VITAL & HEALTH STATISTICS

Americans Assess Their Health: United States, 1978

Statistics are presented on the proportions of persons assessed as being in fair or poor health by respondents in household interviews conducted by the U.S. Bureau of the Census during 1978 on a sample of the civilian noninstitutionalized population. Statistics on assessed health status are shown by age, sex, race, family income, years of completed education, marital status, usual activity, labor force and employment-related characteristics, geographic region, and place of residence.

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Series 10, Number 142

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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 standards of reliability or precision (more than 30-percent relative standard error)
#	Figure suppressed to comply with confidentiality requirements

Americans Assess Their Health

by Peter W. Ries, Division of Health Interview Statistics

Introduction

The National Health Interview Survey has been a major source of national estimates of the health status of the civilian noninstitutionalized population of the United States for about 25 years. The variables most frequently used to measure health status have been disability days and limitation of activity due to chronic conditions. In 1972 an item was added to the survey questionnaire that simply asked the respondent to assess his or her health (or that of family members) in comparison with others of his or her age as excellent, good, fair, or poor.

Although this item has remained on the questionnaire since 1972, only one Series 10 report has either included this variable in any detailed tables or in the discussion of the results in the text.[1] (A forthcoming report on hearing levels[2] includes some data on respondent-assessed health status.) Limited use has been made of the concept because respondent-assessed health status is a more subjective variable than more behaviorally observable variables, such as disability days and limitation of activity.[3]

Over the years, however, there has been a growing use of data on peoples' assessment of their own or family members' health status. Since its inception in 1975, each year's edition of *Health, United States* has included data on respondent-assessed health status.[4] For two recent studies of self-assessed health status (which include discussions of the use of this concept) see references 5 and 6.[a] Self-assessed health status has been found to be highly associated with an individual's actual health status and with his or her utilization of health-care services. For instance, the results of the 1978 National Health Interview Survey indicated that persons assessed to be in excellent health spent 3.3 days in bed per person per year due to illness or injury and made 2.5 doctor visits per person per year, while the corresponding estimates for persons assessed to be in poor health were 64.2 bed days and 15.3 doctor visits per person per year.

Because assessed health status is highly associated with other more behaviorally oriented measures of health and the utilization of health services, it may be used as a type of summary statistic. In this context, it can serve at least three useful purposes: (1) to indicate the health status and utilization patterns for health services for various subgroups in the general population; (2) to show how various sociodemographic and other characteristics are associated with health-related characteristics; and (3) to serve as a control variable to make more meaningful comparisons between various subgroups in the population who differ in their overall health status.

To show as much detail as possible in this first Series 10 publication 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, and indicating associations between the percent of persons assessed in fair and poor health and the characteristics associated with each sociodemographic variable. These associations are highlighted mainly in relation to age, the reader being invited to consult the detailed tables to further interpret the data in terms of other control variables or for locating estimates for specific subgroups in the civilian noninstitutionalized population.

[a]The National Center for Health Statistics maintains a "Health Status Index Clearinghouse." For bibliographies or further information on this topic, contact Pennifer Erickson at the address shown on the back of this publication.

Summary

The following statements summarize the relationships between respondent-assessed health status and the selected sociodemographic characteristics included in this report:

1. In general, as age increases, the proportion of persons assessed as being in fair or poor health is higher. However, for persons with low family incomes and little education, the proportion of persons assessed in fair or poor health declines after the age of about 80 years.
2. A higher proportion of females than of males are assessed as being in fair or poor health.
3. Proportionately more black persons are assessed in fair or poor health than are persons of other races.
4. In general, the lower the family income, the higher the proportion of persons assessed in fair or poor health. However, for many groups at the lowest family income levels, the proportion is as high for persons in families earning $3,000–$4,999 as for persons with less than $3,000 annual family income.
5. The greater the number of years of completed education, the lower the proportion of persons assessed in fair or poor health.
6. Widowed, divorced, and separated persons report a higher proportion of persons in fair or poor health than do persons in other marital status groups.
7. Higher proportions of persons assessed in fair or poor health are found among persons—
   - Not in the labor force.
   - Living in the South.
   - Living in the central cities of SMSA's or outside SMSA's.

Source and limitations of the data

The information from the National Health Interview Survey (NHIS) presented in this report is based on data collected in a continuing nationwide survey by household interview. Each week a probability sample of households was interviewed by the U.S. Bureau of the Census to obtain information about the health and other characteristics of each member of the household in the civilian noninstitutionalized population of the United States.

During the 52 weeks in 1978, the sample was composed of approximately 41,000 households containing about 110,000 persons living at the time of the interview. The total noninterview rate was about 3.8 percent—of which 2.1 percent was the result of respondent refusal, and the remainder was primarily the result of failure to locate an eligible respondent at home despite repeated calls.

A description of the design of the survey, the methods used in estimation, and general qualifications of the data obtained from this survey are presented in appendix I. Because the estimates shown in this report are based on a sample of the population, they are subject to sampling error. Therefore, particular attention should be paid to the section entitled "Reliability of Estimates." Charts of relative sampling errors and instructions for their use are shown in appendix I.

Key terms used in the survey are defined in appendix II. Appendix III contains the parts of the questionnaire used in the interview that are relevant to this report. Also shown are the cards used by the interviewer for asking certain questions.

The estimates shown in this report on respondent-assessed health status are derived from responses to the following question: "Compared to other persons ——'s age, would you say his health is excellent, good, fair, or poor?" At least three things should be noted about these 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 1978, proxy responses were accepted from about 36 percent of all persons in the sample 17 years of age and over.

Research related to self- and proxy responses for adults in the general population has shown that whereas there may be some significant difference between health status judgments of excellent and good, and between fair and poor, there are seldom significant differences in the distributions between self- and proxy responses when the categories excellent and good are combined and compared with the combined categories fair and poor.[7] For this reason, although some data are shown in the detailed tables for each of the four categories, the discussion related to differences in assessed health status in the text is limited to comparisons for the combined category fair or poor.

Second, the question asks about a person's health and not about the possible effects of any impairments. Thus, it is entirely reasonable for a severely impaired person to state that his health is "excellent," while a person with no impairment may classify himself in "poor" health.

Third, as already noted, estimates based on respondent-assessed health status correlate very highly with other measures of health status and with measures of health services utilization. The results for some of these measures by respondent-assessed health status are shown in table A. Each of the measures in table A indicates a high association between respondent-assessed health status and other measures of health status and utilization of health services. These associations do not, of course, remove the limitations ordinarily related to nonclinical health status measures in relation to problems of lay evaluations of health and to the interpretation of the resulting data.

Finally, it should be noted that morbidity is only one measure of the somewhat ambiguous term "health."

Table A. Measures of health status and utilization of health services by assessed health status: United States, 1978

Assessed health status	Number of bed days per person per year	Persons limited in activity due to chronic condition		Short-stay hospital days per 10 persons per year	Doctor visits per person per year
		Unable to carry out major activity	Limited in ability to carry out major activity		
		Percent		Number	
Excellent	3.3	0.5	1.8	3.8	2.5
Good	5.7	2.0	7.1	9.1	3.9
Fair	14.9	12.3	25.4	26.0	7.5
Poor	64.2	46.1	35.5	76.2	15.3

Because mortality patterns for the many subgroups in this report are not considered together with assessed health status, at best only a partial picture of the socio-demographic characteristics associated with the health of the civilian noninstitutionalized population of the United States can be derived from the data shown or discussed in this report.

Results

The results discussed in the report are presented in detail in tables 1–13. In the first five of these tables (age, sex, race, family income, and education) the estimates for each of the four health status categories, as well as for persons assessed in excellent and 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 6–13. Every variable in these tables is shown by age and education of the individuals for persons 17 years of age and over. For persons 17–64 years of age three educational groupings are used (under 12 years, 12 years, and more than 12 years of completed education). This classification of years of completed education 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: "under 9 years" and "9 years and over" for years 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 without education included.

Years of completed education rather than family income was used as the basic sociodemographic control variable primarily for two reasons. First, whereas family income was not reported for 15.4 million persons (about 7.2 percent of the population), education was not reported for only about 2.9 million persons (1.9 percent of persons 17 years of age and over). Thus, using education rather than family income does not involve excluding nearly as many cases because of missing data.

Second, as indicated in table B (which summarizes the results shown in table 5), 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 46.4 percent for persons with no education to 5.9 percent for persons with 16 years or more education, while the range for family income is only from 31.6 percent for persons in families with less than $5,000 in income to 6.8 percent for persons in families with income of $25,000 and over. 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 6–13 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 needed for all the variables shown and would have 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 highly 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. On the other hand, 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. For this

Table B. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons by family income and years of completed education: United States, 1978

Years of education	Family income						
	All incomes	Under $5,000	$5,000–$9,999	$10,000–$14,999	$15,000–$24,999	$25,000 and over	Unknown
	Percent of persons assessed in fair or poor health						
All years of education	15.4	31.6	26.8	12.6	9.4	6.8	19.5
No education	46.4	52.7	45.9	50.5	*20.3	*42.9	40.3
1–8 years	35.8	45.4	37.2	28.2	24.5	22.3	36.2
9–11 years	19.6	32.9	24.7	17.2	13.1	8.8	20.9
12 years	11.1	22.3	15.7	10.7	8.1	6.8	14.1
13–15 years	8.2	13.7	11.8	8.7	6.8	5.4	9.0
16 years and over	5.9	11.5	7.5	6.4	5.5	4.6	9.0
Unknown	23.9	38.9	27.5	19.2	15.4	14.6	25.2
	Number of persons in thousands						
All years of education	154,817	18,404	26,384	25,990	37,531	31,071	15,438
No education	1,041	416	260	101	64	*28	171
1–8 years	22,486	6,187	6,332	3,281	2,558	1,218	2,909
9–11 years	25,742	3,885	5,608	4,589	5,661	3,379	2,620
12 years	57,429	4,252	9,025	11,026	16,655	11,191	5,281
13–15 years	24,235	2,432	3,055	3,826	6,618	6,422	1,882
16 years and over	20,937	905	1,763	2,773	5,634	8,506	1,357
Unknown	2,947	326	342	395	340	326	1,218

reason, 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.

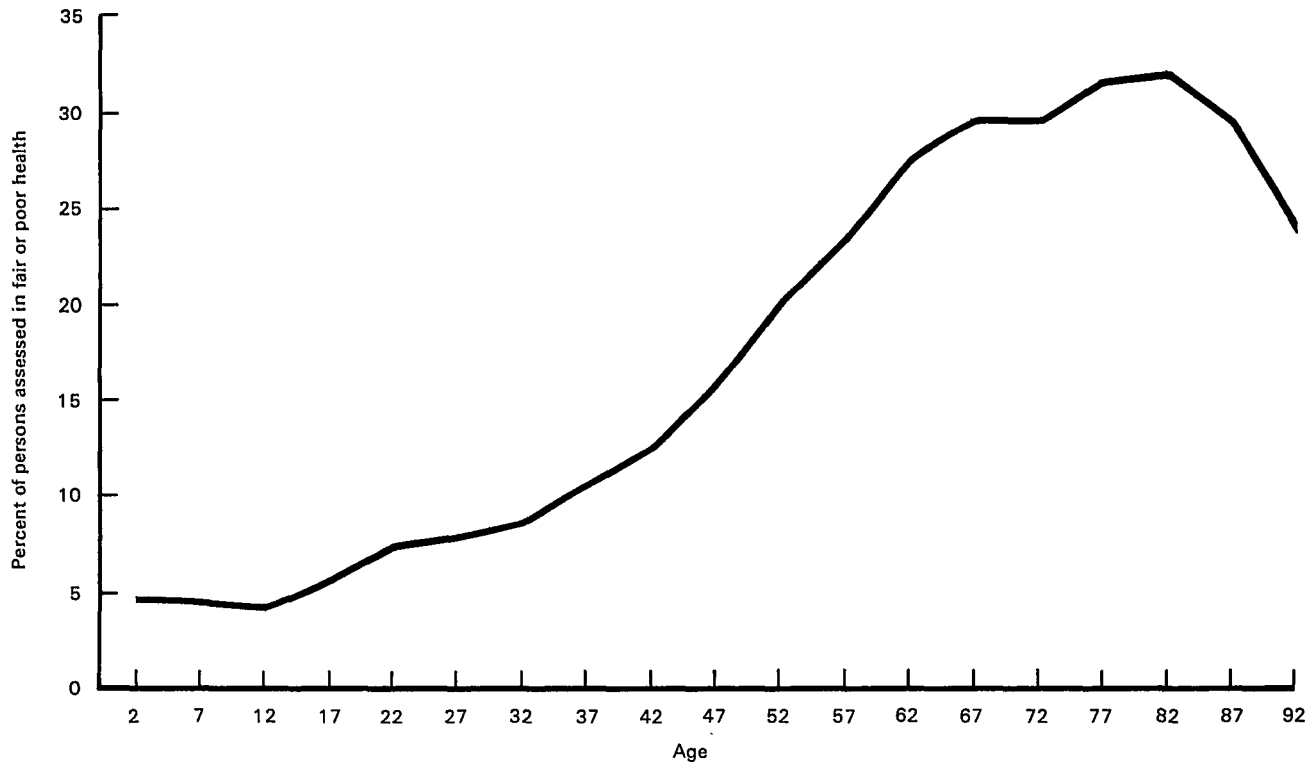
Respondent-assessed health status by selected characteristics

Age

The percent of persons assessed in excellent, good, fair, and poor health by 5-year age groups is shown in table 1. The percent of persons assessed in fair or poor health is shown in figure 1. The curve indicates that even though people are asked to assess their health only in comparison with persons of their own age, there is nevertheless a strong tendency for the proportion of persons assessed in fair or poor health to vary with age.

For those under 17 years of age, there is relatively little variation by 5-year age groups in the proportion of individuals assessed in fair or poor health. For persons 17 years of age and over, the proportion increases (especially in the age range from 35 to 64 years) until about the age of 82 years and then declines.

The decline in the percent of persons assessed in fair or poor health after about 80 years of age is accounted for to a large extent by three factors. First, a relatively large percent of very ill persons at this advanced age are



[1]Excludes persons with health status not assessed.

Figure 1. Percent[1] of persons assessed in fair or poor health by age: United States, 1978

in nursing homes or institutions and are therefore not included in the NHIS sample. Second, respondents are not instructed to exclude this institutionalized population when assessing the health of older persons in comparison with other persons their age. Finally, at an advanced age it is probable that most of a person's age cohort will have died. This consideration may enter into the frame of reference associated with a more favorable assessment of the health of very old persons who are still alive.

Sex

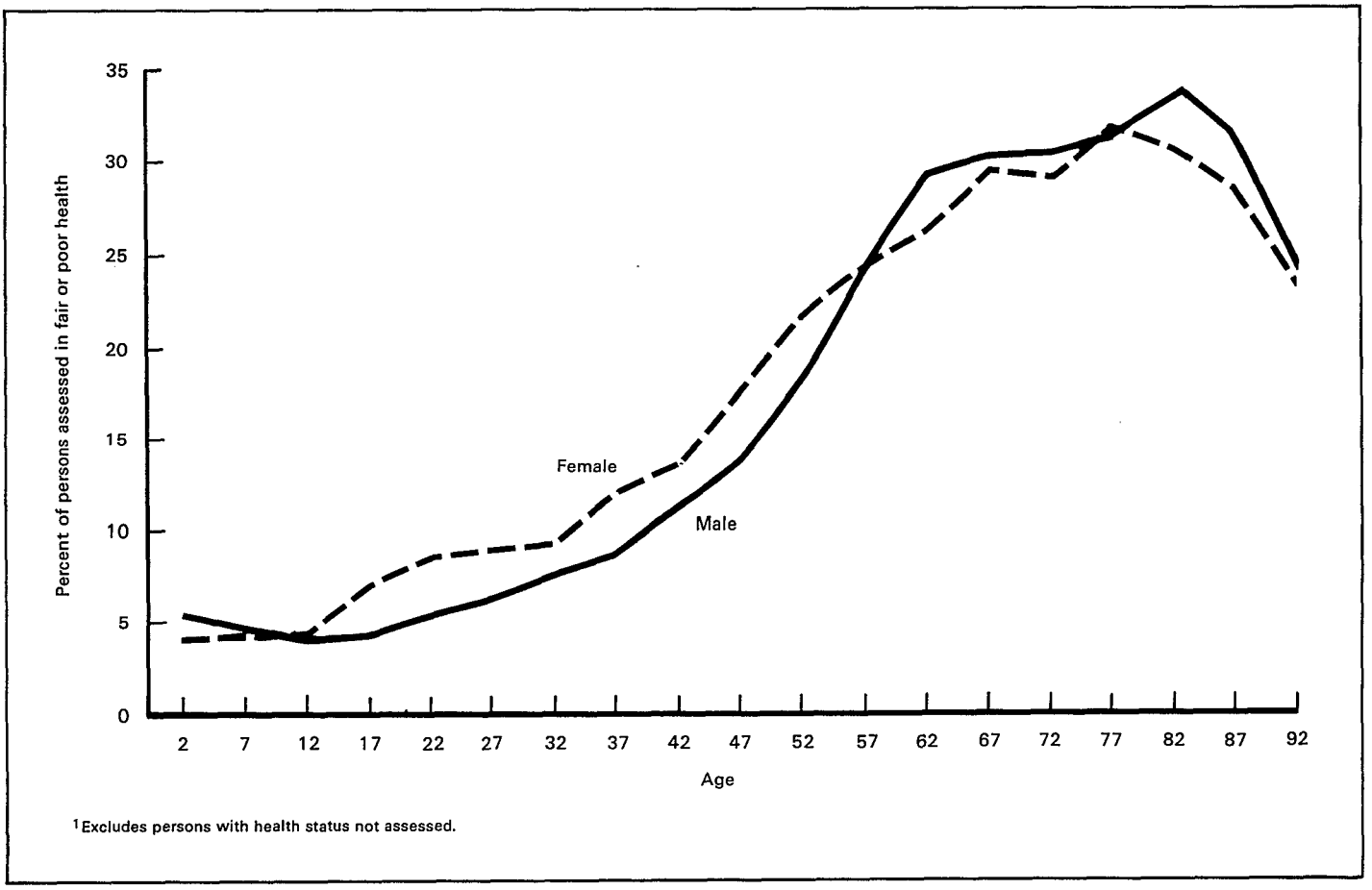
In table 1 the assessed health status for each sex by age is shown. For persons of all ages a higher proportion of females (13.5 percent) than of males (11.3 percent) were assessed in fair or poor health. From about 12 years of age until about 57 years of age the health of males is more positively assessed than that of females, as is shown in figure 2. This relationship is especially marked during the female's child-bearing years. However, after about 60 years of age, there is a tendency for the health of females to be assessed more positively than that of males. Differential patterns of mortality and institutionalization of each of the sexes undoubtedly affects to some degree the sex differences shown for these older persons.

Race

Interviewers conducting the NHIS interviews are instructed to classify each person in a household on the basis of observation as "white," "black," or "other." The distribution of assessed health status according to these three racial groups, age, and sex is shown in table 2. Observed race rather than the respondent's classification of race has been used in this report because all NHIS data were ratio-adjusted and weighted on the basis of observed race to correspond to official U.S. Census Bureau population estimates. Comparisons of estimates of the percent of persons assessed in fair or poor health for observed race and respondent-identified race indicate no statistically significant differences for whites or blacks. The percent of persons assessed in fair or poor health ranges from a low of 3.7 percent for white females under 17 years of age to a high of 47.5 percent for black males 65 years of age and over. For each of the age groups shown in figure 3, blacks have a higher proportion of persons assessed in fair or poor health than do persons classified as white or as other.

Family income

The percent of persons assessed in fair or poor health is generally higher for lower income groups and



[1]Excludes persons with health status not assessed.

Figure 2. Percent[1] of persons assessed in fair or poor health by sex and age: United States, 1978

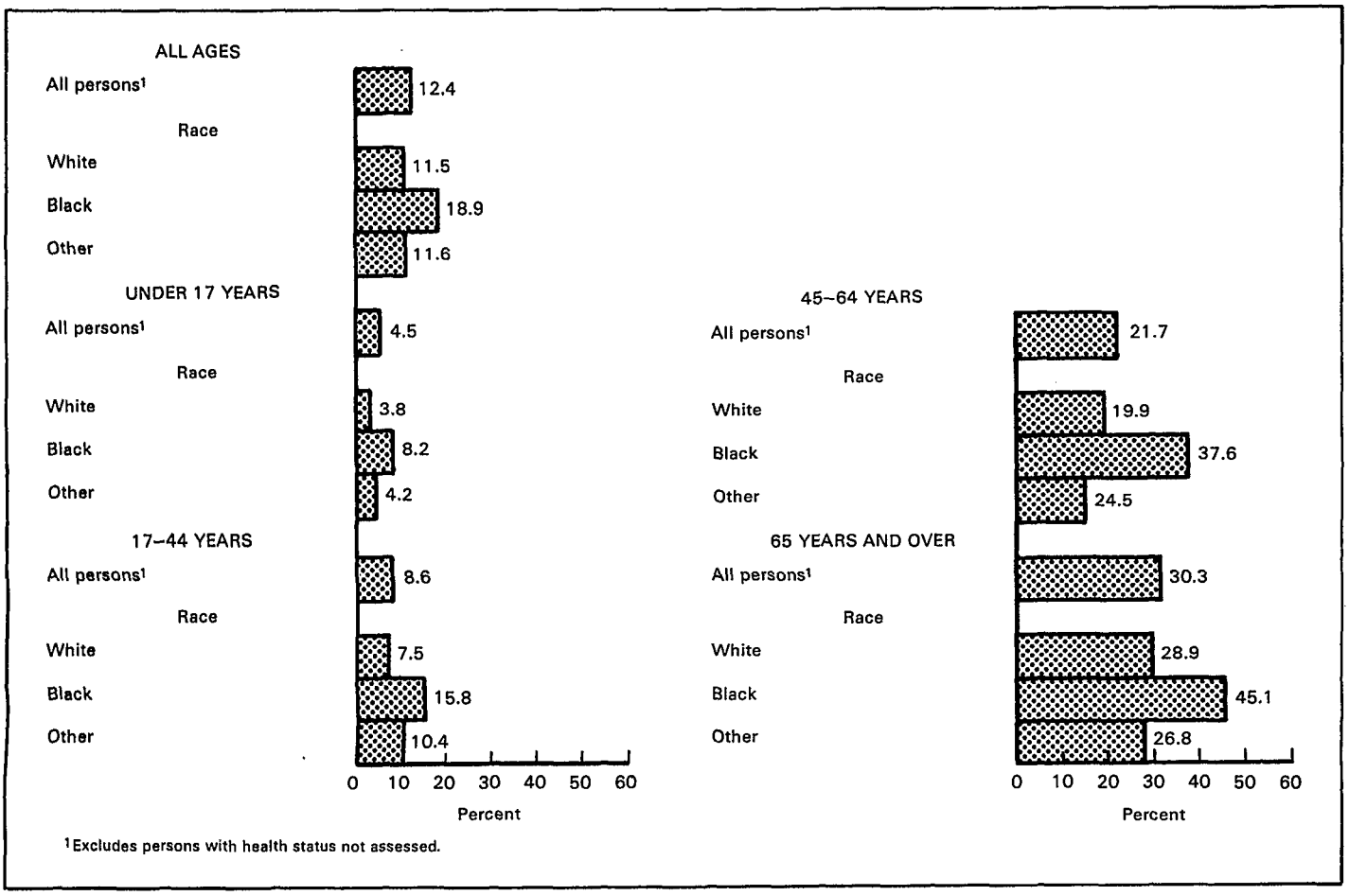


Figure 3. Percent[1] of persons assessed in fair or poor health by age and race: United States, 1978

lower for higher income groups. However, this relationship does not hold for very low family-income groups where, as is shown in table 3 and figure 4, the percents are similar for persons in families with under $3,000 annual income and for those with a $3,000–$4,999 family income (26.6 percent and 27.0 percent, respectively).

