr> <tr> <td>09 <input type="checkbox"/> J</td> <td>19 <input type="checkbox"/> T</td> <td></td> </tr> </table>	00 <input type="checkbox"/> A	10 <input type="checkbox"/> K	20 <input type="checkbox"/> U	01 <input type="checkbox"/> B	11 <input type="checkbox"/> L	21 <input type="checkbox"/> V	02 <input type="checkbox"/> C	12 <input type="checkbox"/> M	22 <input type="checkbox"/> W	03 <input type="checkbox"/> D	13 <input type="checkbox"/> N	23 <input type="checkbox"/> X	04 <input type="checkbox"/> E	14 <input type="checkbox"/> O	24 <input type="checkbox"/> Y	05 <input type="checkbox"/> F	15 <input type="checkbox"/> P	25 <input type="checkbox"/> Z	06 <input type="checkbox"/> G	16 <input type="checkbox"/> Q	26 <input type="checkbox"/> ZZ	07 <input type="checkbox"/> H	17 <input type="checkbox"/> R		08 <input type="checkbox"/> I	18 <input type="checkbox"/> S		09 <input type="checkbox"/> J	19 <input type="checkbox"/> T	
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<b>R</b>	<p><b>a. Mark first appropriate box.</b></p>	<p><b>Ra.</b></p> <p>0 <input type="checkbox"/> Under 17          1 <input type="checkbox"/> Present for all questions          2 <input type="checkbox"/> Present for some questions          3 <input type="checkbox"/> Not present</p>																														
	<p><b>b. Enter person number of respondent.</b></p>	<p><b>b.</b></p> <p>_____</p> <p>Person number(s) of respondent(s)</p>																														
<b>L3</b>	<p>Enter person number of first parent listed or mark box.</p>	<p><b>L3</b></p> <p>_____</p> <p>Person number of parent</p> <p>00 <input type="checkbox"/> None in household</p>																														
<b>L4</b>	<p>Enter person number of spouse or mark box.</p>	<p><b>L4</b></p> <p>_____</p> <p>Person number of spouse</p> <p>00 <input type="checkbox"/> None in household</p>																														
<p>FOOTNOTES</p>																																

**CARD R**

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

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**CARD O**

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

Card R  
Card O

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**CARD I**

- 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**

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**CARD J**

- A ..... Less than \$1,000 (including loss)**
- 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**
- H .. .... \$7,000 – \$7,999**
- I ..... \$8,000 – \$8,999**
- J ..... \$9,000 – \$9,999**
- K ..... \$10,000 – \$10,999**
- L ..... \$11,000 – \$11,999**
- M ..... \$12,000 – \$12,999**
- N ..... \$13,000 – \$13,999**
- O ..... \$14,000 – \$14,999**
- P ..... \$15,000 – \$15,999**
- Q ..... \$16,000 – \$16,999**
- R ..... \$17,000 – \$17,999**
- S ..... \$18,000 – \$18,999**
- T ..... \$19,000 – \$19,999**

Card I  
Card J

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