The percent of persons assessed in fair or poor health by age and selected family income is shown in figure 5. As may be noted, the patterns for different family income groups by age are different. For persons in families with an annual income of $25,000 and over, the proportion of persons in fair or poor health increases with increasing age. However, for persons in low family-income groups, the highest proportion of persons assessed in fair or poor health are in the range from 50 to 60 years of age, with the proportion being lower for persons 65 years of age and over. The curves for the two low family-income groups also indicate two reasons why the assessed health of persons in the under $3,000 annual family-income group is not significantly worse than that of the $3,000–$4,999 annual family-income group: First, there are no differences for persons under 17 years of age; and, second, for persons approximately in the 55–64 age range, a higher proportion in the $3,000–$4,999 than in the under $3,000 annual family-income group are assessed to be in fair or poor health.

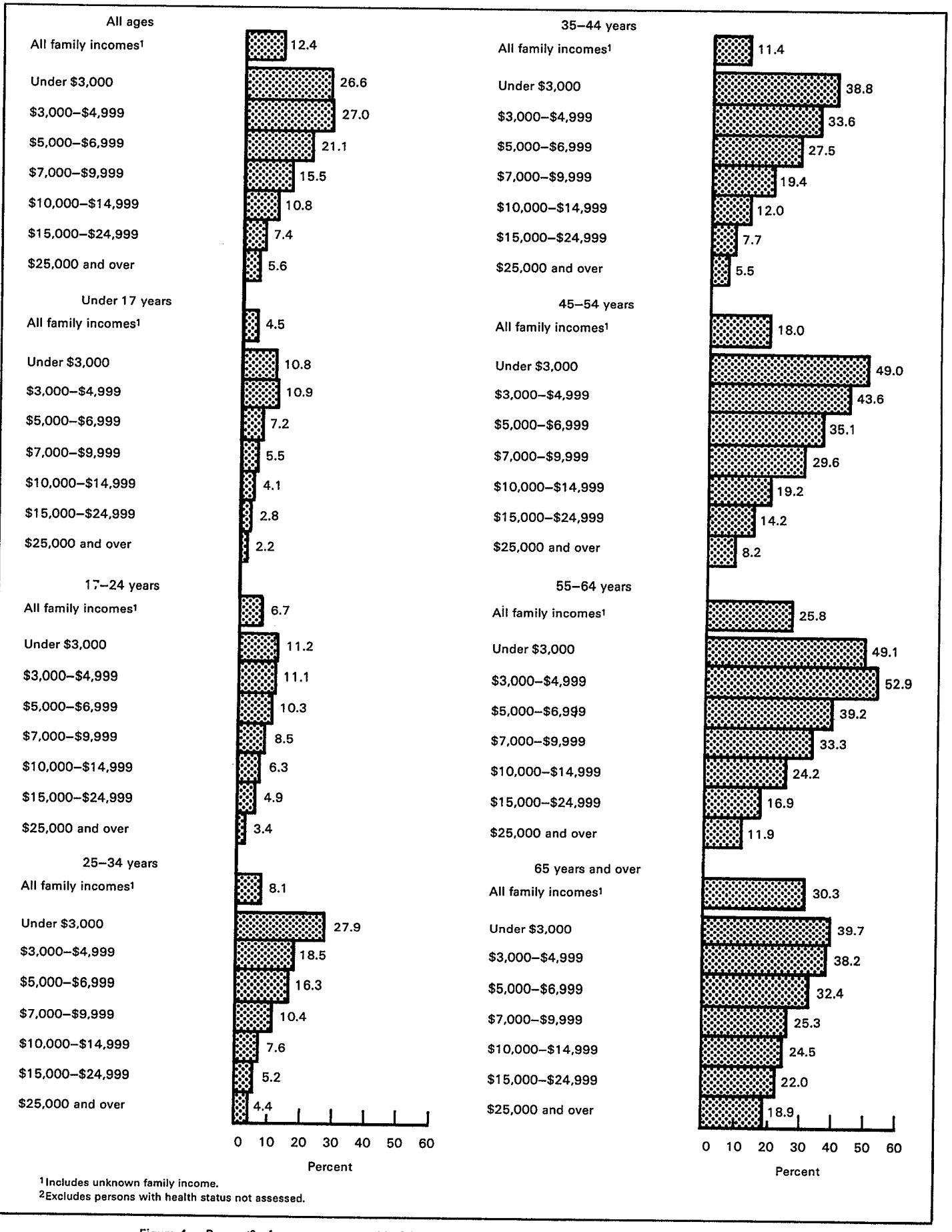
Educational level

The number of years of completed education is requested for all persons in the sample who are 17 years of age and over. There is a high negative association between years of completed education and the percent of persons assessed in fair or poor health, with this pattern appearing within each of the age groups (table 4 and figure 6).

Estimates of the percent of persons in fair or poor health range from 2.1 percent for persons 17–24 years of age who have completed 16 or more years of school to 55.1 percent for persons 45–54 years of age with no education.

The distribution of assessed health status according to family income and years of completed education is shown in table 5. These results were highlighted and discussed in a section entitled "Results."

As in the case of family income, the patterns for persons with little education and for those with a great deal of education differ significantly. The highest proportion of persons assessed in fair or poor health among



1Includes unknown family income.
2Excludes persons with health status not assessed.

Figure 4. Percent2 of persons assessed in fair or poor health by age and family income: United States, 1978

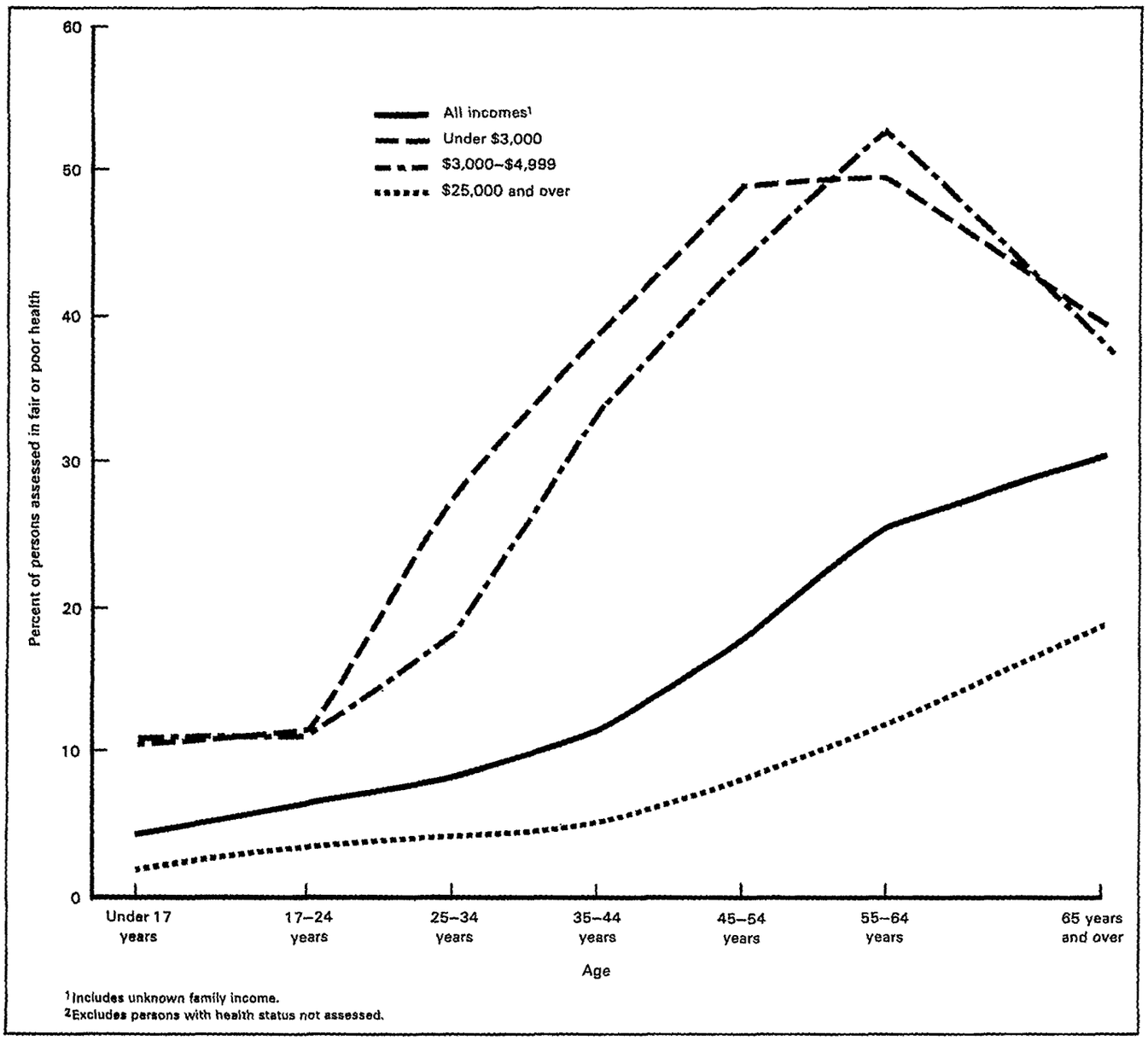


Figure 5. Percent[2] of persons assessed in fair or poor health by age and selected family income: United States, 1978

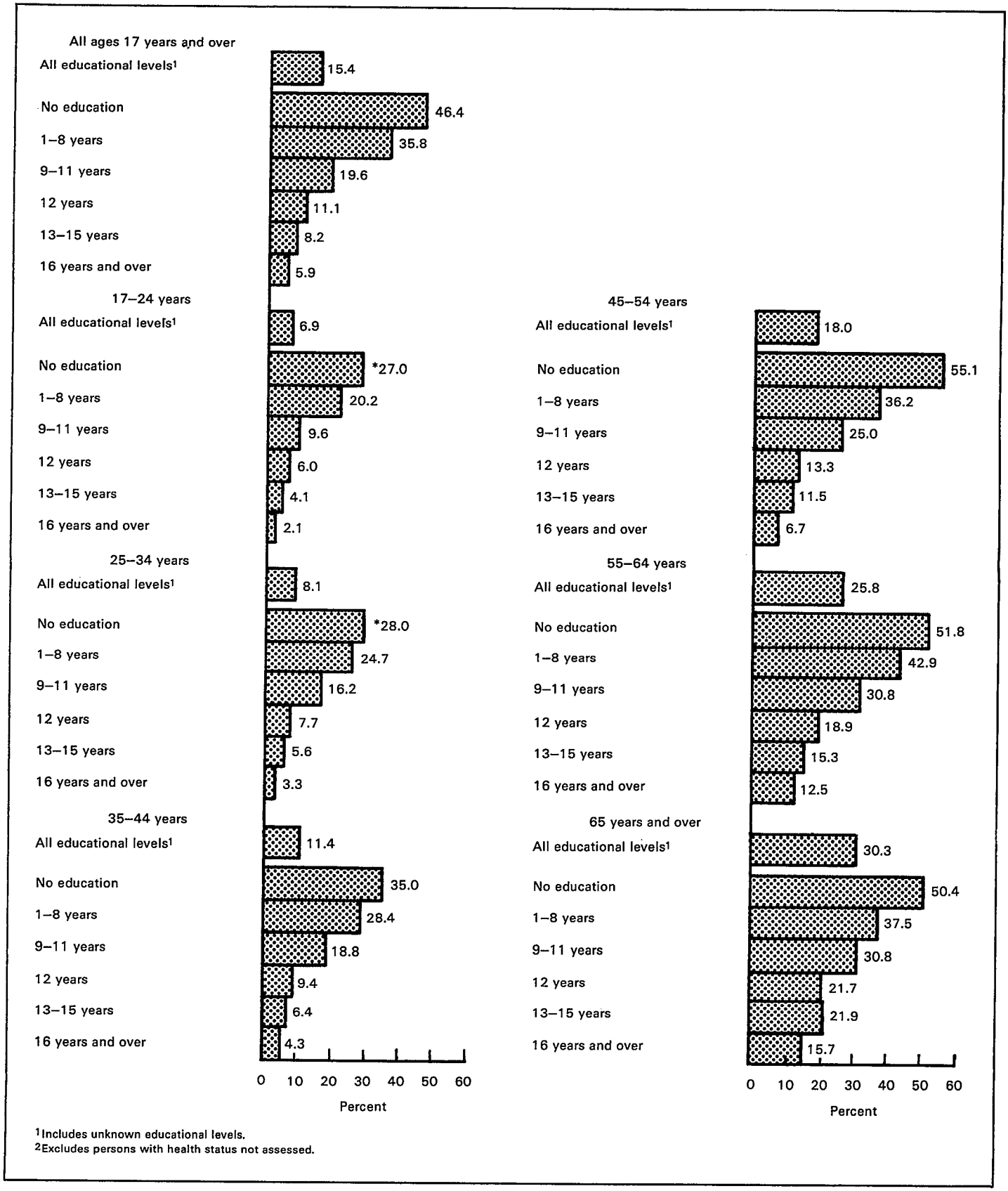
persons with from 1 to 8 years of education occurs at about the age of 60, while for persons with 16 or more years of education, the proportion increases continually as age increases, as is shown in figure 7.

Marital status

Regarding marital status, the highest proportion of persons assessed in fair or poor health is among widowed persons (29.0 percent), while the lowest proportion is among persons who have never been married (9.2 percent). However, the difference in the age distribution among the four marital status groups shown in table 6 accounts for much of the difference among the assessed health statuses of the marital status groups. Within the age groups in figure 8, the estimates for widowed persons are similar to those of persons who are divorced or separated, and with one exception (married persons 65 years of age and over) these are consistently higher than those of married and never-married persons. Between married and never-married persons, the proportions assessed in fair or poor health are similar for persons 17–44 years of age, lower for married persons 45–64 years of age, and lower for never-married persons 65 years of age and over.

Usual activity

Usual activity refers to what a person was doing during most of the 12 months preceding the interview.



[1]Includes unknown educational levels.
[2]Excludes persons with health status not assessed.

Figure 6. Percent[2] of persons 17 years of age and over assessed in fair or poor health by age and years of completed education: United States, 1978

Respondents are asked to classify usual activity from among the following categories for persons 17 years of age and over: working, keeping house (asked of women only), going to school, retired (not asked of persons under 45 years of age), and "something else." In table 7 the results are shown for persons age 17 and over classi-

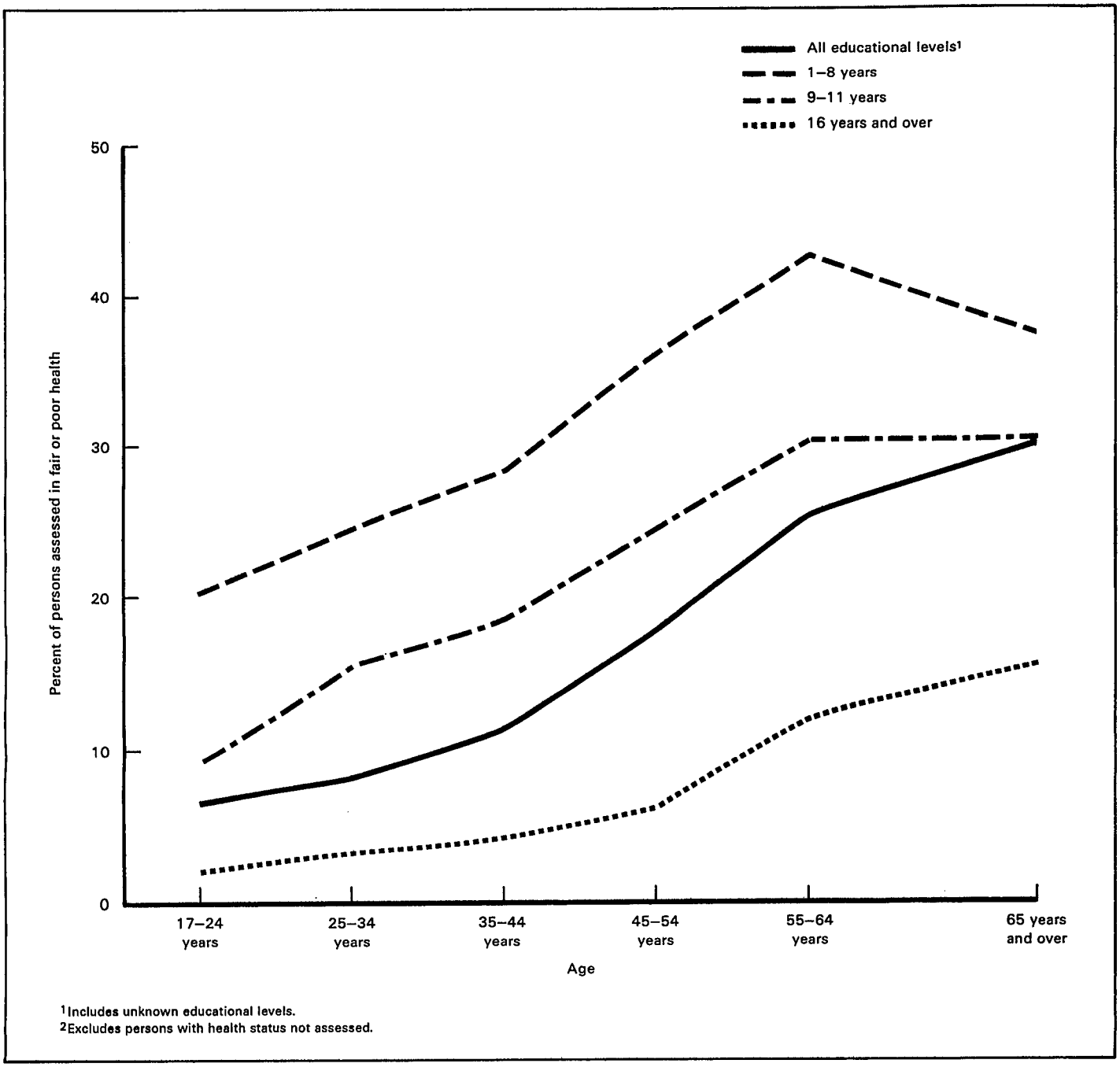


Figure 7. Percent[2] of persons assessed in fair or poor health by age and selected years of completed education: United States, 1978

fied as working, keeping house, going to school, and "other" (which combines retired and "something else" since neither group is large.

For each of the age groups the highest proportion of persons assessed in fair or poor health was for those classified as "other"; the lowest proportion was for people who were usually working, with the estimates for women keeping house falling between these two (figure 9). Going to school is not included in the comparison because the low rate associated with it (5.5 percent) merely reflects that almost all the persons included in this category are in their teens or early twenties. The relationships described above are relatively consistent within all of the age, educational, sex, racial, and family income groups shown in table 7.

Labor force and employment status

Labor force and employment status refer to the person's status during the 2 weeks preceding interview. Persons in the labor force include those who were employed or unemployed during that 2-week period. All other persons 17 years of age and over are classified as "not in the labor force."

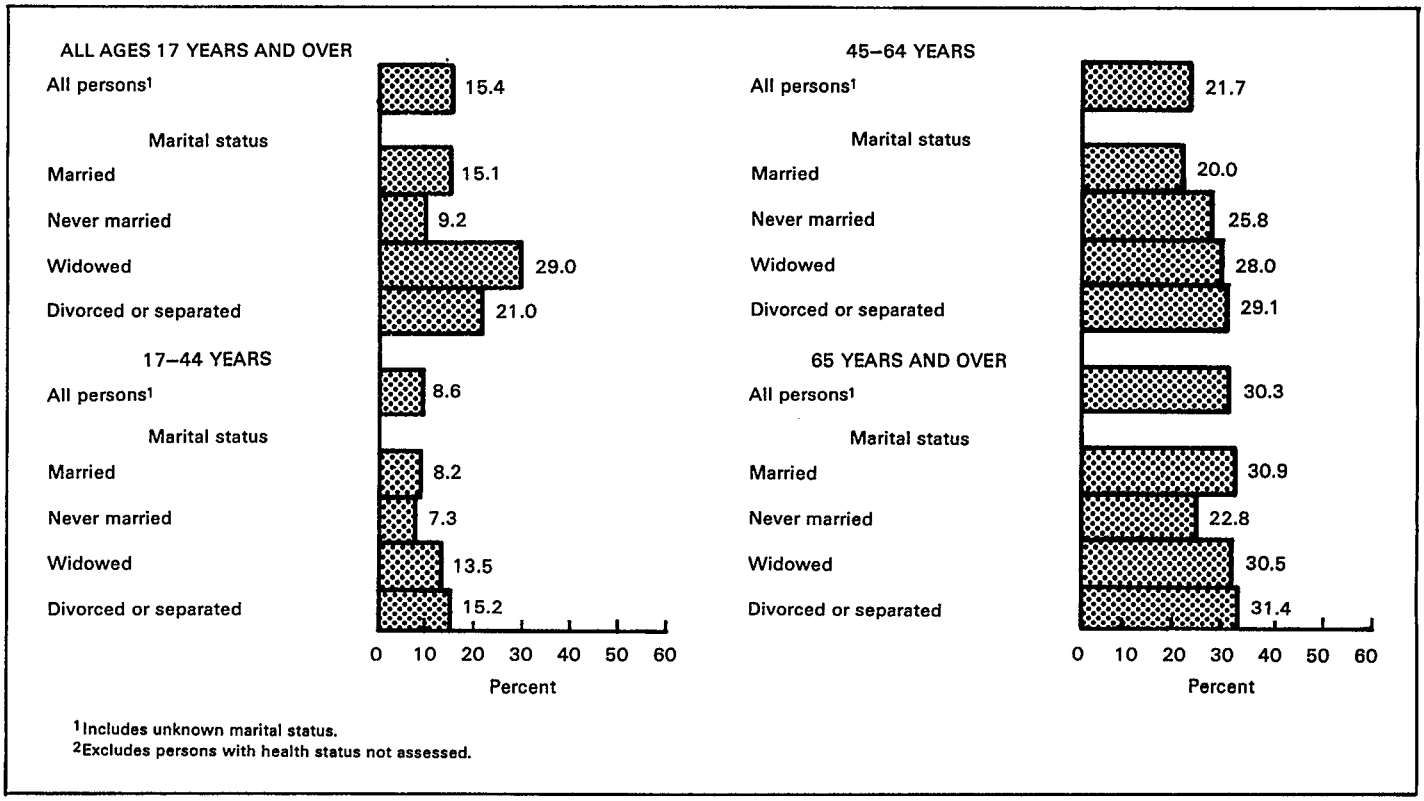


Figure 8. Percent[2] of persons 17 years of age and over assessed in fair or poor health by age and marital status: United States, 1978

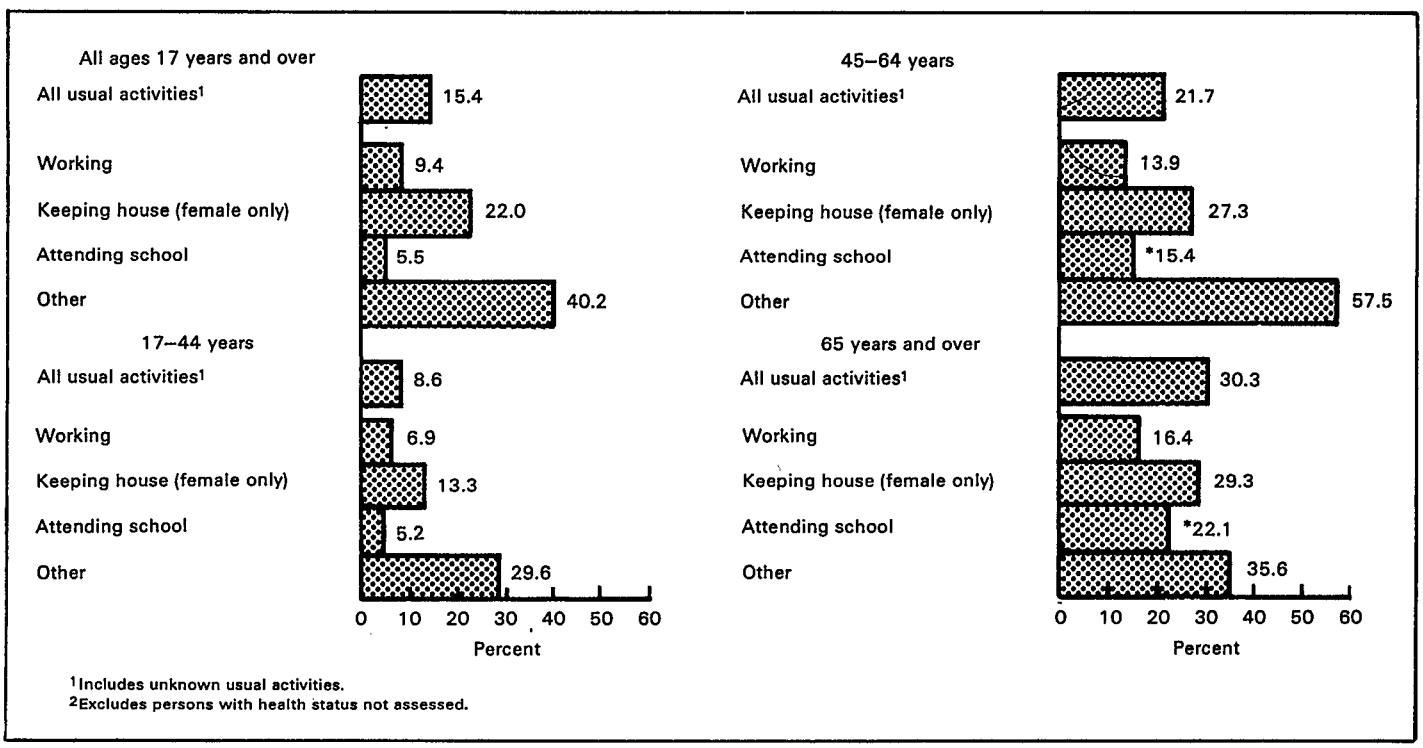


Figure 9. Percent[2] of persons 17 years of age and over assessed in fair or poor health by age and usual activity: United States, 1978

For each of the age groups, those not in the labor force had proportionately many more persons assessed in fair or poor health than did those in the labor force (figure 10). The currently employed had the lowest proportion of persons assessed in fair or poor health for persons 17–64 years of age, with the estimates for the unemployed falling between those currently employed and those not in the labor force. The results are incon-

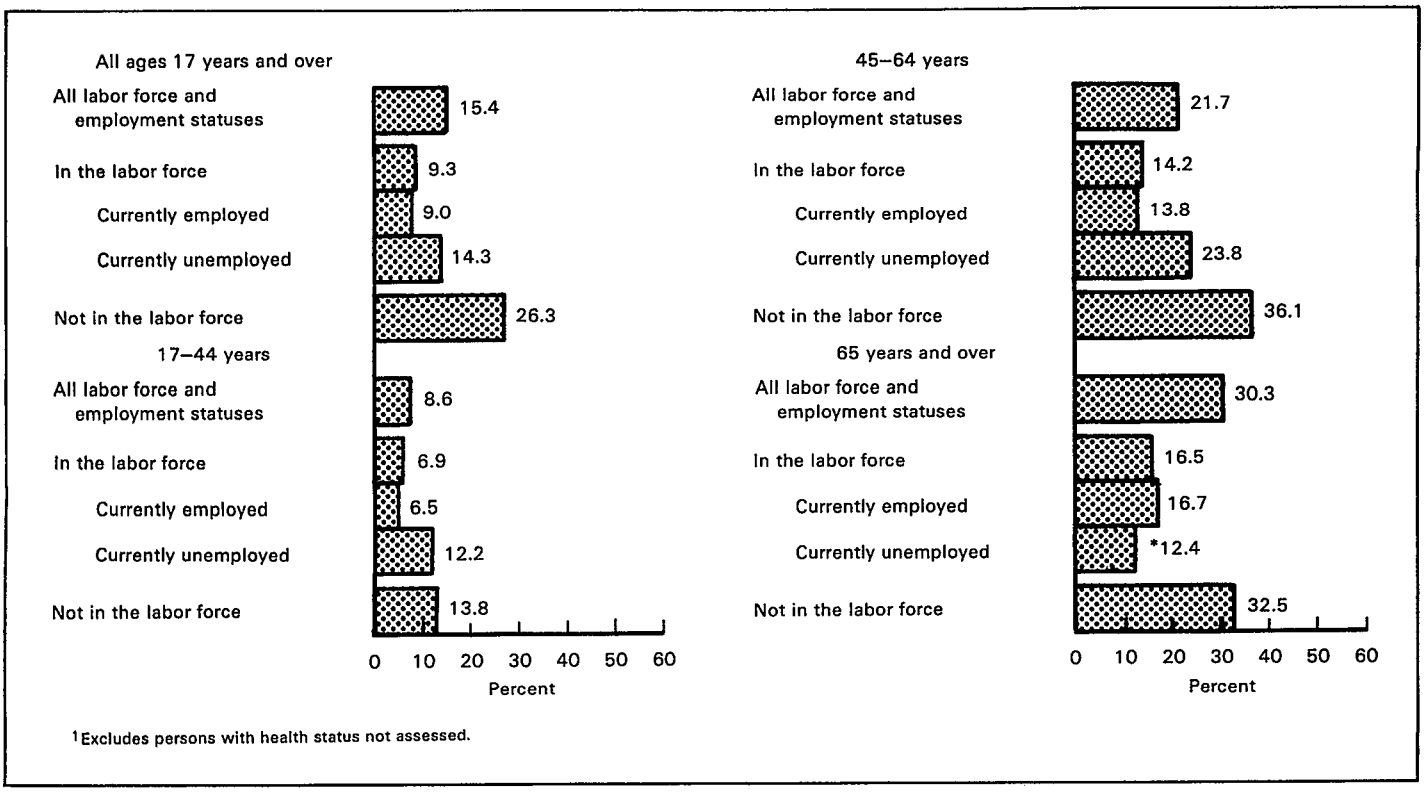


Figure 10. Percent[1] of persons 17 years of age and over assessed in fair or poor health by age and labor force and employment status: United States, 1978

clusive for persons 65 years of age and over because of the large sampling error for persons in this age group who were unemployed.

In table 8 a similar pattern holds for almost all the comparisons based on age, education, sex, race, and family income. The major exception is for persons 17–44 years of age with more than 12 years of education for whom the results are approximately the same for the unemployed and for those not in the labor force. To at least some degree, this exception results from the fact that this group of persons not in the labor force includes many college students. Because college students are, in general, very healthy, the proportion of persons in this group assessed in fair or poor health is relatively low (7.0 percent versus 7.8 percent for unemployed persons).

Employment-related characteristics of persons in the labor force

Information about occupation, type of employer, and industry is determined for all persons in the labor force. For the unemployed the questions are asked in terms of the last occupation they had before they became unemployed. While in a small proportion of the cases this may mean that the occupation named has not been pursued in many years (for example, for a woman who left the labor force to raise her children many years ago and is now attempting to reenter the labor force), in most cases the occupation named by the unemployed person will have been held in the recent past.

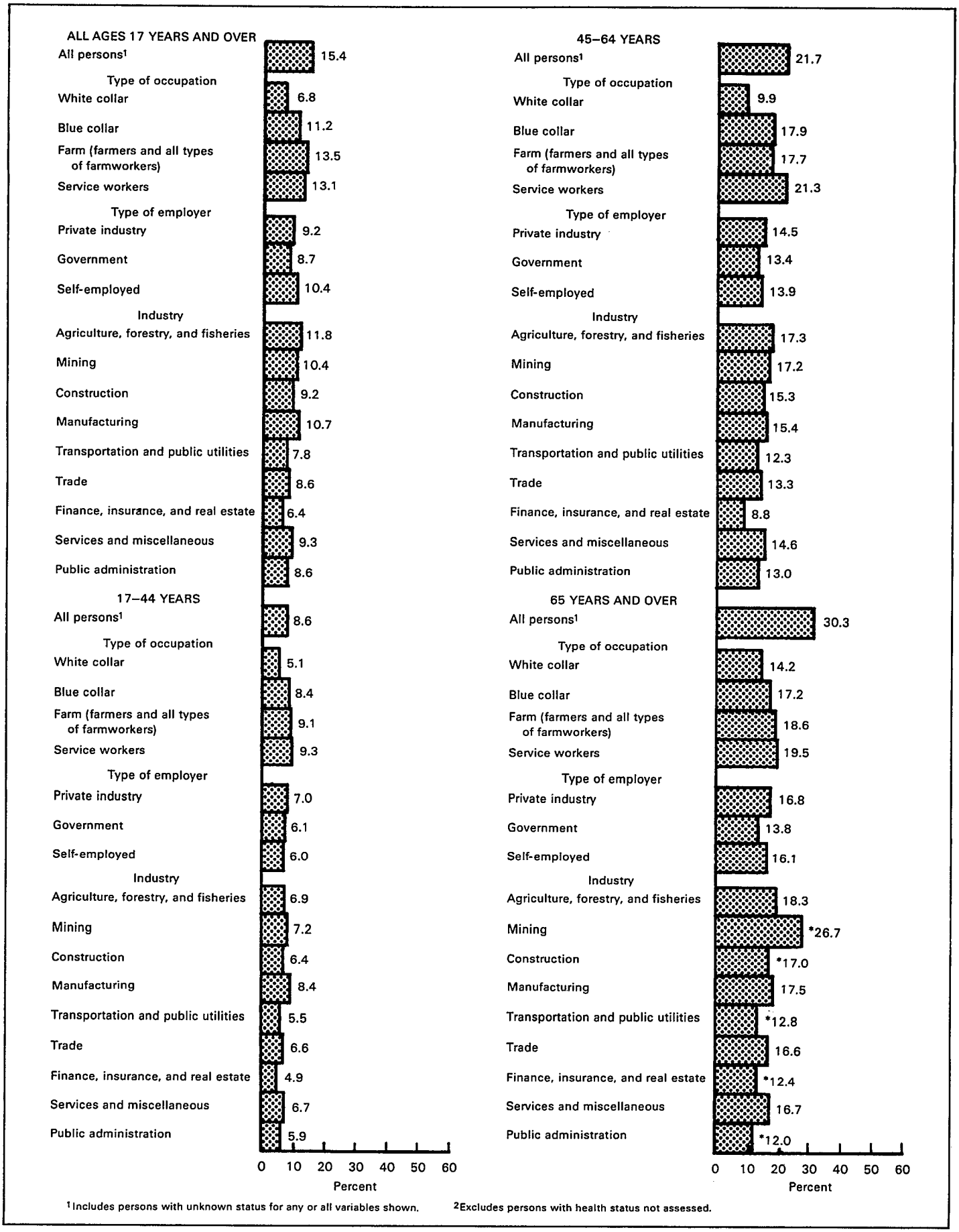
Type of occupation

As shown in figure 11, the occupational group with the smallest proportion of persons assessed in fair or poor health is white collar workers (6.8 percent). Within the three age groups, the estimates for persons assessed in fair or poor health in blue collar, farm, and service work do not vary a great deal from one another, but they are consistently higher than the estimates for white collar workers.

The results in terms of 10 categories used in the standard U.S. Census Bureau classification of occupations are shown in table 9. The estimates of persons assessed in fair or poor health within these categories range from 5.7 percent for professional, technical, and kindred workers to 13.9 percent for all operatives aside from those in the transportation industry. However, the estimates for farmers and all types of farmworkers (13.5 percent) and for service workers (13.1 percent) do not differ significantly from the estimate for operatives.

Type of employer

The percent of persons assessed in fair or poor health by type of employer are 9.2 percent for private industry, 8.7 percent for Government, and 10.4 percent among persons who are self-employed (figure 11). The higher estimate for the self-employed, however, merely



[1] Includes persons with unknown status for any or all variables shown. [2] Excludes persons with health status not assessed.

Figure 11. Percent[2] of persons 17 years of age and over assessed in fair or poor health by age and employment-related characteristics: United States, 1978

reflects the fact that they are disproportionately distributed among older persons.

While it may appear within age groups that a higher proportion of persons employed in private industry are in fair or poor health than are Government workers, when examined within educational levels the estimates for private industry are generally lower than for Government workers (table 10).

Type of industry

Persons working in finance, insurance, and real estate have proportionately fewer persons assessed in fair or poor health (6.4 percent) than in any of the other categories of the standard U.S. Census Bureau Industry Classification. The highest estimates of persons assessed in fair or poor health among persons 17–44 years of age are in manufacturing (8.4 percent) and among persons 45–64 years of age are in agriculture, forestry, and fisheries (17.3 percent) and in mining (17.2 percent) (figure 11). These estimates are not, however, statistically significantly higher than most of the estimates for the other industries.

The percent of persons assessed in fair or poor health for each of the industries shown in figure 11 is shown in table 11 separately for white and blue collar workers. The reliable estimates of persons assessed in fair or poor health range from 5.7 percent for white collar workers in finance, insurance, and real estate to 12.6 percent for blue collar workers in manufacturing.

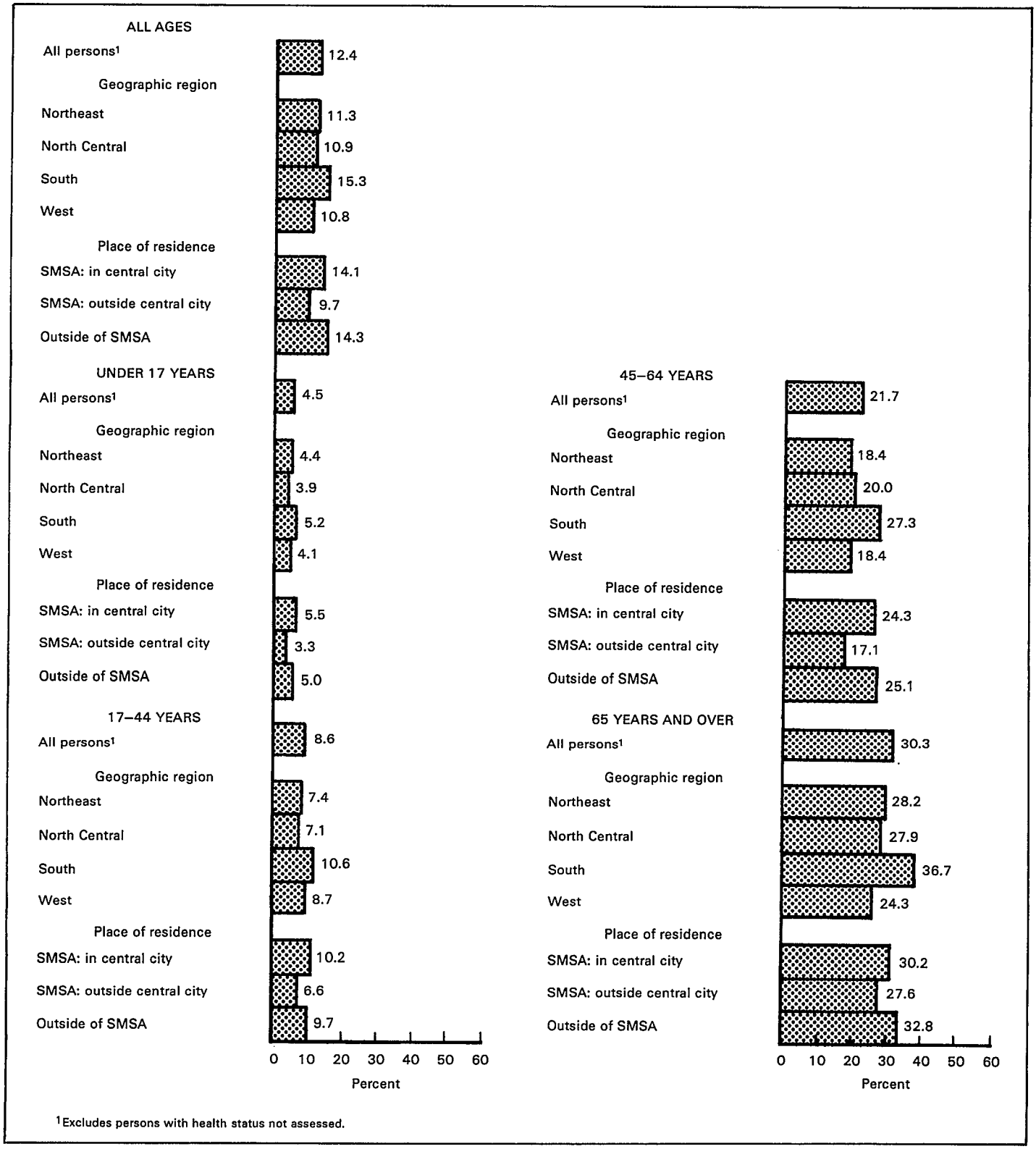
Geographic region

Among the geographic regions of the country, the South contains the highest proportion of persons assessed in fair or poor health (15.3 percent), and this relationship holds within each of the age groups (figure 12). The same relationship is indicated in table 12 for persons with different levels of education, for whites and blacks, and for persons with higher or lower family incomes. In general, the other three regions have a lower proportion of persons in fair or poor health, with no single region consistently having relatively fewer persons in fair or poor health for all of the variables shown in the table.

Place of residence

For persons of all ages and for each of the four age groups examined, the smallest proportion of persons assessed in fair or poor health live in standard metropolitan statistical areas (SMSA's) outside the central city (figure 12). This area is roughly comparable to what are often called "the suburbs." The proportions for persons assessed in fair or poor health living in central cities in SMSA's and for those living outside SMSA's are similar. In general, the same relationship holds within educational, racial, and family income segments of the civilian noninstitutionalized population (table 13).

In table 13, the proportion of persons assessed in fair or poor health living outside SMSA's is further classified into farm and nonfarm areas. According to these estimates, there seems to be a tendency for those living in nonfarm areas to be assessed in fair or poor health in slightly greater proportions (14.4 percent versus 13.3 percent for persons living on farms). However, this difference is not statistically significant.



[1]Excludes persons with health status not assessed.

Figure 12. Percent[1] of persons assessed in fair or poor health, by age, geographic region, and place of residence: United States, 1978

References

[1]National Center for Health Statistics, G. S. Bonham and P. E. Leaverton: Use habits among adults of cigarettes, coffee, aspirin, and sleeping pills. *Vital and Health Statistics.* Series 10-No. 131. DHEW Pub. No. (PHS) 80–1559. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1979.

[2]National Center for Health Statistics, P. W. Ries: Hearing ability of persons by sociodemographic and health characteristics. *Vital and Health Statistics.* Series 10-No. 140. DHHS Pub. No. (PHS) 82–1568. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1982.

[3]J. Ware, Jr., H. Brook, A. R. Davies, and K. N. Lohr: Choosing measures of health status for individuals in general populations. *Amer. J. Pub. Health* 71(6):620–625, June 1981.

[4]National Center for Health Statistics: *Health, United States, 1980.* DHHS Pub. No. (PHS) 81–1232. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1980.

[5]T. F. Garrity, G. W. Somes, and M. B. Marx: Factors influencing self-assessment of health. *Social Sci. Med.* 12:77–81, 1978.

[6]M. Linn, K. Hunter, and B. Linn: Self-assessed health, impairment and disability in Anglo, Black and Cuban elderly. *Med. Care* XVIII (3):282–288, Mar. 1980.

[7]M. G. Kovar, and R. W. Wilson: Perceived health status . . . How good is proxy reporting, in the 1978 Social Statistics Section of *The Proc. Amer. Stat. Ass.*, 1976.

[8]National Center for Health Statistics: Health survey procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. *Vital and Health Statistics.* Series 1-No. 2. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, May 1964.

[9]National Center for Health Statistics: Health Interview Survey Procedure, 1957–1974. *Vital and Health Statistics.* Series 1-No. 11. DHEW Pub. No. (HRA) 75–1311. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1975.

[10]U.S. National Health Survey: The statistical design of the health household interview survey. *Health Statistics.* PHS Pub. No. 584–A2. Public Health Service. Washington, D.C., July 1958.

[11]National Center for Health Statistics, J. A. Bean: Estimation and sampling variance in the Health Interview Survey. *Vital and Health Statistics.* Series 2-No. 38. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, June 1970.

[12]National Center for Health Statistics, D. A. Koons: Quality control and measurement of nonsampling error in the Health Interview Survey. *Vital and Health Statistics.* Series 2-No. 54. DHEW Pub. No. (HSM) 73–1328. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Mar. 1973.

[13]National Center for Health Statistics: Health interview responses compared with medical records. *Vital and Health Statistics.* Series 2-No. 7. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

[14]National Center for Health Statistics: Comparison of hospitalization reporting in three survey procedures. *Vital and Health Statistics.* Series 2-No. 8. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

[15]National Center for Health Statistics, W. G. Madow: Interview data on chronic conditions compared with information derived from medical records. *Vital and Health Statistics.* Series 2-No. 23. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, May 1967.

[16]National Center for Health Statistics, C. F. Cannell, F. J. Fowler, and K. H. Marquis: The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. *Vital and Health Statistics.* Series 2-No. 26. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1968.

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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, 1978

[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	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
Both sexes	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All ages	213,828	100.0	87.6	12.4	48.6	38.5	9.5	2.8
Under 5 years	15,389	100.0	95.3	4.7	60.7	33.7	4.2	0.5
5–9 years	16,860	100.0	95.5	4.5	60.0	34.8	4.0	0.5
10–14 years	18,531	100.0	95.9	4.1	60.2	35.1	3.7	0.4
15–19 years	20,550	100.0	94.4	5.7	56.7	37.2	5.0	0.6
20–24 years	19,414	100.0	92.8	7.2	52.9	39.6	6.4	0.8
25–29 years	17,487	100.0	92.3	7.7	53.5	38.5	6.7	1.0
30–34 years	15,526	100.0	91.5	8.5	53.3	37.9	6.8	1.7
35–39 years	12,749	100.0	89.5	10.5	50.8	38.3	8.4	2.0
40–44 years	11,134	100.0	87.5	12.5	47.1	40.1	9.8	2.7
45–49 years	11,251	100.0	84.1	15.9	42.1	41.6	12.2	3.7
50–54 years	11,720	100.0	80.0	20.0	38.2	41.5	14.4	5.5
55–59 years	10,964	100.0	75.7	24.3	32.9	42.5	16.8	7.4
60–64 years	9,468	100.0	72.4	27.6	30.7	41.3	19.6	7.8
65–69 years	8,243	100.0	70.2	29.8	28.5	41.2	21.6	8.1
70–74 years	6,353	100.0	70.3	29.7	28.4	41.2	21.2	8.2
75–79 years	4,297	100.0	68.3	31.7	25.9	41.9	23.0	8.4
80–84 years	2,429	100.0	68.0	32.0	26.7	41.0	22.0	9.8
85–89 years	1,062	100.0	70.3	29.7	32.5	37.9	18.3	11.5
90–94 years	311	100.0	76.4	23.6	35.4	39.2	16.4	*6.8
95 years and over	93	100.0	67.7	*32.3	*29.0	38.7	*18.3	*14.0
Male								
All ages	103,174	100.0	88.7	11.3	51.8	36.5	8.4	2.9
Under 5 years	7,870	100.0	94.6	5.4	60.6	33.4	4.8	0.5
5–9 years	8,602	100.0	95.4	4.6	59.6	35.0	4.0	0.6
10–14 years	9,436	100.0	96.0	4.0	60.8	34.6	3.6	0.4
15–19 years	10,259	100.0	95.8	4.2	60.2	35.2	3.8	0.5
20–24 years	9,373	100.0	94.5	5.5	57.1	37.2	4.8	0.7
25–29 years	8,485	100.0	93.6	6.4	58.0	35.4	5.5	0.9
30–34 years	7,542	100.0	92.4	7.6	57.9	34.4	5.9	1.7
35–39 years	6,227	100.0	91.2	8.8	55.1	35.7	6.9	1.9
40–44 years	5,252	100.0	88.7	11.3	51.7	36.7	8.4	2.8
45–49 years	5,457	100.0	86.1	13.9	47.4	38.2	10.4	3.5
50–54 years	5,630	100.0	81.9	18.1	41.7	39.6	12.3	5.7
55–59 years	5,201	100.0	75.9	24.1	35.2	40.5	16.2	7.8
60–64 years	4,446	100.0	70.7	29.3	31.4	38.8	19.5	9.5
65–69 years	3,670	100.0	69.8	30.2	30.3	39.1	20.8	9.2
70–74 years	2,672	100.0	69.5	30.5	29.7	39.1	20.8	9.4
75–79 years	1,659	100.0	68.7	31.2	26.3	42.1	21.7	9.3
80–84 years	908	100.0	65.9	34.1	24.7	41.0	21.8	12.1
85–89 years	353	100.0	68.6	31.4	33.4	35.1	21.0	10.5
90–94 years	115	100.0	75.9	*24.1	36.5	37.4	*15.7	*7.8
95 years and over	*17	100.0	*88.2	*11.8	*41.2	*47.1	*11.8	*-
Female								
All ages	110,655	100.0	86.5	13.5	45.6	40.4	10.6	2.8
Under 5 years	7,519	100.0	96.0	4.0	60.8	34.1	3.6	*0.4
5–9 years	8,258	100.0	95.6	4.4	60.4	34.6	4.0	*0.4
10–14 years	9,095	100.0	95.7	4.3	59.5	35.6	3.8	0.5
15–19 years	10,291	100.0	92.9	7.1	53.2	39.2	6.3	0.7
20–24 years	10,041	100.0	91.2	8.8	49.0	41.8	7.8	1.0
25–29 years	9,001	100.0	91.0	9.0	49.3	41.4	7.9	1.0
30–34 years	7,983	100.0	90.6	9.4	49.0	41.3	7.7	1.7
35–39 years	6,522	100.0	87.9	12.1	46.7	40.8	9.9	2.2
40–44 years	5,882	100.0	86.5	13.5	42.9	43.1	10.9	2.5
45–49 years	5,794	100.0	82.3	17.7	37.2	44.8	13.8	3.8
50–54 years	6,089	100.0	78.3	21.7	34.9	43.2	16.2	5.4

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, 1978—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*	*Respondent-assessed health status*						
		All health statuses	*Excellent or good*	*Fair or poor*	*Excellent*	*Good*	*Fair*	*Poor*
Female—Con.	Number in thousands	Percent distribution[1]			Percent distribution[2]			
55–59 years	5,764	100.0	75.4	24.6	30.8	44.2	17.3	7.1
60–64 years	5,022	100.0	74.0	26.0	30.0	43.6	19.6	6.4
65–69 years	4,573	100.0	70.4	29.6	27.0	42.9	22.2	7.2
70–74 years	3,681	100.0	70.9	29.1	27.4	42.7	21.5	7.4
75–79 years	2,638	100.0	68.0	32.0	25.6	41.8	23.8	7.8
80–84 years	1,521	100.0	69.3	30.7	27.8	41.0	22.1	8.5
85–89 years	709	100.0	71.2	28.9	32.0	39.2	16.9	12.0
90–94 years	196	100.0	76.7	23.3	35.2	40.3	*16.8	*6.1
95 years and over	76	100.0	63.2	*36.8	*26.3	*36.8	*19.7	*17.1

[1] Excludes persons with health status not assessed.
[2] Includes persons with health status not assessed.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

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, 1978

[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	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
ALL AGES								
Both sexes	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All races	213,828	100.0	87.6	12.4	48.6	38.5	9.5	2.8
White	185,052	100.0	88.5	11.5	50.3	37.7	8.8	2.7
Black	25,695	100.0	81.1	18.9	37.1	43.5	14.7	4.0
Other	3,081	100.0	88.4	11.6	43.6	44.1	9.3	2.3
Male								
All races	103,174	100.0	88.7	11.3	51.8	36.5	8.4	2.9
White	89,717	100.0	89.4	10.6	53.4	35.6	7.8	2.8
Black	11,871	100.0	83.7	16.3	40.8	42.3	12.6	3.6
Other	1,586	100.0	89.1	10.9	46.0	42.4	8.3	2.5
Female								
All races	110,655	100.0	86.5	13.5	45.6	40.4	10.6	2.8
White	95,335	100.0	87.6	12.4	47.4	39.7	9.7	2.6
Black	13,824	100.0	79.0	21.0	33.9	44.6	16.5	4.4
Other	1,496	100.0	87.6	12.4	41.0	45.9	10.3	*2.1
UNDER 17 YEARS OF AGE								
Both sexes								
All races	59,012	100.0	95.5	4.5	60.1	34.7	4.0	0.5
White	48,945	100.0	96.2	3.8	63.0	32.5	3.3	0.4
Black	9,148	100.0	91.8	8.2	45.6	45.5	7.5	0.6
Other	919	100.0	95.8	4.2	47.1	47.6	*3.6	*0.5
Male								
All races	30,096	100.0	95.5	4.5	60.5	34.3	4.0	0.5
White	25,027	100.0	96.1	3.9	63.3	32.2	3.4	0.5
Black	4,582	100.0	92.0	8.0	46.6	44.7	7.4	*0.6
Other	486	100.0	94.8	*5.2	48.8	44.2	*4.7	*0.4
Female								
All races	28,916	100.0	95.6	4.4	59.6	35.2	4.0	0.4
White	23,917	100.0	96.3	3.7	62.8	32.7	3.3	0.4
Black	4,565	100.0	91.7	8.3	44.6	46.4	7.6	*0.6
Other	433	100.0	97.0	*3.2	45.3	51.0	*2.3	*0.9
17–44 YEARS OF AGE								
Both sexes								
All races	88,627	100.0	91.4	8.6	52.4	38.8	7.1	1.4
White	76,738	100.0	92.5	7.5	54.4	37.8	6.3	1.2
Black	10,377	100.0	84.2	15.8	38.5	45.4	12.8	2.9
Other	1,511	100.0	89.6	10.4	45.7	43.8	8.7	*1.7
Male								
All races	42,951	100.0	92.9	7.1	56.8	35.9	5.8	1.3
White	37,627	100.0	93.5	6.5	58.3	34.9	5.3	1.1
Black	4,559	100.0	87.6	12.4	44.7	42.6	9.7	2.6
Other	765	100.0	92.7	7.3	50.1	42.5	5.4	*1.8

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, 1978—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	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
17–44 YEARS OF AGE—Con.								
Female	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All races	45,676	100.0	90.1	9.9	48.3	41.5	8.4	1.5
White	39,112	100.0	91.4	8.6	50.5	40.5	7.3	1.2
Black	5,818	100.0	81.6	18.4	33.7	47.5	15.2	3.1
Other	746	100.0	86.4	13.6	41.2	45.2	12.1	*1.5
45–64 YEARS OF AGE								
Both sexes								
All races	43,403	100.0	78.3	21.7	36.2	41.7	15.5	6.0
White	38,756	100.0	80.1	19.9	37.6	42.1	14.2	5.7
Black	4,156	100.0	62.4	37.6	23.3	38.5	27.9	9.4
Other	491	100.0	75.5	24.5	36.3	38.5	18.7	*5.5
Male								
All races	20,734	100.0	79.1	20.9	39.4	39.3	14.4	6.4
White	18,599	100.0	80.3	19.7	40.6	39.3	13.3	6.3
Black	1,888	100.0	67.8	32.2	27.6	39.5	24.2	7.7
Other	247	100.0	74.2	25.8	35.6	38.1	19.0	*6.5
Female								
All races	22,668	100.0	77.6	22.4	33.3	43.9	16.6	5.6
White	20,156	100.0	79.9	20.1	34.8	44.7	15.0	5.1
Black	2,268	100.0	58.0	42.0	19.8	37.8	31.0	10.8
Other	244	100.0	76.9	23.1	36.9	38.9	18.4	*4.5
65 YEARS OF AGE AND OVER								
Both sexes								
All races	22,788	100.0	69.7	30.3	28.0	41.1	21.5	8.5
White	20,613	100.0	71.1	28.9	28.9	41.6	20.7	7.9
Black	2,015	100.0	55.0	45.1	19.0	35.4	30.3	14.4
Other	160	100.0	73.2	26.8	26.3	45.0	*17.5	*8.8
Male								
All races	9,393	100.0	69.2	30.8	29.1	39.7	21.0	9.6
White	8,463	100.0	70.9	29.1	30.3	40.1	20.0	8.9
Black	843	100.0	52.5	47.5	17.2	34.9	31.0	16.1
Other	88	100.0	68.2	*31.8	*25.0	43.2	*21.6	*10.2
Female								
All races	13,394	100.0	70.0	30.0	27.3	42.1	21.9	7.8
White	12,150	100.0	71.3	28.7	28.0	42.7	21.2	7.3
Black	1,172	100.0	56.7	43.3	20.3	35.9	29.8	13.1
Other	72	100.0	79.7	*20.3	*29.2	*47.2	*12.5	*6.9

[1] Excludes persons with health status not assessed.
[2] Includes persons with health status not assessed.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

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, 1978

[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	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
All ages	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All family incomes[3]	213,828	100.0	87.6	12.4	48.6	38.5	9.5	2.8
Under $3,000	10,300	100.0	73.4	26.6	33.5	39.4	18.5	8.0
$3,000–$4,999	13,644	100.0	73.0	27.0	32.0	40.6	18.7	8.1
$5,000–$6,999	15,637	100.0	78.9	21.1	35.9	42.6	15.9	5.1
$7,000–$9,999	20,444	100.0	84.5	15.5	40.2	43.9	11.5	4.0
$10,000–$14,999	36,882	100.0	89.2	10.8	48.9	39.9	8.6	2.1
$15,000–$24,999	53,894	100.0	92.6	7.4	54.8	37.4	6.2	1.1
$25,000 and over	42,336	100.0	94.4	5.6	62.4	31.6	4.7	0.9
Under 17 years of age								
All family incomes[3]	59,012	100.0	95.5	4.5	60.1	34.7	4.0	0.5
Under $3,000	2,210	100.0	89.2	10.8	41.4	47.3	10.2	*0.5
$3,000–$4,999	3,330	100.0	89.1	10.9	44.4	43.8	9.8	1.1
$5,000–$6,999	3,976	100.0	92.8	7.2	47.3	45.1	6.4	*0.8
$7,000–$9,999	5,721	100.0	94.5	5.5	51.0	42.5	4.8	0.7
$10,000–$14,999	10,892	100.0	95.9	4.1	60.2	35.0	3.6	0.4
$15,000–$24,999	16,363	100.0	97.2	2.8	65.8	30.7	2.4	0.3
$25,000 and over	11,265	100.0	97.8	2.2	72.9	24.5	1.9	*0.3
17–24 years of age								
All family incomes[3]	31,731	100.0	93.1	6.9	53.8	39.1	6.1	0.8
Under $3,000	2,627	100.0	88.8	11.2	47.5	41.0	9.6	1.5
$3,000–$4,999	2,084	100.0	88.9	11.1	44.1	44.7	9.4	*1.6
$5,000–$6,999	2,518	100.0	89.7	10.3	44.1	45.3	9.1	*1.1
$7,000–$9,999	3,361	100.0	91.5	8.5	47.3	43.9	7.5	1.0
$10,000–$14,999	5,345	100.0	93.7	6.3	52.3	41.0	5.5	0.8
$15,000–$24,999	6,781	100.0	95.1	4.9	57.5	37.4	4.5	*0.3
$25,000 and over	6,192	100.0	96.6	3.4	67.3	29.1	3.1	*0.3
25–34 years of age								
All family incomes[3]	33,012	100.0	91.9	8.1	53.4	38.2	6.8	1.3
Under $3,000	918	100.0	72.1	27.9	35.5	36.6	20.5	7.4
$3,000–$4,999	1,330	100.0	81.5	18.5	36.3	44.7	14.2	4.2
$5,000–$6,999	1,809	100.0	83.7	16.5	41.5	41.8	13.5	2.7
$7,000–$9,999	2,950	100.0	89.6	10.4	45.3	44.2	8.9	1.5
$10,000–$14,999	7,054	100.0	92.4	7.6	53.0	39.2	6.4	1.2
$15,000–$24,999	10,783	100.0	94.8	5.2	57.5	37.2	4.6	0.6
$25,000 and over	6,019	100.0	95.6	4.4	63.7	31.8	3.9	*0.4
35–44 years of age								
All family incomes[3]	23,883	100.0	88.6	11.4	49.1	39.2	9.1	2.3
Under $3,000	511	100.0	61.2	38.8	25.2	35.6	26.2	12.3
$3,000–$4,999	797	100.0	66.4	33.6	27.5	38.8	21.7	11.8
$5,000–$6,999	1,004	100.0	72.5	27.5	29.1	42.7	18.5	8.8
$7,000–$9,999	1,692	100.0	80.6	19.4	32.8	47.6	15.2	4.1
$10,000–$14,999	3,832	100.0	88.0	12.0	44.6	43.0	9.9	2.1
$15,000–$24,999	7,269	100.0	92.3	7.7	51.5	40.6	6.8	0.9
$25,000 and over	6,797	100.0	94.5	5.5	61.8	32.4	4.8	0.6

See footnotes at end of table.

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, 1978—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 and family income	*All persons*	*Respondent-assessed health status*						
		All health statuses	*Excellent or good*	*Fair or poor*	*Excellent*	*Good*	*Fair*	*Poor*
45–54 years of age	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All family incomes[3]	22,970	100.0	82.0	18.0	40.1	41.5	13.3	4.6
Under $3,000	664	100.0	51.0	49.0	19.6	30.6	26.8	21.5
$3,000–$4,999	798	100.0	56.4	43.6	20.2	35.8	29.4	13.9
$5,000–$6,999	1,008	100.0	64.9	35.1	26.3	38.3	23.0	11.9
$7,000–$9,999	1,531	100.0	70.4	29.6	28.3	41.9	19.0	10.5
$10,000–$14,999	3,365	100.0	80.9	19.2	35.0	45.5	15.3	3.8
$15,000–$24,999	6,118	100.0	85.8	14.2	40.8	44.8	11.6	2.5
$25,000 and over	6,929	100.0	91.8	8.2	52.4	39.0	6.9	1.2
55–64 years of age								
All family incomes[3]	20,432	100.0	74.2	25.8	31.9	41.9	18.1	7.6
Under $3,000	972	100.0	50.9	49.1	19.1	31.2	28.2	20.4
$3,000–$4,999	1,330	100.0	47.1	52.9	16.3	30.5	31.1	21.6
$5,000–$6,999	1,657	100.0	60.8	39.2	21.7	38.6	27.8	11.0
$7,000–$9,999	2,088	100.0	66.7	33.3	23.3	43.2	22.6	10.7
$10,000–$14,999	3,587	100.0	75.8	24.2	32.1	43.5	17.7	6.5
$15,000–$24,999	4,579	100.0	83.1	16.9	36.5	46.4	13.7	3.2
$25,000 and over	3,649	100.0	88.1	11.9	47.7	40.2	9.4	2.5
65 years of age and over								
All family incomes[3]	22,788	100.0	69.7	30.3	28.0	41.1	21.5	8.5
Under $3,000	2,397	100.0	60.1	39.9	21.4	38.1	27.1	12.5
$3,000–$4,999	3,975	100.0	61.8	38.2	22.4	39.0	25.5	12.4
$5,000–$6,999	3,666	100.0	67.6	32.4	26.1	41.2	24.2	8.0
$7,000–$9,999	3,101	100.0	74.7	25.3	29.0	45.4	17.6	7.6
$10,000–$14,999	2,808	100.0	75.6	24.5	31.9	43.2	18.2	6.2
$15,000–$24,999	2,001	100.0	78.1	22.0	37.5	40.1	16.9	4.9
$25,000 and over	1,485	100.0	81.2	18.9	43.8	37.0	13.9	4.9

[1] Excludes persons with health status not assessed.
[2] Includes persons with health status not assessed.
[3] Includes persons with unknown family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 4. Number of persons 17 years of age and over by age and years of completed education and percent distribution of persons 17 years of age and over by respondent-assessed health status, according to age and years of completed education: United States, 1978

[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 completed education	All persons 17 years of age and over	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
All ages 17 years and over	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All educational levels[3]	154,817	100.0	84.6	15.4	44.3	39.9	11.6	3.7
No education	1,041	100.0	53.5	46.4	18.9	33.6	23.4	22.1
1–8 years	22,486	100.0	64.2	35.8	22.7	41.2	24.7	10.9
9–11 years	25,742	100.0	80.4	19.6	36.6	43.5	15.5	4.0
12 years	57,429	100.0	88.9	11.1	46.3	42.3	8.9	2.2
13–15 years	24,235	100.0	91.8	8.2	55.0	36.6	6.6	1.5
16 years and over	20,937	100.0	94.1	5.9	61.7	32.0	4.7	1.2
17–24 years of age								
All educational levels[3]	31,731	100.0	93.1	6.9	53.8	39.1	6.1	0.8
No education	63	100.0	73.0	*27.0	*27.0	*46.0	*12.7	*14.3
1–8 years	1,100	100.0	79.8	20.2	28.4	51.3	17.5	*2.6
9–11 years	8,144	100.0	90.4	9.6	49.1	41.0	8.3	1.3
12 years	12,906	100.0	94.0	6.0	54.2	39.5	5.4	0.6
13–15 years	6,904	100.0	95.9	4.1	59.6	36.0	3.9	*0.2
16 years and over	2,084	100.0	97.8	2.1	64.3	33.0	2.0	*0.1
25–34 years of age								
All educational levels[3]	33,012	100.0	91.9	8.1	53.4	38.2	6.8	1.3
No education	82	100.0	72.0	*28.0	*30.5	*41.5	*14.6	*13.4
1–8 years	1,554	100.0	75.4	24.7	28.1	46.5	17.2	7.2
9–11 years	3,523	100.0	83.8	16.2	35.4	48.4	14.4	1.8
12 years	13,116	100.0	92.3	7.7	51.1	41.0	6.5	1.1
13–15 years	6,829	100.0	94.4	5.6	58.8	35.4	4.7	0.9
16 years and over	7,526	100.0	96.7	3.3	67.2	29.2	2.9	0.5
35–44 years of age								
All educational levels[3]	23,883	100.0	88.6	11.4	49.1	39.2	9.1	2.3
No education	106	100.0	66.0	35.0	*29.2	*32.1	*19.8	*13.2
1–8 years	2,269	100.0	71.6	28.4	27.5	43.8	20.7	7.7
9–11 years	3,566	100.0	81.2	18.8	34.2	46.6	15.4	3.3
12 years	9,786	100.0	90.6	9.4	49.1	41.3	7.7	1.7
13–15 years	3,551	100.0	93.6	6.4	59.3	34.0	5.0	1.5
16 years and over	4,254	100.0	95.6	4.3	65.7	29.7	3.8	*0.5
45–54 years of age								
All educational levels[3]	22,970	100.0	82.0	18.0	40.1	41.5	13.3	4.6
No education	131	100.0	44.9	55.1	*22.9	*20.6	35.1	*19.1
1–8 years	3,497	100.0	63.8	36.2	23.0	40.5	25.1	10.9
9–11 years	3,735	100.0	75.0	25.0	30.3	44.4	18.7	6.1
12 years	9,250	100.0	86.7	13.3	42.3	44.0	10.2	3.0
13–15 years	2,757	100.0	88.5	11.5	48.9	39.3	9.0	2.5
16 years and over	3,190	100.0	93.3	6.7	58.7	33.9	5.2	1.5
55–64 years of age								
All educational levels[3]	20,432	100.0	74.2	25.8	31.9	41.9	18.1	7.6
No education	170	100.0	48.2	51.8	*10.0	37.1	23.5	27.1
1–8 years	4,696	100.0	57.1	42.9	19.9	36.8	27.4	15.2
9–11 years	3,328	100.0	69.2	30.8	26.1	42.7	22.7	7.9
12 years	7,498	100.0	81.1	18.9	33.7	47.2	14.4	4.5
13–15 years	2,206	100.0	84.7	15.3	45.6	38.8	11.6	3.7
16 years and over	2,075	100.0	87.5	12.5	50.0	37.1	9.1	3.4

See footnotes at end of table.

Table 4. Number of persons 17 years of age and over by age and years of completed education and percent distribution of persons 17 years of age and over by respondent-assessed health status, according to age and years of completed education: United States, 1978—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 and years of completed education	*All persons 17 years of age and over*	*Respondent-assessed health status*						
		All health statuses	*Excellent or good*	*Fair or poor*	*Excellent*	*Good*	*Fair*	*Poor*
65 years of age and over	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All educational levels[3]	22,788	100.0	69.7	30.3	28.0	41.1	21.5	8.5
No education	489	100.0	49.6	50.4	15.7	33.3	24.1	25.8
1–8 years	9,371	100.0	62.5	37.5	21.2	41.0	26.2	11.1
9–11 years	3,446	100.0	69.2	30.8	27.3	41.4	23.6	7.0
12 years	4,874	100.0	78.3	21.7	33.9	43.7	16.6	4.9
13–15 years	1,989	100.0	78.1	21.9	36.7	41.0	17.1	4.7
16 years and over	1,809	100.0	84.4	15.7	44.6	39.0	11.2	4.3

[1] Excludes persons with health status not assessed.
[2] Includes persons with health status not assessed.
[3] Includes persons with unknown years of completed education.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 5. Number of persons 17 years of age and over by family income and years of completed education and percent distribution of persons 17 years of age and over by respondent-assessed health status, according to family income and years of completed education: United States, 1978

[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 completed education	All persons 17 years of age and over	Respondent-assessed health status						
		All health statuses	Excellent or good	Fair or poor	Excellent	Good	Fair	Poor
All family incomes	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All educational levels	154,817	100.0	84.6	15.4	44.3	39.9	11.6	3.7
No education	1,041	100.0	53.5	46.4	18.9	33.6	23.4	22.1
1–8 years	22,486	100.0	64.2	35.8	22.7	41.2	24.7	10.9
9–11 years	25,742	100.0	80.4	19.6	36.6	43.5	15.5	4.0
12 years	57,429	100.0	88.9	11.1	46.3	42.3	8.9	2.2
13–15 years	24,235	100.0	91.8	8.2	55.0	36.6	6.6	1.5
16 years and over	20,937	100.0	94.1	5.9	61.7	32.0	4.7	1.2
Unknown	2,947	100.0	76.1	23.9	33.9	39.9	15.6	7.6
Under $5,000								
All educational levels	18,404	100.0	68.4	31.6	29.5	38.5	21.2	10.2
No education	416	100.0	47.3	52.7	17.1	30.0	26.9	25.2
1–8 years	6,187	100.0	54.6	45.4	18.5	35.7	27.8	17.3
9–11 years	3,885	100.0	67.1	32.9	27.3	39.5	24.6	8.2
12 years	4,252	100.0	77.7	22.3	34.5	42.8	16.4	5.8
13–15 years	2,432	100.0	86.3	13.7	46.9	39.1	10.8	2.8
16 years and over	905	100.0	88.5	11.5	51.0	36.5	8.3	*3.1
Unknown	326	100.0	61.4	38.9	23.9	36.5	23.3	15.0
$5,000–$9,999								
All educational levels	26,384	100.0	77.7	26.8	34.3	43.2	16.4	5.8
No education	260	100.0	54.1	45.9	18.5	35.4	19.2	26.5
1–8 years	6,332	100.0	62.8	37.2	21.2	41.4	25.9	11.2
9–11 years	5,608	100.0	75.3	24.7	30.3	44.7	19.2	5.5
12 years	9,025	100.0	84.3	15.7	37.4	46.6	12.3	3.4
13–15 years	3,055	100.0	88.2	11.8	47.5	40.5	8.9	2.9
16 years and over	1,763	100.0	92.5	7.5	58.6	33.5	5.9	*1.6
Unknown	342	100.0	72.5	27.5	26.0	44.4	19.6	*7.6
$10,000–$14,999								
All educational levels	25,990	100.0	86.4	12.6	44.1	42.0	10.7	2.8
No education	101	100.0	49.5	50.5	*20.8	*27.7	*22.8	*26.7
1–8 years	3,281	100.0	71.8	28.2	25.9	45.5	21.7	6.3
9–11 years	4,589	100.0	82.8	17.2	36.8	45.8	14.1	3.0
12 years	11,026	100.0	89.3	10.7	46.7	42.3	8.6	2.2
13–15 years	3,826	100.0	91.3	8.7	52.4	38.6	7.0	1.7
16 years and over	2,773	100.0	93.6	6.4	57.7	35.7	4.9	1.4
Unknown	395	100.0	80.8	19.2	41.8	38.2	13.7	*5.6
$15,000–$24,999								
All educational levels	37,531	100.0	90.6	9.4	50.0	40.4	7.9	1.5
No education	64	100.0	79.7	*20.3	*26.6	54.7	*17.2	*3.1
1–8 years	2,558	100.0	75.5	24.5	30.4	45.0	19.4	5.0
9–11 years	5,661	100.0	86.9	13.1	42.0	44.7	11.4	1.6
12 years	16,655	100.0	91.9	8.1	49.9	41.9	6.9	1.2
13–15 years	6,618	100.0	93.2	6.8	54.9	38.2	5.7	1.0
16 years and over	5,634	100.0	94.5	5.5	62.2	32.0	4.5	1.0
Unknown	340	100.0	84.6	15.4	45.3	38.5	13.2	*2.1

See footnotes at end of table.

Table 5. Number of persons 17 years of age and over by family income and years of completed education and percent distribution of persons 17 years of age and over by respondent-assessed health status, according to family income and years of completed education: United States, 1978—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 income and years of completed education	*All persons 17 years of age and over*	*Respondent-assessed health status*						
		All health statuses	*Excellent or good*	*Fair or poor*	*Excellent*	*Good*	*Fair*	*Poor*
$25,000 and over	Number in thousands	Percent distribution[1]			Percent distribution[2]			
All educational levels	31,071	100.0	93.2	6.8	58.7	34.2	5.7	1.1
No education	*28	100.0	*60.7	*42.9	*39.3	*21.4	*21.4	*21.4
1–8 years	1,218	100.0	77.8	22.3	34.3	43.3	18.1	4.1
9–11 years	3,379	100.0	91.2	8.8	52.8	38.1	7.5	1.3
12 years	11,191	100.0	93.2	6.8	55.2	37.8	5.7	1.0
13–15 years	6,422	100.0	94.6	5.4	64.3	30.1	4.6	0.8
16 years and over	8,506	100.0	95.4	4.6	65.2	29.8	3.9	0.7
Unknown	326	100.0	85.4	14.6	50.6	31.9	10.7	*3.4
Unknown family income								
All educational levels	15,438	100.0	80.5	19.5	36.3	43.1	14.4	4.9
No education	171	100.0	59.7	40.3	*17.5	38.0	24.6	*12.9
1–8 years	2,909	100.0	63.8	36.2	19.6	43.4	26.0	9.8
9–11 years	2,620	100.0	79.1	20.9	30.5	47.7	16.1	4.6
12 years	5,281	100.0	85.9	14.1	40.4	44.7	11.4	2.6
13–15 years	1,882	100.0	91.0	9.0	50.9	39.1	7.2	*1.6
16 years and over	1,357	100.0	91.0	9.0	56.9	33.8	5.4	3.5
Unknown	1,218	100.0	74.8	25.2	28.6	42.6	15.2	8.9

[1] Excludes persons with health status not assessed.
[2] Includes persons with health status not assessed.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 6. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and marital status: United States, 1978

[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 by sex, race, and family income	All persons 17 years of age and over	17–44 years of age				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
	Percent of persons assessed in fair or poor health[2]											
All marital statuses[3]	15.4	8.6	16.4	7.5	4.4	21.7	34.7	15.8	11.1	30.3	38.1	23.4
Married	15.1	8.2	17.6	7.3	4.0	20.0	32.6	15.0	10.1	30.9	40.0	24.2
Never married	9.2	7.3	11.8	6.4	4.6	25.8	36.6	20.6	16.2	22.8	31.6	16.1
Widowed	29.0	13.5	24.7	*10.3	*4.7	28.0	39.5	19.4	12.7	30.5	36.8	23.0
Divorced or separated	21.0	15.2	26.9	12.6	7.3	29.1	44.5	18.8	16.1	31.4	37.4	26.6
SEX												
Male												
Married	15.2	7.2	15.5	6.5	3.6	19.9	31.8	15.7	9.5	31.1	39.9	23.9
Never married	8.0	6.2	9.7	5.4	4.1	27.4	35.5	21.2	18.6	23.8	30.2	*15.4
Widowed	27.5	*5.5	*12.9	*5.4	*3.6	25.1	36.0	*12.3	*9.5	30.8	31.4	28.9
Divorced or separated	19.0	11.9	22.1	11.7	4.8	27.8	38.6	21.6	16.9	32.2	32.9	30.1
Female												
Married	15.0	9.2	19.5	7.9	4.5	20.1	33.5	14.4	11.0	30.5	40.1	24.5
Never married	10.6	8.7	14.5	7.7	5.1	24.2	37.6	20.1	14.5	22.2	32.8	16.3
Widowed	29.3	15.6	27.2	*11.8	*5.3	28.5	40.2	20.6	13.3	30.4	38.1	22.2
Divorced or separated	22.2	17.1	28.9	13.1	9.2	30.0	48.2	17.6	15.6	30.8	41.1	24.9
RACE												
White												
Married	14.3	7.6	16.6	6.8	3.8	18.8	31.4	14.3	9.8	29.7	38.6	23.7
Never married	8.0	6.1	9.9	5.3	4.2	23.4	31.9	20.7	16.8	21.6	30.7	15.4
Widowed	26.8	*8.5	*16.0	*6.4	*6.0	24.6	36.3	17.3	12.5	28.6	35.0	21.6
Divorced or separated	18.4	12.9	25.1	10.3	6.2	25.2	40.7	17.6	13.8	30.0	34.7	26.8
Black												
Married	24.7	15.0	24.3	13.3	7.3	33.9	41.6	27.7	16.5	47.7	51.6	41.0
Never married	15.7	13.6	18.2	12.0	7.4	43.1	54.9	*24.4	*7.1	34.3	*37.3	*33.3
Widowed	42.7	23.4	*34.1	*20.4	*-	43.5	48.0	37.4	*17.6	45.9	46.3	44.9
Divorced or separated	30.0	22.7	31.1	20.9	11.1	42.6	52.9	22.3	*29.9	37.2	42.8	*26.4
FAMILY INCOME												
Under $15,000												
Married	22.6	12.0	20.7	9.4	5.1	32.6	41.2	23.5	19.2	34.1	40.8	27.5
Never married	12.4	10.1	17.6	8.6	5.7	30.4	38.4	23.3	22.0	23.1	31.9	16.3
Widowed	30.0	17.4	28.1	*11.9	*7.0	30.8	41.8	20.0	13.3	30.5	37.1	22.3
Divorced or separated	24.5	17.7	29.1	13.8	9.2	34.4	47.3	20.7	23.9	33.8	37.5	30.1
$15,000 and over												
Married	8.6	5.6	12.1	5.7	3.7	12.3	21.0	10.7	8.7	18.2	30.8	15.6
Never married	4.6	4.1	4.8	4.3	3.2	11.5	*21.3	*11.5	*8.3	*17.5	*41.7	*9.2
Widowed	21.3	*4.9	*10.0	*4.9	*3.2	15.0	22.8	14.5	*7.7	27.5	32.0	21.6
Divorced or separated	9.2	7.1	14.4	8.0	*3.9	13.3	*23.6	13.2	10.0	*11.8	*16.7	*10.4
	Number of persons in thousands[2]											
All marital statuses[3]	154,817	88,627	20,406	35,807	31,147	43,403	15,556	16,748	10,228	22,788	9,860	12,117
Married	99,167	52,690	10,350	22,873	18,896	34,154	11,588	13,699	8,280	12,323	4,929	7,024
Never married	31,525	28,107	7,811	9,830	9,859	2,118	811	609	568	1,300	487	747
Widowed	11,977	564	182	224	150	3,380	1,581	1,157	569	8,033	3,934	3,760
Divorced or separated	12,148	7,266	2,063	2,880	2,241	3,751	1,576	1,282	810	1,132	510	586

See footnotes at end of table.

Table 6. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and marital status: United States, 1978—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 by sex, race, and family income	All persons 17 years of age and over	17–44 years of age				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
SEX												
Male		Number of persons in thousands[2]										
Married	49,738	24,791	4,842	9,417	10,260	17,714	6,220	6,126	4,999	7,233	3,091	3,893
Never married	16,914	15,437	4,364	5,380	5,392	1,035	462	269	244	442	222	195
Widowed	1,924	128	*31	37	56	553	287	155	95	1,243	750	425
Divorced or separated	4,502	2,595	618	969	967	1,432	615	416	356	475	250	200
Female												
Married	49,428	27,899	5,508	13,456	8,637	16,440	5,368	7,573	3,281	5,090	1,839	3,131
Never married	14,611	12,670	3,446	4,450	4,468	1,083	348	340	324	858	265	552
Widowed	10,054	436	151	187	94	2,828	1,295	1,002	474	6,790	3,184	3,336
Divorced or separated	7,646	4,671	1,446	1,911	1,275	2,318	962	866	454	657	260	385
RACE												
White												
Married	90,365	47,642	8,938	20,929	17,305	31,283	10,093	12,912	7,805	11,441	4,344	6,778
Never married	26,158	23,168	5,894	8,177	8,639	1,812	618	557	536	1,178	401	722
Widowed	10,246	388	94	173	116	2,768	1,148	1,048	513	7,090	3,263	3,525
Divorced or separated	9,338	5,541	1,413	2,240	1,822	2,893	1,050	1,090	699	903	344	531
Black												
Married	7,439	4,185	1,266	1,732	1,103	2,466	1,364	645	357	788	549	197
Never married	4,792	4,399	1,807	1,523	925	286	181	45	*30	107	75	*21
Widowed	1,647	171	88	49	*31	574	416	99	51	902	646	229
Divorced or separated	2,669	1,622	627	603	378	829	518	177	107	218	159	53
FAMILY INCOME												
Under $15,000												
Married	38,642	19,256	5,957	8,775	4,331	11,037	5,810	3,951	1,117	8,349	3,946	4,254
Never married	15,428	13,318	3,780	4,244	5,068	1,197	587	307	250	913	373	506
Widowed	8,430	379	146	159	71	2,267	1,203	755	286	5,783	2,981	2,662
Divorced or separated	8,279	4,879	1,579	2,000	1,256	2,498	1,253	860	354	902	437	458
$15,000 and over												
Married	51,551	30,086	3,459	12,813	13,673	19,240	4,332	8,235	6,520	2,225	383	1,813
Never married	12,577	11,865	3,165	4,492	4,027	555	82	183	257	156	36	111
Widowed	1,763	123	*20	41	62	647	180	243	209	993	400	514
Divorced or separated	2,710	1,766	278	627	857	833	140	295	389	112	*30	69

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown marital status and family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 7. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and usual activity: United States, 1978

[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 activity by sex, race, and family income	All persons 17 years of age and over	17–44 years of age				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
		Percent of persons assessed in fair or poor health[2]										
All usual activities[3]	15.4	8.6	16.4	7.5	4.4	21.7	34.7	15.8	11.1	30.3	38.1	23.4
Working	9.4	6.9	14.1	6.5	4.0	13.9	22.3	11.4	7.9	16.4	23.9	12.4
Keeping house[4]	22.0	13.3	24.6	9.7	5.6	27.3	41.5	17.9	14.2	29.3	37.0	23.1
Attending school	5.5	5.2	6.7	4.7	4.1	*15.4	*27.5	*7.0	*20.0	*22.1	*48.4	*12.1
Other.....	40.2	29.6	39.1	24.1	17.2	57.5	67.1	49.4	38.1	35.6	42.2	28.1
SEX												
Male												
Working	8.9	6.3	12.9	5.7	3.5	13.4	21.4	10.8	7.4	17.7	23.1	14.4
Attending school	4.3	4.1	4.8	4.1	3.3	*19.2	*31.6	*-	*29.0	*10.0	*22.2	*12.5
Other.....	39.6	30.4	37.9	24.8	20.7	57.7	65.8	50.0	39.7	33.8	40.0	27.1
Female												
Working	10.2	7.9	16.6	7.6	4.9	14.7	24.1	12.1	8.9	14.2	26.0	9.2
Keeping house[4]	22.0	13.3	24.6	9.7	5.6	27.3	41.5	17.9	14.2	29.3	37.0	23.1
Attending school	6.8	6.5	8.8	5.2	5.0	*12.5	*28.6	*9.5	*12.1	*31.9	*59.1	*11.8
Other.....	43.2	27.1	43.9	22.0	*5.9	56.4	76.4	46.7	32.9	44.6	55.7	33.1
RACE												
White												
Working	8.7	6.3	13.3	5.9	3.8	12.8	21.0	10.8	7.4	15.0	21.2	12.0
Keeping house[4]	20.2	11.2	22.0	8.3	4.7	24.4	37.9	16.4	13.9	28.3	36.2	22.4
Attending school	4.7	4.5	5.6	4.0	3.8	*11.9	*24.1	*3.8	*16.9	*24.1	*50.0	*12.1
Other.....	38.6	27.6	38.9	22.2	15.3	56.4	66.4	49.8	37.8	33.7	40.2	27.1
Black												
Working	15.9	11.8	18.0	11.5	6.4	24.4	29.8	19.4	15.8	30.2	38.3	*20.2
Keeping house[4]	39.5	28.7	34.8	23.3	*17.3	57.2	61.9	49.2	*24.5	41.2	43.6	37.6
Attending school	9.6	9.3	11.1	*7.2	7.4	*38.1	*36.4	*-	*60.0	*-	*-	*-
Other.....	50.5	35.6	39.7	31.8	*23.5	62.7	68.8	39.6	*48.4	53.6	53.0	60.4
FAMILY INCOME												
Under $15,000												
Working	12.6	9.3	16.5	7.8	5.2	19.9	26.5	14.6	12.5	19.1	25.4	14.3
Keeping house[4]	27.9	18.7	27.7	13.4	7.8	37.5	47.5	24.6	22.0	30.5	37.4	24.1
Attending school	7.8	7.6	11.7	6.9	5.3	*19.0	*22.2	*11.1	*23.8	*19.6	*35.0	*10.5
Other.....	43.1	33.8	43.0	26.7	21.1	63.2	70.1	53.7	46.6	37.3	42.8	29.9
$15,000 and over												
Working	6.6	5.0	10.0	5.3	3.5	9.8	16.4	8.8	7.0	9.3	*12.3	8.8
Keeping house[4]	11.4	6.8	15.7	5.9	4.3	15.4	26.5	12.2	10.7	21.1	33.1	16.5
Attending school	3.2	2.9	3.1	2.9	2.3	*9.6	*14.3	*6.5	*15.0	*28.1	*72.7	*16.7
Other.....	29.5	18.5	24.4	18.7	*12.1	42.3	55.3	41.8	31.6	25.8	34.8	21.0
		Number of persons in thousands[2]										
All usual activities[3]	154,817	88,627	20,406	35,807	31,147	43,403	15,556	16,748	10,228	22,788	9,860	12,117
Working	86,945	57,050	9,865	24,615	21,961	27,307	8,418	10,759	7,616	2,588	861	1,665
Keeping house[4]	38,637	16,080	4,797	7,446	3,642	11,644	4,860	4,747	1,864	10,914	4,647	5,960
Attending school	12,783	12,513	4,467	2,753	4,972	184	40	57	65	86	*31	*33
Other.....	15,998	2,728	1,206	922	499	4,127	2,210	1,144	659	9,142	4,302	4,437

See footnotes at end of table.

Table 7. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and usual activity: United States, 1978—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 activity by sex, race, and family income	All persons 17 years of age and over	17–44 years of age				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
SEX												
Male		Number of persons in thousands[2]										
Working	53,058	34,279	6,525	13,775	13,610	17,100	5,622	5,975	5,150	1,679	603	1,028
Attending school	6,573	6,456	2,344	1,306	2,649	78	*19	*15	*31	40	*9	*16
Other	13,250	2,090	953	687	378	3,507	1,938	962	506	7,653	3,692	3,665
Female												
Working	33,887	22,771	3,340	10,840	8,352	10,207	2,797	4,784	2,466	909	258	636
Keeping house[4]	38,637	16,080	4,797	7,446	3,642	11,644	4,860	4,747	1,864	10,914	4,647	5,960
Attending school	6,209	6,057	2,123	1,447	2,323	106	*21	42	*33	47	*22	*17
Other	2,748	638	252	234	120	620	273	182	152	1,490	610	772
RACE												
White												
Working	76,797	50,015	8,130	21,688	19,719	24,441	7,011	9,983	7,041	2,341	728	1,564
Keeping house[4]	34,484	14,017	3,740	6,737	3,373	10,516	4,061	4,513	1,802	9,951	3,997	5,687
Attending school	10,693	10,453	3,584	2,320	4,296	161	*29	52	59	79	*30	*33
Other	13,762	2,043	836	707	429	3,527	1,786	1,031	628	8,193	3,587	4,250
Black												
Working	8,897	6,135	1,620	2,702	1,690	2,528	1,307	662	458	234	128	94
Keeping house[4]	3,733	1,810	974	626	191	1,020	743	199	49	904	619	258
Attending school	1,785	1,760	817	374	502	*21	*11	*2	*5	*5	*2	*-
Other	2,056	633	357	201	51	560	411	93	*31	863	672	148
FAMILY INCOME												
Under $15,000												
Working	32,475	22,271	5,579	9,885	6,619	8,736	4,074	3,278	1,252	1,467	617	823
Keeping house[4]	21,135	7,818	3,260	3,464	999	5,415	3,073	1,839	444	7,902	3,653	4,118
Attending school	5,973	5,863	1,718	1,220	2,808	63	*18	*18	*21	46	*20	*19
Other	11,002	1,772	860	584	279	2,727	1,671	724	285	6,502	3,429	2,911
$15,000 and over												
Working	46,707	30,537	3,351	12,874	14,163	15,469	3,299	6,256	5,759	701	122	571
Keeping house[4]	13,061	6,990	989	3,514	2,446	4,720	1,135	2,323	1,239	1,351	323	985
Attending school	5,707	5,581	2,365	1,306	1,796	94	*14	*31	40	*32	*11	*12
Other	2,949	628	197	241	174	932	277	325	321	1,390	394	935

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown usual activity and family income.
[4] Asked only of females.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 8. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and labor force and current employment status: United States, 1978

[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]

Labor force and current employment status by sex, race, and family income	All persons 17 years of age and over	17–44 years of age				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
		Percent of persons assessed in fair or poor health[2]										
All labor force and current employment statuses[3]	15.4	8.6	16.4	7.5	4.4	21.7	34.7	15.8	11.1	30.3	38.1	23.4
In the labor force	9.3	6.9	13.3	6.5	3.9	14.2	23.2	11.4	7.9	16.5	23.2	12.7
Currently employed	9.0	6.5	12.6	6.4	3.7	13.8	22.7	11.0	7.9	16.7	23.3	12.8
Currently unemployed	14.3	12.2	18.6	9.1	7.8	23.8	33.1	23.3	*8.8	*12.4	*20.0	*10.0
Not in the labor force	26.3	13.8	21.9	11.0	7.0	36.1	50.2	25.0	22.2	32.5	39.9	25.6
SEX												
Male												
In the labor force	8.8	6.1	11.8	5.6	3.4	13.8	22.3	11.2	7.4	17.0	22.4	13.6
Currently employed	8.5	5.7	11.2	5.5	3.2	13.4	21.8	10.7	7.4	17.2	22.7	13.5
Currently unemployed	15.2	12.5	16.8	9.1	8.5	25.3	31.2	24.7	*10.3	*12.5	*13.8	*12.1
Not in the labor force	33.8	15.5	19.9	17.8	8.5	56.6	65.2	49.2	43.0	34.6	40.5	28.1
Female												
In the labor force	10.0	7.9	15.7	7.5	4.6	14.7	24.9	11.7	8.8	15.6	25.0	11.4
Currently employed	9.7	7.6	14.9	7.4	4.4	14.4	24.3	11.3	8.9	15.8	24.6	11.7
Currently unemployed	13.4	11.9	20.7	9.1	7.1	21.7	36.4	21.1	*7.4	*12.3	*33.3	*7.5
Not in the labor force	23.5	13.3	22.6	10.0	6.4	30.0	44.4	20.0	16.7	31.3	39.5	24.3
RACE												
White												
In the labor force	8.5	6.2	12.5	5.8	3.6	12.9	21.5	10.7	7.4	15.0	20.8	12.1
Currently employed	8.2	5.9	11.8	5.7	3.4	12.5	20.9	10.3	7.4	15.3	21.0	12.2
Currently unemployed	13.5	11.2	17.9	8.1	7.2	23.5	35.3	23.2	*6.7	*10.6	*17.6	*8.5
Not in the labor force	24.7	11.9	19.6	9.5	6.4	33.5	47.3	23.6	21.9	31.1	38.5	24.8
Black												
In the labor force	16.2	12.1	17.5	11.6	7.0	26.0	31.9	20.3	16.5	30.9	35.6	*26.0
Currently employed	16.2	11.5	16.9	11.4	6.7	26.3	32.5	20.5	16.3	30.5	35.2	*25.0
Currently unemployed	16.8	15.8	20.4	13.1	*9.8	*21.0	*23.1	*17.0	*23.8	*50.0	*50.0	*50.0
Not in the labor force	39.5	25.0	29.9	23.1	12.0	60.3	66.5	48.8	*32.1	47.3	48.9	44.9
FAMILY INCOME												
Under $15,000												
In the labor force	12.5	9.3	16.4	7.9	5.2	20.7	28.0	14.6	12.9	18.0	24.3	13.5
Currently employed	12.0	8.6	15.6	7.5	4.7	20.1	27.4	14.1	12.7	18.4	24.8	13.7
Currently unemployed	17.5	15.5	21.2	11.6	11.4	30.1	36.8	24.7	*16.9	*11.3	*12.5	*11.1
Not in the labor force	32.2	19.3	28.2	15.4	8.6	47.2	56.0	34.6	33.0	34.1	40.4	27.0
$15,000 and over												
In the labor force	6.4	4.8	8.4	5.3	3.3	9.8	16.2	9.0	6.9	10.1	*13.6	9.4
Currently employed	6.3	4.7	8.2	5.3	3.2	9.6	16.1	8.7	7.0	9.8	*12.4	9.3
Currently unemployed	8.9	7.0	11.2	6.4	*4.0	15.0	*20.6	21.5	*5.0	*18.2	*50.0	*11.1
Not in the labor force	14.0	6.9	9.7	6.0	5.5	20.6	33.4	16.0	16.5	23.7	34.4	18.9
		Number of persons in thousands[2]										
All labor force and current employment statuses[3]	154,817	88,627	20,406	35,807	31,147	43,403	15,556	16,748	10,228	22,788	9,860	12,117
In the labor force	99,018	67,257	13,065	27,891	25,817	28,593	8,918	11,304	7,955	3,167	1,051	2,042
Currently employed	93,107	62,577	11,477	26,101	24,567	27,515	8,492	10,935	7,690	3,015	1,011	1,931
Currently unemployed	5,911	4,680	1,589	1,790	1,250	1,078	426	369	264	153	40	110
Not in the labor force	55,799	21,369	7,341	7,916	5,330	14,810	6,638	5,444	2,273	19,620	8,809	10,075

See footnotes at end of table.

Table 8. Percent of persons 17 years of age and over assessed in fair or poor health and number of persons 17 years of age and over, by age, years of completed education, sex, race, family income, and labor force and current employment status: United States, 1978—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]

Labor force and current employment status by sex, race, and family income	All persons 17 years of age and over	17–44 years of age-				45–64 years of age				65 years of age and over		
		Years of completed education				Years of completed education				Years of completed education		
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
SEX												
Male					Number of persons in thousands[2]							
In the labor force	57,649	38,357	7,981	14,754	15,303	17,279	5,724	6,045	5,219	2,013	711	1,241
Currently employed	54,786	36,189	7,119	14,040	14,752	16,672	5,449	5,851	5,091	1,926	682	1,183
Currently unemployed	2,863	2,168	862	715	550	607	276	194	128	88	*29	58
Not in the labor force	15,429	4,594	1,875	1,049	1,372	3,456	1,859	922	475	7,380	3,602	3,472
Female												
In the labor force	41,369	28,901	5,084	13,137	10,515	11,314	3,194	5,259	2,735	1,154	340	801
Currently employed	38,321	26,389	4,358	12,061	9,814	10,843	3,043	5,084	2,599	1,089	329	748
Currently unemployed	3,048	2,512	726	1,075	700	471	151	175	136	65	*12	53
Not in the labor force	40,370	16,775	5,466	6,867	3,958	11,354	4,779	4,522	1,798	12,240	5,207	6,603
RACE												
White												
In the labor force	87,147	58,753	10,744	24,544	23,103	25,519	7,354	10,470	7,379	2,875	881	1,930
Currently employed	82,488	55,136	9,610	23,135	22,067	24,619	7,025	10,155	7,138	2,733	846	1,824
Currently unemployed	4,659	3,617	1,134	1,409	1,036	900	329	315	241	142	*34	106
Not in the labor force	48,960	17,986	5,595	6,975	4,778	13,236	5,554	5,137	2,174	17,738	7,472	9,626
Black												
In the labor force	10,442	7,420	2,183	3,092	2,029	2,744	1,466	721	464	278	163	104
Currently employed	9,283	6,432	1,754	2,740	1,836	2,582	1,375	674	443	269	159	100
Currently unemployed	1,159	988	429	352	194	162	91	47	*21	*8	*4	*4
Not in the labor force	6,105	2,957	1,605	814	408	1,411	1,013	246	81	1,737	1,265	396
FAMILY INCOME												
Under $15,000												
In the labor force	38,491	27,180	7,068	11,372	8,527	9,425	4,427	3,511	1,346	1,886	769	1,080
Currently employed	35,154	24,457	5,989	10,374	7,907	8,925	4,167	3,353	1,275	1,772	737	999
Currently unemployed	3,337	2,723	1,079	998	621	499	261	158	71	115	*32	81
Not in the labor force	32,287	10,653	4,394	3,807	2,199	7,574	4,425	2,362	661	14,061	6,968	6,800
$15,000 and over												
In the labor force	52,123	35,327	4,794	14,509	15,884	16,024	3,386	6,527	5,980	772	125	640
Currently employed	50,022	33,711	4,409	13,846	15,331	15,562	3,279	6,356	5,798	750	121	623
Currently unemployed	2,101	1,616	385	663	553	462	107	172	182	*22	*4	*18
Not in the labor force	16,478	8,513	2,128	3,464	2,734	5,251	1,348	2,428	1,395	2,714	724	1,866

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 9. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, sex, race, family income, and occupation and type of occupation: United States, 1978

[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]

Occupation and type of occupation by sex, race, and family income	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
	Percent of persons assessed in fair or poor health[2]									
All occupations[3]	9.3	6.9	13.3	6.5	3.9	14.2	23.2	11.4	7.9	16.5
White collar	6.8	5.1	11.4	5.9	3.9	9.9	17.8	10.4	7.2	14.2
Professional, technical, and kindred workers	5.7	4.4	*9.1	7.1	3.8	8.4	19.6	9.8	7.4	13.5
Managers and administrators, except farm	6.6	4.0	*6.4	5.0	3.2	9.5	17.3	9.3	6.7	15.1
Sales workers	7.0	5.1	11.3	4.9	3.7	10.0	17.3	9.3	6.8	14.1
Clerical and kindred workers	7.9	6.4	13.8	6.1	4.6	11.5	17.9	11.5	7.6	14.1
Blue collar	11.2	8.4	13.5	6.5	4.1	17.9	23.3	11.8	10.4	17.2
Craftsmen and kindred workers	9.5	6.8	10.9	6.0	4.1	14.8	20.8	10.2	9.5	13.7
Operatives, except transportation	13.9	11.1	16.5	8.5	5.6	21.0	25.8	14.0	*11.8	18.8
Transportation equipment operatives	9.9	6.4	11.8	3.8	*3.1	18.0	19.9	14.5	*15.4	*19.3
Laborers, except farm	10.5	7.4	12.0	5.2	*2.7	22.1	27.2	*10.5	*9.8	*21.6
Farm (farmers and all types of farmworkers)	13.5	9.1	14.8	*6.8	*3.3	17.7	26.5	11.2	*8.6	18.6
Service workers	13.1	9.3	15.0	8.2	3.9	21.3	27.4	14.8	13.6	19.5
SEX										
Male										
White collar	6.4	4.1	9.7	5.0	3.3	9.8	20.0	10.8	6.6	15.7
Blue collar	10.3	7.4	12.3	5.7	3.8	17.1	22.6	10.9	10.0	17.2
Farm and service	11.4	7.4	12.1	7.1	3.2	17.7	23.6	12.9	*10.8	18.3
Female										
White collar	7.2	5.9	12.5	6.3	4.5	10.0	14.9	10.0	8.1	12.2
Blue collar	14.9	12.3	17.3	10.0	*6.1	21.1	25.7	15.5	*13.0	*16.7
Farm and service	14.6	10.6	16.8	8.6	4.5	23.0	29.9	14.9	*15.2	20.3
RACE										
White										
White collar	6.5	4.8	11.3	5.5	3.6	9.4	17.2	9.8	6.8	13.4
Blue collar	10.4	7.7	12.8	5.8	3.7	16.8	21.7	11.7	10.4	16.4
Farm and service	11.2	8.0	13.6	6.8	3.6	17.7	25.2	11.9	*8.5	16.5
Black										
White collar	10.9	8.5	*12.2	9.5	6.6	18.6	25.5	20.0	14.1	*35.4
Blue collar	16.7	13.1	16.8	11.6	*7.8	26.0	32.4	*11.2	*11.9	*24.7
Farm and service	22.5	15.8	20.6	14.5	*6.3	31.4	32.9	28.9	*30.5	33.1
FAMILY INCOME										
Under $15,000										
White collar	9.2	7.0	16.0	7.4	5.2	15.0	23.3	13.4	11.5	15.6
Blue collar	14.0	10.4	16.1	7.5	4.9	23.8	28.1	15.9	*17.2	19.4
Farm and service	15.8	11.5	18.0	9.2	5.1	24.1	29.9	15.1	*15.2	18.8
$15,000 and over										
White collar	5.3	4.1	7.4	5.0	3.3	7.6	11.2	8.4	6.5	9.5
Blue collar	8.0	6.0	8.9	5.7	3.6	12.5	17.0	9.3	8.4	*9.9
Farm and service	8.4	5.9	9.5	5.5	*2.9	14.8	20.5	12.1	*10.3	*13.9

See footnotes at end of table.

Table 9. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, sex, race, family income, and occupation and type of occupation: United States, 1978—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]

Occupation and type of occupation by sex, race, and family income	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
	Number of persons in thousands[2]									
All occupations[3]	99,018	67,257	13,065	27,891	25,817	28,593	8,918	11,304	7,955	3,167
White collar	49,149	33,021	2,269	11,784	18,861	14,609	1,819	6,058	6,601	1,519
Professional, technical, and kindred workers	15,364	10,835	242	1,537	9,037	4,148	194	851	3,078	381
Managers and administrators, except farm	10,581	5,995	410	2,088	3,473	4,135	689	1,603	1,808	451
Sales workers	6,266	4,074	480	1,574	2,000	1,886	325	884	664	305
Clerical and kindred workers	16,939	12,116	1,136	6,584	4,350	4,441	610	2,719	1,051	382
Blue collar	32,888	22,979	7,208	11,452	4,097	9,198	4,745	3,514	763	711
Craftsmen and kindred workers	13,364	8,809	2,109	4,642	1,977	4,257	1,839	1,845	503	299
Operatives, except transportation	11,214	7,939	2,907	3,966	989	3,076	1,834	1,040	152	199
Transportation equipment operatives	3,812	2,677	912	1,263	487	1,047	545	401	65	88
Laborers, except farm	4,497	3,554	1,279	1,581	643	818	526	228	43	125
Farm (farmers and all types of farmworkers)	2,277	1,155	422	471	244	826	373	329	116	296
Service workers	12,532	8,430	2,610	3,586	2,153	3,508	1,847	1,235	361	594
SEX										
Male										
White collar	23,440	14,819	862	3,713	10,201	7,726	1,026	2,443	4,193	896
Blue collar	26,477	18,569	5,607	9,207	3,569	7,325	3,679	2,823	670	583
Farm and service	6,523	4,064	1,183	1,543	1,289	1,957	936	699	279	503
Female										
White collar	25,709	18,202	1,407	8,071	8,660	6,884	793	3,616	2,408	623
Blue collar	6,410	4,410	1,601	2,244	527	1,872	1,065	691	92	128
Farm and service	8,285	5,520	1,849	2,514	1,108	2,377	1,285	865	198	388
RACE										
White										
White collar	44,946	29,739	1,999	10,650	17,003	13,747	1,656	5,754	6,216	1,460
Blue collar	28,599	19,878	6,048	10,040	3,617	8,084	4,031	3,239	682	638
Farm and service	11,967	7,924	2,336	3,407	2,114	3,311	1,563	1,330	378	732
Black										
White collar	3,419	2,674	263	1,061	1,331	697	140	245	304	48
Blue collar	3,906	2,810	1,074	1,301	385	1,023	669	244	69	73
Farm and service	2,626	1,518	661	592	239	954	628	211	82	154
FAMILY INCOME										
Under $15,000										
White collar	15,048	10,925	1,020	4,222	5,650	3,410	725	1,656	978	713
Blue collar	14,655	10,602	3,953	4,969	1,561	3,563	2,221	1,126	163	491
Farm and service	8,027	4,998	1,805	1,967	1,177	2,367	1,433	709	191	661
$15,000 and over										
White collar	30,608	20,282	1,097	6,848	12,280	9,787	859	3,748	5,130	539
Blue collar	15,400	10,645	2,551	5,712	2,333	4,634	1,962	2,076	535	121
Farm and service	5,308	3,764	971	1,704	1,061	1,437	516	646	261	108

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown occupation, type of occupation, and family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 10. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, sex, race, family income, and type of employer: United States, 1978

[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 employer by sex, race, and family income	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
	Percent of persons assessed in fair or poor health[2]									
All types of employers[3]	9.3	6.9	13.3	6.5	3.9	14.2	23.2	11.4	7.9	16.5
Private industry	9.2	7.0	13.5	6.4	3.8	14.5	22.7	10.8	7.7	16.8
Government	8.7	6.1	14.8	7.5	4.0	13.4	24.1	14.1	8.1	13.8
Self-employed	10.4	6.0	10.6	5.9	4.2	13.9	25.0	10.9	7.9	16.1
SEX										
Male										
Private industry	8.6	6.2	11.9	5.5	3.3	13.8	21.3	10.5	7.0	18.3
Government	8.6	5.5	13.9	6.8	3.5	13.7	24.7	14.1	7.5	*11.7
Self-employed	10.4	5.7	9.4	6.2	3.6	14.0	24.7	11.1	8.1	16.1
Female										
Private industry	10.2	8.2	15.9	7.4	4.5	15.4	25.0	11.2	9.2	14.9
Government	8.8	6.7	16.2	8.1	4.6	13.0	23.1	14.1	8.9	*16.5
Self-employed	10.6	7.0	*13.7	*5.3	*6.5	13.8	26.4	10.4	*7.4	*16.3
RACE										
White										
Private industry	8.4	6.4	12.5	5.7	3.5	13.2	21.1	10.3	7.7	15.0
Government	7.8	5.7	15.7	7.0	3.9	11.5	21.3	12.5	6.8	*10.8
Self-employed	9.8	5.5	10.3	5.4	3.7	13.2	23.9	10.7	7.1	15.5
Black										
Private industry	16.5	12.6	18.2	11.7	6.6	26.0	31.2	18.8	*10.2	31.2
Government	13.5	8.6	13.2	9.2	5.9	23.4	32.1	21.9	17.9	*30.2
Self-employed	25.7	*16.5	*14.9	*17.4	*16.4	36.0	*40.5	*23.7	*46.7	*35.5
FAMILY INCOME										
Under $15,000										
Private industry	12.3	9.4	16.6	7.7	4.8	20.6	27.2	14.0	13.0	18.0
Government	11.8	8.6	17.5	9.1	5.8	19.8	28.6	15.9	13.5	*15.0
Self-employed	14.7	8.1	15.5	6.7	*5.1	21.9	31.3	16.4	*10.2	18.5
$15,000 and over										
Private industry	6.4	5.0	8.6	5.3	3.2	10.0	16.9	8.1	6.8	10.8
Government	6.5	4.4	*9.7	6.1	3.2	10.1	15.1	13.1	6.9	*5.1
Self-employed	6.4	4.4	*5.3	4.6	3.9	8.2	12.8	7.1	7.3	*9.5
	Number of persons in thousands[2]									
All types of employers[3]	99,018	67,257	13,065	27,891	25,817	28,593	8,918	11,304	7,955	3,167
Private industry	71,359	50,818	10,791	22,320	17,359	18,777	6,559	7,612	4,301	1,764
Government	15,563	10,046	937	3,016	6,035	5,162	1,001	1,946	2,168	355
Self-employed	9,425	4,445	713	1,784	1,924	4,017	1,162	1,478	1,345	962
SEX										
Male										
Private industry	41,457	29,291	6,606	11,876	10,581	11,146	4,056	3,968	2,909	1,019
Government	7,951	4,932	525	1,364	3,005	2,822	663	968	1,158	197
Self-employed	7,255	3,355	543	1,271	1,524	3,140	933	1,066	1,115	760
Female										
Private industry	29,902	21,527	4,185	10,445	6,778	7,631	2,502	3,644	1,392	744
Government	7,612	5,114	412	1,651	3,030	2,340	338	978	1,010	158
Self-employed	2,170	1,090	170	513	400	877	229	412	230	202

See footnotes at end of table.

Table 10. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, sex, race, family income, and type of employer: United States, 1978—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 employer by sex, race, and family income	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
RACE										
White					Number of persons in thousands[2]					
Private industry	63,050	44,717	8,948	19,850	15,656	16,777	5,377	7,120	4,060	1,555
Government	12,952	8,279	655	2,369	5,217	4,366	753	1,680	1,894	306
Self-employed	8,914	4,182	664	1,672	1,822	3,804	1,070	1,421	1,289	929
Black										
Private industry	7,327	5,309	1,716	2,287	1,228	1,815	1,119	434	180	202
Government	2,323	1,564	273	606	665	716	224	233	252	43
Self-employed	383	200	47	92	61	152	81	38	*30	*31
FAMILY INCOME										
Under $15,000										
Private industry	28,536	20,859	5,837	9,076	5,781	6,503	3,245	2,403	745	1,174
Government	5,482	3,830	552	1,253	2,003	1,447	524	585	319	206
Self-employed	3,401	1,653	353	732	557	1,281	575	445	254	466
$15,000 and over										
Private industry	37,065	26,446	3,987	11,720	10,633	10,258	2,541	4,404	3,221	360
Government	9,193	5,729	310	1,591	3,803	3,346	398	1,196	1,735	118
Self-employed	4,832	2,381	281	868	1,226	2,174	401	812	948	277

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown type of employer and family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 11. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, type of occupation, and industry: United States, 1978

[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 by type of occupation	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
	Percent of persons assessed in fair or poor health[2]									
All industries[3]	9.3	6.9	13.3	6.5	3.9	14.2	23.2	11.4	7.9	16.5
Agriculture, forestry, and fisheries	11.8	6.9	13.4	*3.9	*2.0	17.3	27.7	9.3	*8.7	18.3
Mining	10.4	7.2	*10.3	*7.6	*2.5	17.2	*25.7	*8.6	*13.2	*26.7
Construction	9.2	6.4	11.2	4.8	3.6	15.3	20.9	10.1	*9.9	*17.0
Manufacturing	10.7	8.4	14.8	7.8	3.6	15.4	21.7	12.4	8.6	17.5
Transportation and public utilities	7.8	5.5	12.3	4.2	4.0	12.3	20.6	8.7	8.3	*12.8
Trade	8.6	6.6	11.5	5.8	4.0	13.3	21.3	10.3	7.1	16.6
Finance, insurance, and real estate	6.4	4.9	*9.5	5.6	3.8	8.8	19.6	9.0	*4.9	*12.4
Services and miscellaneous	9.3	6.7	15.2	7.5	4.1	14.6	28.3	12.0	7.9	16.7
Public administration	8.6	5.9	16.0	6.7	3.7	13.0	17.5	15.7	8.0	*12.0
TYPE OF OCCUPATION[4]										
White collar										
Agriculture, forestry, and fisheries	*5.4	*2.4	*18.2	*-	*-	*10.2	*46.2	*-	*10.0	*-
Mining	*7.6	*3.5	*-	*6.1	*2.0	*13.7	*30.8	*17.4	*10.3	*22.2
Construction	7.0	*3.1	*-	*4.8	*2.4	11.0	*12.6	*11.2	*10.3	*34.4
Manufacturing	6.7	4.9	12.7	6.0	3.1	10.0	17.6	11.7	6.6	*19.1
Transportation and public utilities	6.1	4.7	*5.6	4.7	4.4	8.9	*21.5	*6.7	*7.7	*5.7
Trade	8.0	6.2	13.1	5.8	4.1	11.2	19.0	9.8	6.7	16.2
Finance, insurance, and real estate	5.7	4.7	*8.0	5.4	3.9	7.5	*16.7	8.5	*5.0	*11.8
Services and miscellaneous	6.2	4.8	9.5	6.7	4.0	8.8	16.1	9.3	7.6	13.2
Public administration	8.2	5.9	*14.4	6.8	4.6	12.1	*12.9	15.9	7.7	*5.0
Blue collar										
Agriculture, forestry, and fisheries	8.1	*3.5	*7.5	*-	*2.7	*21.4	*32.9	*-	*-	*14.8
Mining	11.2	*7.6	*8.9	*8.0	*3.2	*19.9	*27.0	*7.5	*22.2	*33.3
Construction	9.7	7.1	11.9	4.8	*4.3	16.8	21.6	9.2	*10.5	*12.2
Manufacturing	12.6	10.2	15.2	8.3	4.7	18.1	22.3	12.7	14.8	*16.3
Transportation and public utilities	8.9	6.1	12.8	3.9	*4.0	14.6	20.7	9.1	*10.3	*20.5
Trade	9.3	6.4	9.7	5.5	*3.6	18.1	23.5	13.3	*-	*19.8
Finance, insurance, and real estate	9.4	*8.6	*10.3	*6.9	*4.9	*11.5	*13.5	*8.3	*13.3	*-
Services and miscellaneous	12.3	7.8	15.2	4.7	*3.7	22.1	33.2	14.1	*2.9	*19.3
Public administration	12.1	10.0	*18.1	*9.9	*2.0	14.8	*22.0	*13.4	*3.8	*20.0
	Number of persons in thousands[2]									
All industries[3]	199,018	67,257	13,065	27,891	25,817	28,593	8,918	11,304	7,955	3,167
Agriculture, forestry, and fisheries	3,008	1,636	569	650	391	1,038	459	398	172	333
Mining	911	629	175	289	162	267	105	81	76	*15
Construction	6,387	4,453	1,255	2,145	1,022	1,787	822	664	272	147
Manufacturing	22,821	15,471	3,762	7,364	4,234	7,028	2,811	2,694	1,420	322
Transportation and public utilities	6,363	4,242	700	2,078	1,442	2,042	598	964	433	78
Trade	18,800	13,462	3,115	5,919	4,323	4,666	1,470	2,170	961	673
Finance, insurance, and real estate	5,579	3,730	199	1,597	1,931	1,607	225	695	671	242
Services and miscellaneous	27,107	18,327	2,451	5,766	10,006	7,652	1,950	2,510	3,090	1,129
Public administration	5,969	3,699	320	1,485	1,869	2,112	356	971	766	1,58

See footnotes at end of table.

Table 11. Percent of persons 17 years of age and over in the labor force assessed in fair or poor health and number of persons 17 years of age and over in the labor force, by age, years of completed education, type of occupation, and industry: United States, 1978—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 by type of occupation	All persons 17 years and over	17–44 years of age				45–64 years of age				65 years of age and over
		Years of completed education				Years of completed education				
		All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	
TYPE OF OCCUPATION[4]										
White collar	Number of persons in thousands[2]									
Agriculture, forestry, and fisheries	279	170	*22	60	88	98	*13	35	50	*11
Mining	277	172	*8	66	98	95	*13	*23	58	*9
Construction	1,319	769	76	351	340	519	87	233	194	*32
Manufacturing	7,431	4,930	300	1,862	2,748	2,391	295	978	1,085	110
Transportation and public utilities	2,676	1,764	89	826	845	876	121	447	299	35
Trade	11,310	7,626	1,095	3,450	3,046	3,216	728	1,610	852	469
Finance, insurance, and real estate	5,039	3,452	113	1,485	1,852	1,383	102	636	640	203
Services and miscellaneous	16,683	11,617	446	2,705	8,434	4,533	312	1,376	2,800	533
Public administration	3,905	2,360	111	903	1,337	1,445	140	694	607	100
Blue collar										
Agriculture, forestry, and fisheries	482	344	134	130	73	112	73	*31	*8	*27
Mining	605	434	158	212	62	166	89	53	*18	*6
Construction	4,979	3,623	1,163	1,760	671	1,242	718	426	76	115
Manufacturing	14,796	10,188	3,330	5,340	1,433	4,416	2,374	1,663	318	192
Transportation and public utilities	3,479	2,350	588	1,216	530	1,089	453	485	116	39
Trade	4,247	3,215	1,017	1,465	690	906	466	362	52	126
Finance, insurance, and real estate	223	140	39	58	41	78	37	*24	*15	*5
Services and miscellaneous	3,164	2,136	632	987	491	852	394	334	105	176
Public administration	755	433	105	224	99	302	124	120	52	*20

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown occupation and industry.
[4] Excludes service workers and farmworkers and firemen.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 12. Percent of persons assessed in fair or poor health and number of persons, by age, years of completed education, race, family income, and geographic region: United States, 1978

[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 by race and family income	All persons	Under 17 years of age	17–44 years of age				45–64 years of age				65 years of age and over		
			Years of completed education				Years of completed education				Years of completed education		
			All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
			Percent of persons assessed in fair or poor health[2]										
All geographic regions[3]	12.4	4.5	8.6	16.4	7.5	4.4	21.7	34.7	15.8	11.1	30.3	38.1	23.4
Northeast	11.3	4.4	7.4	15.4	6.4	3.6	18.4	28.6	14.1	9.2	28.2	33.8	23.0
North Central	10.9	3.9	7.1	14.2	6.5	3.5	20.0	31.9	14.5	10.7	27.9	33.7	22.2
South	15.3	5.2	10.6	18.7	8.7	5.1	27.3	41.7	18.0	13.4	36.7	46.8	27.1
West	10.8	4.1	8.7	15.5	8.7	5.6	18.4	30.8	16.8	10.4	24.3	31.5	19.7
RACE													
White													
Northeast	10.6	3.6	6.3	13.4	5.8	3.1	17.2	26.9	13.5	9.1	27.7	33.0	22.7
North Central	10.3	3.6	6.3	13.5	5.6	3.1	18.7	29.9	13.9	10.4	27.1	33.2	21.2
South	14.1	4.0	9.2	16.7	7.6	4.9	25.0	40.5	16.9	12.4	34.4	45.6	26.0
West	10.4	4.0	8.4	15.1	8.3	5.3	17.0	28.3	15.5	10.4	23.5	30.6	19.4
Black													
Northeast	17.6	9.8	15.1	23.4	11.6	*7.2	30.6	41.1	23.3	*11.8	37.1	42.6	32.2
North Central	16.9	6.0	15.3	18.4	17.3	8.7	36.3	47.4	24.9	*16.8	39.9	39.7	43.7
South	20.3	9.0	16.4	24.0	13.5	6.7	40.5	45.6	29.7	25.8	48.1	49.9	44.8
West	17.4	*4.0	14.2	23.5	14.2	*10.0	41.5	63.6	33.9	*14.1	50.0	52.2	*36.4
FAMILY INCOME													
Under $15,000													
Northeast	16.7	6.8	11.6	21.2	9.2	4.9	28.1	34.5	21.2	19.2	29.7	34.7	24.6
North Central	15.7	5.4	9.9	19.4	7.9	5.0	30.4	39.9	21.3	18.1	30.2	35.0	24.9
South	20.0	6.6	14.0	21.7	11.0	6.1	38.2	48.0	24.9	20.9	38.8	46.7	28.8
West	15.3	6.2	12.1	20.6	11.0	7.5	28.4	39.3	22.6	19.1	25.3	31.0	20.7
$15,000 and over													
Northeast	6.3	2.5	4.5	8.6	4.4	3.1	11.2	19.8	9.5	7.2	20.3	28.1	16.5
North Central	6.0	2.6	4.8	8.5	5.3	2.4	12.3	20.9	9.6	9.2	16.5	25.2	11.1
South	7.5	2.6	5.9	9.3	5.8	4.5	14.4	24.3	12.2	10.4	24.0	40.2	19.4
West	6.7	2.5	5.9	8.9	6.7	4.4	11.6	18.0	12.9	7.9	21.1	39.4	17.8
			Number of persons in thousands[2]										
All geographic regions[3]	213,828	59,012	88,627	20,406	35,807	31,147	43,403	15,556	16,748	10,228	22,788	9,860	12,117
Northeast	48,667	12,900	19,595	4,141	8,125	6,985	10,680	3,854	4,196	2,389	5,493	2,311	2,973
North Central	57,356	15,697	24,545	5,027	10,792	8,419	11,146	3,890	4,740	2,315	5,968	2,734	3,042
South	69,206	19,619	28,074	8,048	11,034	8,573	13,944	5,928	4,735	2,994	7,570	3,541	3,750
West	38,599	10,796	16,413	3,190	5,856	7,170	7,633	1,884	3,076	2,530	3,757	1,275	2,353
RACE													
White													
Northeast	43,341	11,142	17,322	3,346	7,317	6,387	9,724	3,344	3,952	2,242	5,152	2,123	2,836
North Central	51,728	13,714	22,138	4,291	9,918	7,672	10,294	3,423	4,506	2,181	5,583	2,486	2,919
South	55,296	14,568	22,588	5,826	9,016	7,440	11,792	4,482	4,343	2,761	6,348	2,597	3,525
West	34,688	9,520	14,691	2,876	5,269	6,382	6,946	1,660	2,807	2,369	3,530	1,148	2,277
Black													
Northeast	4,862	1,630	2,026	760	749	448	891	474	232	136	316	178	123
North Central	5,396	1,926	2,267	724	861	632	830	463	231	119	372	241	119
South	13,438	4,888	5,245	2,152	1,958	1,028	2,092	1,413	381	219	1,213	940	225
West	1,999	704	839	153	339	331	342	129	123	71	114	69	*33

See footnotes at end of table.

Table 12. Percent of persons assessed in fair or poor health and number of persons, by age, years of completed education, race, family income, and geographic region: United States, 1978—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 by race and family income	All persons	Under 17 years of age	17–44 years of age				45–64 years of age				65 years of age and over		
			Years of completed education				Years of completed education				Years of completed education		
			All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
FAMILY INCOME													
Under $15,000			Number of persons in thousands[2]										
Northeast	20,862	5,531	7,704	2,205	3,273	2,120	3,966	2,072	1,395	413	3,662	1,714	1,860
North Central	24,270	6,178	9,770	2,471	4,222	2,983	4,042	2,028	1,572	397	4,279	2,130	2,081
South	35,246	10,046	13,509	5,057	5,144	3,129	6,322	3,729	1,804	682	5,368	2,869	2,367
West	16,529	4,374	6,850	1,729	2,540	2,494	2,669	1,023	1,101	514	2,637	1,023	1,572
$15,000 and over													
Northeast	23,018	6,251	10,264	1,564	4,214	4,392	5,450	1,318	2,310	1,770	1,053	288	722
North Central	28,233	8,374	13,222	2,172	5,946	5,008	5,811	1,425	2,610	1,715	827	258	544
South	26,138	7,496	11,841	1,988	4,860	4,918	5,791	1,332	2,375	2,033	1,010	209	755
West	18,841	5,508	8,514	1,198	2,953	4,300	4,224	658	1,661	1,858	594	94	485

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

Table 13. Percent of persons assessed in fair or poor health and number of persons, by age, years of completed education, race, family income, and place of residence: United States, 1978

[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 by race and family income	All persons	Under 17 years of age	17–44 years of age				45–64 years of age				65 years of age and over		
			Years of completed education				Years of completed education				Years of completed education		
			All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
			Percent of persons assessed in fair or poor health[2]										
All places of residence[3]	112.4	4.5	8.6	16.4	7.5	4.4	21.7	34.7	15.8	11.1	30.3	38.1	23.4
SMSA:													
In central city	14.1	5.5	10.2	17.7	9.1	5.7	24.3	36.8	18.2	12.2	30.2	36.1	24.9
Outside of central city	9.7	3.3	6.6	13.5	6.2	3.9	17.1	28.8	13.7	10.0	27.6	35.3	22.1
Outside of SMSA	14.3	5.0	9.7	17.7	8.1	3.8	25.1	38.0	16.6	12.0	32.8	41.7	23.6
Nonfarm	14.4	5.2	9.9	18.2	8.3	4.0	25.6	38.3	17.2	12.2	32.9	42.4	23.3
Farm	13.3	3.2	6.7	12.2	5.9	*1.0	22.1	35.4	13.2	*10.6	32.1	36.6	26.1
RACE													
White													
SMSA:													
In central city	12.6	4.2	8.3	15.3	7.5	5.0	20.7	32.3	16.1	11.8	28.0	34.2	23.1
Outside of central city	9.4	3.1	6.3	12.9	5.7	3.9	16.6	28.3	13.2	9.9	26.8	34.0	21.8
Outside of SMSA	13.5	4.4	8.7	16.4	7.3	3.4	23.8	36.6	16.4	11.0	31.5	40.2	23.3
Nonfarm	13.5	4.5	8.9	16.8	7.5	3.6	24.2	37.1	17.0	11.2	31.5	40.9	23.0
Farm	12.8	3.0	6.6	12.5	5.6	*1.0	21.0	33.8	13.2	*9.1	31.1	35.2	26.1
Black													
SMSA:													
In central city	18.8	8.0	15.5	22.6	13.0	8.6	38.0	47.7	29.7	16.1	41.7	42.2	43.1
Outside of central city	14.4	6.3	12.2	18.3	13.3	*5.1	27.7	34.2	23.4	*14.3	50.2	56.5	*37.5
Outside of SMSA	22.6	9.9	20.0	25.6	17.7	*9.4	43.3	47.9	*22.6	*34.5	49.1	52.4	*35.6
FAMILY INCOME													
Under $15,000													
SMSA:													
In central city	18.4	7.4	13.7	21.4	12.0	7.4	34.6	43.8	25.6	17.9	32.3	37.1	27.4
Outside of central city	14.9	5.0	9.8	18.9	8.1	5.4	27.9	36.4	20.6	21.1	29.6	36.4	23.5
Outside of SMSA	18.6	6.4	12.6	21.7	9.6	4.5	34.2	44.1	22.2	19.3	34.0	41.4	24.9
Nonfarm	18.7	6.6	12.9	22.2	9.9	4.7	34.9	44.4	23.1	19.6	33.8	41.9	24.0
Farm	17.3	3.8	8.7	16.1	*6.2	*1.2	29.5	41.1	16.9	*18.1	36.1	37.1	34.0
$15,000 and over													
SMSA:													
In central city	7.6	2.9	5.6	8.8	5.9	4.2	14.7	25.1	12.3	10.0	18.4	24.5	15.7
Outside of central city	6.1	2.4	4.9	8.9	5.0	3.4	11.2	19.5	10.5	7.8	21.9	33.6	18.0
Outside of SMSA	6.7	2.6	5.6	8.8	5.8	3.3	12.4	19.6	10.4	9.4	20.8	34.0	14.3
			Number of persons in thousands[2]										
All places of residence[3]	213,828	59,012	88,627	20,406	35,807	31,147	43,403	15,556	16,748	10,228	22,788	9,860	12,117
SMSA:													
In central city	61,289	16,238	25,511	6,599	8,990	9,506	12,541	4,818	4,414	2,950	6,999	3,016	3,675
Outside of central city	85,152	23,739	36,438	6,359	14,986	14,575	17,427	4,982	7,173	4,966	7,548	2,890	4,387
Outside of SMSA	67,387	19,035	26,678	7,448	11,831	7,066	13,435	5,756	5,160	2,311	8,240	3,954	4,056
Nonfarm	61,028	17,357	24,539	6,843	10,742	6,657	11,739	5,040	4,430	2,075	7,394	3,512	3,676
Farm	6,360	1,678	2,139	605	1,089	409	1,697	716	730	236	846	441	379

See footnotes at end of table.

Table 13. Percent of persons assessed in fair or poor health and number of persons, by age, years of completed education, race, family income, and place of residence: United States, 1978—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 by race and family income	All persons	Under 17 years of age	17–44 years of age				45–64 years of age				65 years of age and over		
			Years of completed education				Years of completed education				Years of completed education		
			All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 12 years	12 years	More than 12 years	All years[1]	Under 9 years	9 years and over
RACE													
White			Number of persons in thousands[2]										
SMSA:													
In central city	44,872	10,573	18,872	4,329	6,605	7,691	9,676	3,251	3,682	2,502	5,750	2,200	3,296
Outside of central city	79,077	21,665	33,587	5,673	13,914	13,551	16,603	4,598	6,893	4,837	7,222	2,682	4,294
Outside of SMSA	61,103	16,706	24,280	6,338	11,000	6,640	12,476	5,059	5,033	2,213	7,641	3,471	3,966
Nonfarm	54,960	15,086	22,226	5,776	9,946	6,238	10,821	4,379	4,303	1,982	6,828	3,051	3,593
Farm	6,143	1,621	2,054	562	1,055	402	1,655	679	730	232	813	420	373
Black													
SMSA:													
In central city	15,033	5,281	5,968	2,153	2,201	1,459	2,623	1,482	647	388	1,162	777	338
Outside of central city	4,724	1,632	2,203	586	932	627	619	318	205	70	269	177	72
Outside of SMSA	5,938	2,235	2,206	1,050	773	352	913	678	115	87	584	475	90
FAMILY INCOME													
Under $15,000													
SMSA:													
In central city	31,198	8,599	12,482	4,119	4,285	3,886	5,247	2,837	1,644	645	4,870	2,346	2,404
Outside of central city	29,327	7,623	11,882	2,728	5,213	3,797	5,112	2,312	1,959	774	4,710	2,048	2,569
Outside of SMSA	36,382	9,907	13,469	4,615	5,680	3,044	6,640	3,703	2,271	587	6,366	3,342	2,907
Nonfarm	32,987	8,991	12,431	4,267	5,165	2,881	5,780	3,259	1,931	515	5,784	3,008	2,672
Farm	3,396	916	1,038	348	516	163	861	445	340	72	582	334	235
$15,000 and over													
SMSA:													
In central city	23,761	6,100	10,961	1,826	3,991	5,070	5,761	1,382	2,235	2,063	938	216	680
Outside of central city	47,551	14,042	21,654	2,982	8,670	9,835	10,193	1,981	4,340	3,777	1,662	393	1,210
Outside of SMSA	24,918	7,486	11,225	2,113	5,312	3,714	5,321	1,370	2,381	1,535	885	241	616

[1] Includes persons with unknown education.
[2] Excludes persons with health status not assessed.
[3] Includes persons with unknown family income.

NOTE: The appropriate relative standard errors of the estimates shown in this table are found in appendix I, figures I and II.

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I. Technical notes

Background

This report is one of a series of statistical reports prepared by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households in the National Health Interview Survey (NHIS).

In this survey a questionnaire is used to obtain information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these topics are tabulated and analyzed, separate reports that cover one or more of the specific topics are issued.

The population covered by the sample for NHIS is the civilian noninstitutionalized population of the United States. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period because data are not collected for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small. However, the contribution by decedents during a long reference period (for example, 1 year) might be sizable, especially for older persons.

Statistical design of the National Health Interview Survey

General plan

The sampling plan of the survey is based on a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population of the United States. The sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. This feature of the design permits both continuous measurement of characteristics of samples and more detailed analysis of less common characteristics and smaller categories of health-related items. The continuous collection has administrative and operational advantages as well as technical assets because it permits fieldwork to be handled by an experienced, stable staff.

The overall sample was designed so that tabulations can be provided for each of the four major geographic regions and for selected places of residence in the United States.

The first stage of the sample design consists of drawing a sample of 376 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units, called segments, are defined in such a manner that each segment contains an expected six households. Three general types of segments are used:

1. *Area segments,* which are defined geographically.
2. *List segments,* using 1970 census registers as the frame.
3. *Permit segments,* using updated lists of building permits issued in sample PSU's since 1970.

Census address listings were used for all areas of the country where addresses were well defined and could be used to locate housing units. In general, the list frame included the larger urban areas of the United States, from which about two-thirds of the NHIS sample households were selected.

The usual NHIS sample consists of approximately 12,000 segments containing about 50,000 assigned

households, of which 9,000 were vacant, demolished, or occupied by persons not in the scope of the survey. The 41,000 eligible occupied households yield a probability sample of about 120,000 persons.

Descriptive material has already been published[8,9] on data collection, field procedures, and questionnaire development in the NHIS; a detailed description of the sample design[10] and a report on the estimation procedure and the method used to calculate sampling errors of estimates derived from the survey[11] have also been published.

Collection of data

Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by NCHS. In accordance with these specifications the Bureau of the Census participates in survey planning, selects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

Estimating procedures

Because the design of NHIS is a complex multistage probability sample, it is necessary to use complex procedures in the derivation of estimates. Four basic operations are involved:

1. *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. *Nonresponse adjustment.*—The estimates are inflated by a multiplication factor that has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. *First-stage ratio adjustment.*—Sampling theory indicates that the use of auxiliary information that is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1970 populations within 12 race-residence classes.
4. *Poststratification by age-sex-race.*—The estimates are ratio adjusted within each of 60 age-sex-race cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the U.S. Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit (person, household, condition, and hospitalization).

NOTE: A list of references follows the text.

The effect of the ratio-estimating process is to make the sample more closely representative of the civilian noninstitutionalized population by age, sex, race, and residence, which thereby reduces sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period (for example, a calendar quarter) produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

For prevalence statistics, such as number of persons with speech impairments or number of persons classified by time interval since last physician visit, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in the quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures.

For other types of statistics—namely those measuring the number of occurrences during a specified time period—such as incidence of acute conditions, number of disability days, or number of visits to a doctor or dentist, a similar computational procedure is used, but the statistics are interpreted differently. For these items, the questionnaire asks for the respondent's experience over the 2 calendar weeks prior to the week of interview. In such instances the estimated quarterly total for the statistic is 6.5 times the average 2-week estimate produced by the 13 successive samples taken during the period. The annual total is the sum of the four quarters. Thus the experience of persons *interviewed during a year*—experience that actually occurred for each person in a 2-calendar-week interval prior to week of interview—is treated as though it measured the total of such experience *during the year.* Such interpretation leads to no significant bias.

General qualifications

Nonresponse

Data were adjusted for nonresponse by a procedure that imputes to persons in a household who were not interviewed the characteristics of persons in households in the same segment who were interviewed.

Interview process

The statistics presented in this report are based on replies obtained in interviews with persons in the sample households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

There are limitations to the accuracy of diagnostic and other information collected in household interviews.

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. However, other facts, such as the number of disability days 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.

Rounding of numbers

The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All consolidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables, the figures are rounded to the nearest thousand, although these are not necessarily accurate to that detail. Devised statistics such as rates and percent distributions are computed after the estimates on which these are based have been rounded to the nearest thousand.

Population figures

Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and race, which are adjusted to independent estimates, these figures are based on the sample of households in the NHIS. These are given primarily to provide denominators for rate computation, and for this purpose 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, the population figures differ from figures (derived from different sources) published in reports of the U.S. Bureau of the Census. Official population estimates are presented in U.S. Bureau of the Census reports in Series P-20, P-25, and P-60.

Reliability of estimates

Because the statistics presented in this report are based on a sample, they will differ somewhat from the figures that would have been obtained had a complete census been taken using the same schedules, instructions, and interviewing personnel and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures.[12] Although it is very difficult to measure the extent of bias in the NHIS, a number of studies have been conducted to study this problem. The results have been published in several reports.[13–16]

NOTE: A list of references follows the text.

The standard error is primarily a measure of sampling variability; that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation that arises in the measurement process. It does not include estimates of any biases that might be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

Standard error charts

The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percent of the estimate. For this report, asterisks are shown for any cell with more than a 30-percent relative standard error. Included in this appendix are graphs from which the relative standard errors can be determined for estimates shown in the report. To derive relative errors applicable to a wide variety of health statistics and at moderate cost, a number of approximations were required. As a result, the graphs provide an estimate of the relative standard error rather than the precise error for any specific aggregate or percent.

Three classes of statistics for the health survey are identified for purposes of estimating variances:

1. *Narrow range.*—This class consists of (1) statistics that estimate a population attribute; for example, the number of persons in a particular income group, and (2) statistics for which the measure for a single individual during the reference period used in data collection is usually either 0 to 1, and, on occasion, may take on the value 2, or, very rarely, 3.
2. *Medium range.*—This class consists of other statistics for which the measure for a single individual during the reference period used in data collection will rarely lie outside the range 0 to 5.
3. *Wide range.*—This class consists of statistics for which the measure for a single individual during the reference period used in data collection can range from 0 to a number in excess of 5; for example, the number of days of bed disability.

In addition to classifying variables according to whether they are narrow, medium, or wide range, statistics in the survey are further classified as to whether they are based on a reference period of 2 weeks, 6 months, or 12 months.

Determination of relative standard errors

The following rules will enable the reader to determine approximate relative standard errors from the

graphs for estimates presented in this report. These graphs represent standard errors of NHIS data. They should be used in preference to the charts in all previous Series 10 publications.

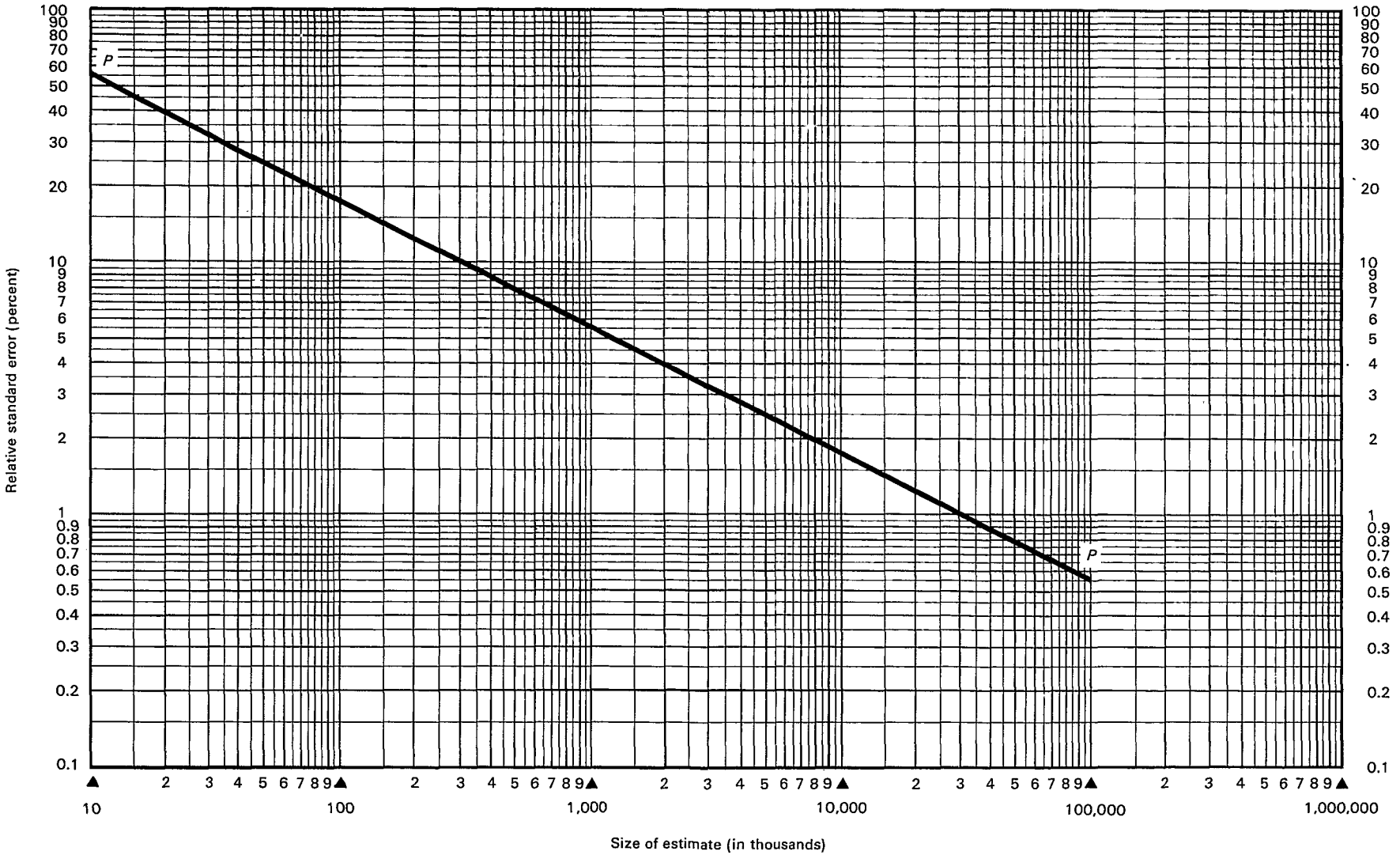
1. *Estimates of aggregates:* Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from figure I. The number of persons in the total U.S. population or in an age-sex-race class of the total population is adjusted to official U.S. Bureau of the Census figures and is not subject to sampling error.
2. *Estimates of percent in a percent distribution:* Relative standard errors for percent in a percent distribution of a total are obtained from appropriate curves, figure II. For values that do not fall on one of the curves presented, visual interpolation will provide a satisfactory approximation.
3. *Estimates of rates when the numerator is a subclass of the denominator:* This rule applies for prevalence rates or when a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates, if converted to rates per 100, may be treated as though they were percents and the relative standard errors obtained from the percent graphs for population estimates. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percent chart will provide the relative standard error per 100.
4. *Estimates of difference between two statistics (such as mean, rate, and total):* The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference

$$d = X_1 - X_2$$

is

$$\sigma_d = \sqrt{(X_1 V_{x1})^2 + (X_2 V_{x2})^2}$$

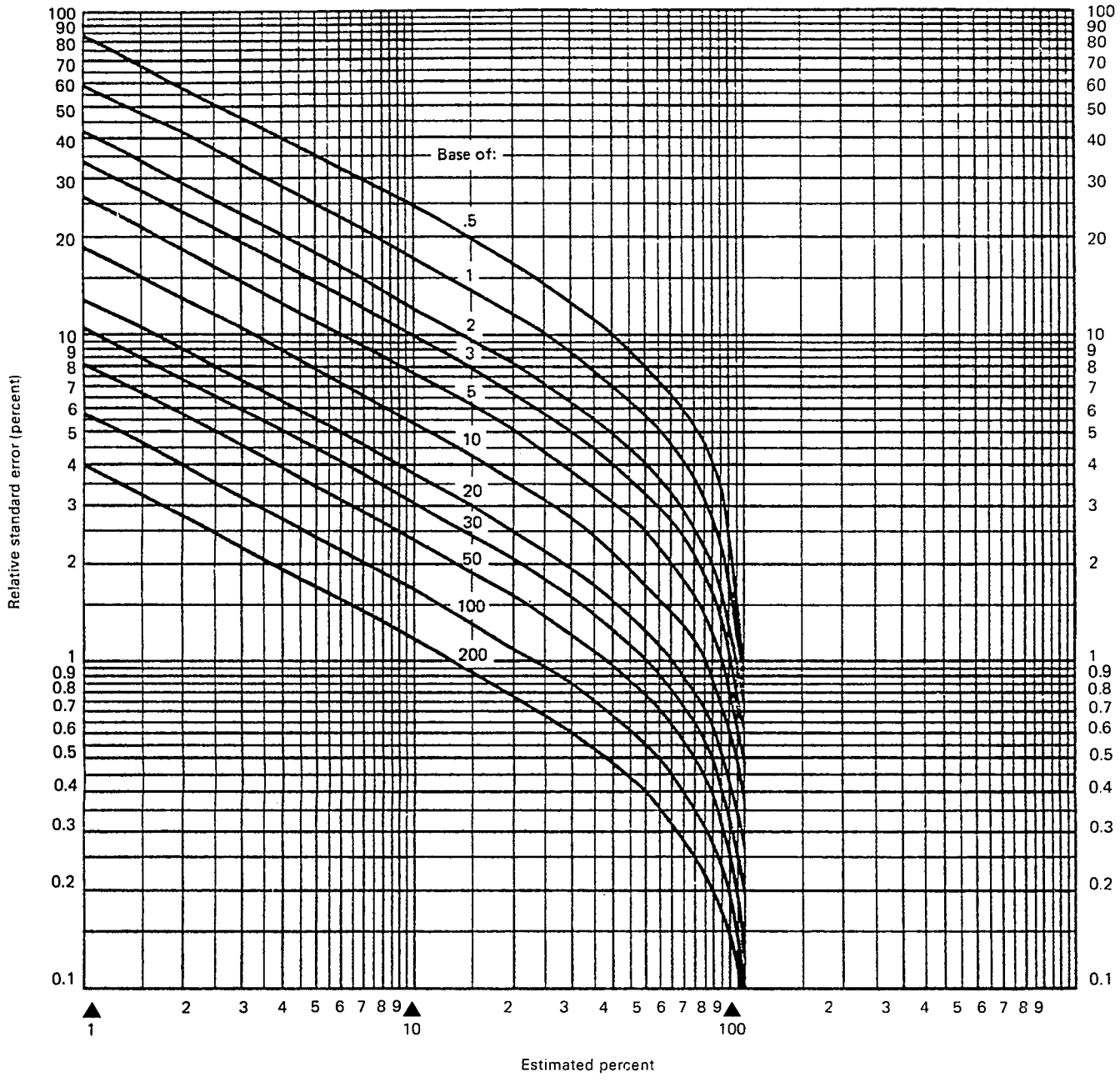
where X_1 is the estimate for class 1, X_2 is the estimate for class 2, and V_{x1} and V_{x2} are the relative errors of X_1 and X_2, respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the three rules above, whichever is appropriate.



[1] This curve represents estimates of relative standard errors based on 4 quarters of data collection for narrow range estimates of population characteristics or narrow range estimates of aggregates using a 12-month reference period.

Example of use of chart: An estimate of 10,000,000 persons with annual family income of $15,000 or more, or 10,000,000 persons who were hospitalized one or more times in the past year (on scale at bottom of chart) has a relative standard error of 1.7 percent (read from scale at left side of chart), or a standard error of 170,000 (1.7 percent of 10,000,000).

Figure I. Relative standard errors for population characteristics[1]



[1] These curves represent estimates of relative standard errors of percents of population characteristics based on 4 quarters of data collection for narrow range estimates.

NOTE: Base of percent shown on curves in millions

Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 3.6 percent (read from the scale at the left side of chart), the point at which the curve for a base of 10,000,000 intersects the vertical line for 20 percent. The standard error in percent is equal to 20 percent × 3.6 percent, or 0.72 percent.

Figure II. Relative standard errors of percents of population characteristics[1]

II. Definitions of terms

Age.—Age is recorded as of the person's last birthday.

Race.—Race is recorded according to interviewers' observations of whether a person is "white," "black," or "other."

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.

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 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 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 6 years of age are classified as "preschool." All persons aged 6–16 years are classified as "school age."

The categories of usual activity used in this report for persons aged 17 years and over are *usually working, usually going to school, usually keeping house, retired, and other activity.* 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 because the objective of the question is not to estimate the numbers of persons in labor force categories but to identify roughly 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 17 in the National Health Interview Survey (NHIS), 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* includes persons 17 years of age or older who are paid employees; persons self-employed in their own businesses, professions, or in farming; or unpaid employees in a family business or in farming. Work around the house or volunteer or unpaid work such as for a church is not counted as working.
- *Usually going to school* includes persons 17 years of age or older whose major activity is going to school.
- *Usually keeping house* consists of female persons 17 years of age or older whose major activity is described as "keeping house" and who cannot be classified as "working."
- *Retired* includes persons 45 years old and over who consider themselves retired. In case of doubt, a person 45 years of age or older is counted as retired if he or she has either voluntarily or involuntarily stopped working, is not looking for work, and is not described as "keeping house." A retired person may or may not be able to work.
- *Other activity* includes all persons 17 years of age or older not classified as "working," "retired," or "going to school," and females 17 years of age or older not classified as "keeping house."

In labor force.—All persons 17 years of age and older who worked at or had a job or business or were looking for work or on layoff from work during the 2-week period prior to the week of interview are in the labor force. The labor force consists of persons *currently employed* and those *currently unemployed* as defined below.

- *Currently employed* includes persons 17 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. Current employment includes paid work as an employee of someone else; self-employment in business, farming, or professional practice; and unpaid work in a family business or farm. Persons who were temporarily absent from a job or business because of a temporary illness, vacation, strike, or bad weather are considered currently employed if they expected to work as soon as the particular event causing the absence no longer existed.

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

  Excluded from the currently employed population are persons who have no definite employment schedule but work only when their services are needed. Also excluded from the currently employed population are (1) persons receiving revenue from an enterprise but not participating in its operation; (2) persons doing housework or charity work for which they receive 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 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, these surveys contain three primary conceptual differences: (1) NHIS estimates are for persons 17 years of age and over, while CPS estimates are for persons 16 years of age and over; (2) NHIS uses a 2-week reference period, while CPS uses a 1-week reference period; (3) NHIS is a continuing survey with separate samples taken weekly, while CPS is a monthly sample taken for the survey week that includes the 12th of the month.

- *Currently unemployed* includes persons 17 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 looking for work.

Not in labor force.—Persons not in the labor force are all persons under 17 years of age and other persons 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 17, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

Types of employer.—Persons in the labor force are classified according to type of employer as follows:

- *Private paid workers* are persons working for a private employer for wages, salary, or commissions. This includes compensation by tips; piece rates or pay in kind; and wages or salary from settlement houses, churches, unions, and other nonprofit organizations.
- *Government workers* are persons who work for any branch of the Federal Government including employees of Government-owned bus lines and utilities, civilian employees of the Armed Forces, and persons elected to Federal offices, or persons who work for any branch of government other than the Federal Government; for example, State, city, or county. Included in this group are civilian employees of the National Guard, persons elected to paid offices, employees of international organizations such as the United Nations, and employees of foreign governments.
- *Self-employed workers* are persons working for profit or fees in their own business, farm, shop, or office. "Own business" includes persons who have their own tools or equipment and provide services on a contract, subcontract, or job basis. Officers of corporations are not classified as owning their own business, even though they do own all or part of the corporation stock; such persons are considered as "private paid." A person who operates a farm for himself, regardless of whether he owns or rents the land, is considered self-employed.
- *Other class of worker* includes (1) persons not paid for work, (2) persons who have never worked in the past but have a job or business that will begin in the near future, (3) persons who have not worked in the past but are presently looking for work, and (4) persons for whom no information as to class of worker is available.

Marital status.—Marital status is recorded only for persons 17 years of age or older. The marital status categories in this report are as follows:

- *Married* includes all married persons not separated from their spouses. Persons with common-law marriages are considered married.
- *Never married* includes persons who were never married and persons whose only marriage was annulled.

- *Separated* includes married persons who have a legal separation or who have parted for other reasons. This does not include persons separated from their spouses because of the circumstances of their employment or service in the Armed Forces; these persons are considered married.
- *Widowed and divorced* include, respectively, all persons who said they were either widowed or legally divorced.

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

Region	*States included*
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania
North Central	Michigan, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, 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 standard metropolitan statistical area (SMSA) and either as central city or not central city or outside an SMSA and as either farm or nonfarm.

Standard metropolitan statistical areas.—The definitions and titles of SMSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Standard Metropolitan Statistical Areas.

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

Central cities.—Each SMSA must include at least one central city. The complete title of an SMSA identifies the central city or cities. If only one central city is designated, then it must have 50,000 or more inhabitants. 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 have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000, the smaller of which must have a population of at least 15,000.

Farm and nonfarm residence.—The population residing outside the SMSA's is subdivided into the farm population, which comprises all non-SMSA residents living on farms, and the nonfarm population, which comprises the remaining outside SMSA population. The farm population includes persons living on land of 10 acres or more from which sales of farm products amounted to $50 or more during the previous 12 months or on land of less than 10 acres from which sales of farm products amounted to $250 or more during the preceding 12 months. Other persons living outside an SMSA were classified as nonfarm if their household paid rent for the house but their rent did not include any land used for farming.

Sales of farm products refer to the gross receipts from the sale of field crops, vegetables, fruits, nuts, livestock, livestock products (such as milk and wool), poultry, poultry products, nursery, and forest products produced on the land and sold at any time during the preceding 12 months.

III. Relevant parts of 1978 questionnaire and cards used in the survey

1a. What is the name of the head of this household? – Enter name in first column b. What are the names of all other persons who live here? – List all persons who live here. Yes * No c. I have listed (Read names). Is there anyone else staying here now, such as friends, relatives, or roomers? ☐ ☐ d. Have I missed anyone who USUALLY lives here but is now away from home? ☐ ☐ e. Do any of the people in this household have a home anywhere else? ☐ ☐ *Apply household membership rules. f. Are any of the persons in this household now on full-time active duty with the Armed Forces of the United States? 1 Y Col(s). ____ (Delete) 2 N	1a.	First name ① Last name AGE RACE 1 W 2 B 3 OT
2. How is -- related to -- (Head of household)?	2.	Relationship HEAD SEX 1 M 2 F
3. What is --'s date of birth? (Enter date and Age, and circle Race and Sex)	3.	Month / Date / Year
L Ask Condition list ____.	C	BED DAYS / DV / HOSP.
C 1. Record the number of Bed Days, Doctor Visits, and Hospitalizations		☐ None (NP) ____ (NP) / ☐ None (NP) ____ (NP) / ☐ None (NP) ____ (NP)
2. Record each condition in the person's column, with the question number(s) where it was reported. Reference dates 2-week period ____, ____ 12-month Bed Days and Doctor visit probe ____ Hospital probe ____		Q. No. / Condition
If 17+, ask: 4. Is -- now married, widowed, divorced, separated, or never married?	4.	0 ☐ Under 17 1 ☐ Married – spouse present 6 ☐ Married – spouse absent 2 ☐ Widowed 4 ☐ Divorced 5 ☐ Separated 3 ☐ Never married

Ages 17+	19a. What was -- doing MOST OF THE PAST 12 MONTHS – (For males): working or doing something else? (For females): keeping house, working, or doing something else? If "something else," ask: b. What was -- doing? If 45+ years and was not "working," "keeping house," or "going to school," ask: c. Is -- retired? d. If "retired," ask: Did he retire because of his health?	19. & 20. 1 ☐ Working (24a) 2 ☐ Keeping house (24b) 3 ☐ Retired, health (23) 4 ☐ Retired, other (23) 5 ☐ Going to school (26) 6 ☐ 17+ something else (23) 7 ☐ 6–16 something else (25)
Ages 6–16	20a. What was -- doing MOST OF THE PAST 12 MONTHS – going to school or doing something else? If "something else," ask: b. What was -- doing?	
Ages under 6		0 ☐ 1–5 years (27) 0 ☐ Under 1 (22)

33. Compared to other persons --'s age, would you say that his health is excellent, good, fair, or poor?	33.	1 E 2 G 3 F 4 P

Mark box or ask:

10a. What is the highest grade or year -- attended in school? — 10a.

☐ Under 17 *(NP)*
00 ☐ None *(NP)*
Elem: 1 2 3 4 5 6 7 8
High: 9 10 11 12
College: 1 2 3 4 5 6+

b. Did -- finish the -- grade (year)? — b. 1 Y 2 N

Hand Card R
Mark box or ask:

11a. Please give me the number of the group or groups which describes --'s racial background. — 11a.

☐ Under 17 *(NP)*

Circle all that apply.

1 – Alaskan Native or American Indian
2 – Asian or Pacific Islander
3 – Black
4 – White
5 – Another group not listed – *Please specify.*

1 2 3 4 5

(Specify)

If multiple entries ask:

b. Which of those groups, that is, (entries in 11a) would you say BEST describes --'s racial background? — b.

1 2 3 4 5

(Specify)

Mark box or ask:

13a. Did -- work at any time last week or the week before – not counting work around the house? — 13a.

☐ Under 17 *(NP)*
1 Y *(14)* 2 N

b. Even though -- did not work during these 2 weeks, does he have a job or business? — b. 1 Y 2 N

c. Was he looking for work or on layoff from a job? — c. 1 Y 2 N *(14)*

d. Which – looking for work or on layoff from a job? — d.

1 ☐ Looking 3 ☐ Both
2 ☐ Layoff

Ask for all persons with a "Yes" in 13a, b, or c.

If "Yes" in 13c only, questions 14a through 14e apply to this person's LAST full-time civilian job.

14a. For whom did -- work? Name of company, business, organization, or other employer — 14a. Employer

b. What kind of business or industry is this? For example, TV and radio manufacturing, retail shoe store, State Labor Dept., farm — b. Industry

c. What kind of work was -- doing? For example, electrical engineer, stock clerk, typist, farmer — c. Occupation

d. What were --'s most important activities or duties? For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete — d. Duties

Complete from entries in 14a–d; if not clear, ask:

e. Was -- an employee of 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?
If not a farm, ask: **Is the business incorporated?**
Yes I
No (or farm) ..... SE
-- working WITHOUT PAY in family business or farm? ..... WP
-- NEVER WORKED. ..... NEV

e.

Class of worker

1 ☐ P 5 ☐ I
2 ☐ F 6 ☐ SE
3 ☐ S 7 ☐ WP
4 ☐ L 8 ☐ NEV

Hand Card I

15. Which of those income groups represents your total combined family income for the past 12 months – that is, yours, your --'s, etc.? Include income from all sources such as wages, salaries, social security or retirement benefits, help from relatives, rent from property, and so forth. — 15.

00 ☐ A 04 ☐ E 08 ☐ I
01 ☐ B 05 ☐ F 09 ☐ J
02 ☐ C 06 ☐ G 10 ☐ K
03 ☐ D 07 ☐ H

CARD I

Under $1,000 (including loss)	Group A
$ 1,000 – $ 1,999	Group B
$ 2,000 – $ 2,999	Group C
$ 3,000 – $ 3,999	Group D
$ 4,000 – $ 4,999	Group E
$ 5,000 – $ 5,999	Group F
$ 6,000 – $ 6,999	Group G
$ 7,000 – $ 9,999	Group H
$10,000 – $14,999	Group I
$15,000 – $24,999	Group J
$25,000 and over	Group K

CARD R

1. Alaskan Native or American Indian
2. Asian or Pacific Islander
3. Black
4. White
5. Another group not listed – Specify

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