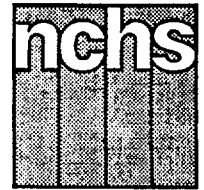


# Advance Data



From Vital and Health Statistics of the National Center for Health Statistics

## Characteristics of Persons With and Without Health Care Coverage: United States, 1989

by Peter Ries, Division of Health Interview Statistics

### Persons with no health care coverage

In 1989 an estimated 33.9 million persons in the civilian noninstitutionalized population of the United States (13.9 percent) were reported to lack health care coverage. This point-prevalence estimate represents an average for 52 weeks of household interviews conducted by the U.S. Bureau of the Census for the National Health Interview Survey (NHIS). It is a measure of a person's coverage status at the time of interview, not at any time prior to the interview. Noncoverage was relatively higher for younger persons, males, persons who are not white, those with low incomes, persons 18 years of age and over who were unemployed or had less than 12 years of education, residents of the South and West Regions of the country, and residents of central cities in metropolitan statistical areas (MSA's).

Table 1 shows that more than 20 percent of persons in the following groups lacked coverage: Unemployed workers 18 years of age and over (38.3 percent), persons

living below the poverty level (32.5 percent), members of families with low annual incomes (27.7 percent for \$5,000–\$9,999, 27.1 percent for less than \$5,000, and 24.3 for \$10,000–\$19,999), young adults 18–24 years of age (27.4 percent), and black persons (20.2 percent). In contrast, the lowest proportions of those without health care coverage were among persons 65 years of age and over (1.2 percent) and members of families with an annual income of \$50,000 or more (3.6 percent).

Because of Medicare, most persons without any form of health care coverage are under 65 years of age (an estimated 33.6 million persons, or 15.7 percent of those in this age group). In terms of both age and sociodemographic characteristics, more than 40 percent of the persons in some of the resulting subgroups lacked coverage. These included persons 18–44 years of age who were unemployed or were members of families with an annual income of \$5,000–\$9,999; those 25–44 years of age who had family incomes of less

than \$5,000 per year or were below the poverty level; and young adults 18–24 years of age with less than 12 years of education.

Figure 1 shows the proportion of persons of all ages and of those under 65 years of age without health care coverage by family income. For all ages combined, the estimates of noncoverage range from 27.7 percent for those in families with an annual family income of \$5,000–\$9,999 to 3.6 percent for members of families with an annual income of \$50,000 or more. The estimates for persons under 65 years of age range from 36.9 to 3.7 percent for the corresponding income groups.

The estimate reported above of the number of persons without health care coverage is similar to the corresponding estimates of two recent large-scale U.S. Government surveys. The National Medical Expenditure Survey of 1987 reported point-prevalence estimates for different periods of the year of 34–36 million persons without health care coverage (1). The preliminary estimate from the March 1990 Current Population



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Centers for Disease Control  
National Center for Health Statistics  
Manning Feinleib, M.D., Dr. P.H., Director



Table 1. Percent of persons without health care coverage, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Total	Under 65 years				65 years and over
			Under 18 years	18-24 years	25-44 years	45-64 years	
All persons not covered <sup>2</sup>	13.9	15.7	14.9	Percent <sup>1</sup>			1.2
Sex							
Male	15.1	16.7	15.1	31.3	17.6	9.6	1.3
Female	12.7	14.6	14.7	23.7	13.6	11.2	1.2
Race							
White	12.8	14.5	14.0	26.3	14.4	9.4	1.0
Black	20.2	21.9	18.9	34.3	22.5	17.5	2.5
Other	19.7	20.4	18.9	27.8	20.7	17.5	*8.4
Family income							
Less than \$5,000	27.1	31.3	25.5	27.3	42.4	35.5	*1.5
\$5,000-\$9,999	27.7	36.9	31.6	43.5	43.5	32.2	1.6
\$10,000-\$19,999	24.3	30.1	30.2	37.5	32.0	21.3	1.1
\$20,000-\$34,999	10.6	11.6	10.9	22.1	11.8	6.8	1.0
\$35,000-\$49,999	5.8	6.0	4.0	18.4	5.8	3.9	*0.8
\$50,000 or more	3.6	3.7	2.3	12.9	3.7	1.9	*1.6
Poverty status							
In poverty	32.5	36.0	32.5	35.9	42.2	35.9	2.3
Not in poverty	10.3	11.5	9.6	23.5	11.7	7.6	1.1
Employment status <sup>3</sup>							
Currently employed	13.9	14.3	...	26.6	13.6	9.0	1.5
Unemployed	38.3	39.2	...	44.5	40.8	26.5	...
Not in labor force	10.8	18.5	...	26.0	21.2	12.8	1.2
Education <sup>3</sup>							
Less than 12 years	20.8	30.1	...	42.1	35.5	19.9	1.5
12 years	14.4	16.6	...	29.8	16.8	8.5	0.7
More than 12 years	8.4	9.2	...	16.0	9.0	5.8	1.3
Region							
Northeast	9.6	11.0	9.9	22.0	10.9	6.6	1.7
Midwest	9.6	10.8	8.8	22.3	10.6	7.6	0.8
South	17.5	19.7	20.5	30.9	19.2	13.4	1.1
West	17.1	18.9	16.7	32.7	19.7	13.1	1.6
Place of residence							
MSA	13.7	15.3	14.4	27.4	15.2	9.8	1.3
Central city	17.2	19.4	18.2	30.0	20.1	12.9	1.6
Not central city	11.4	12.7	12.1	25.4	12.1	8.0	1.1
Not MSA	14.7	17.1	16.5	27.6	17.0	12.6	1.1

<sup>1</sup>Percent calculated excluding the 9.7 million persons for whom coverage status was not determined.

<sup>2</sup>Includes persons with unknown sociodemographic characteristics.

<sup>3</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.

Survey indicates that 33.4 million persons had no health care coverage in 1989 (2). The sociodemographic characteristics of persons without health care coverage in those surveys are similar to those shown in table 1 of this report.

Understanding the reasons for the similarities and differences in the results from these three surveys would require a detailed comparison of the procedures and definitions used in each and the possible effect of comparing estimates from different years. The procedures used in NHIS

are briefly summarized in the technical notes. Health care coverage as used in this report is defined on the basis of persons' coverage status under four types of plans: Private health insurance, Medicare, public assistance (overwhelmingly Medicaid), and military or Veterans' Administration (military-VA) health benefits. Persons covered by any one of these four plans were classified as having health care coverage. In addition, a relatively small number of persons who indicated an unspecified form of coverage were included in

this group. Persons classified as not being covered under any of the four plans were classified as not having health care coverage. All other persons were classified as being of unknown coverage status and were excluded in calculating the percents shown in this report. Numbers of persons in a category with or without coverage were calculated by multiplying the percents with or without coverage by the population estimates shown in table I of the technical notes. The following four sections highlight the characteristics

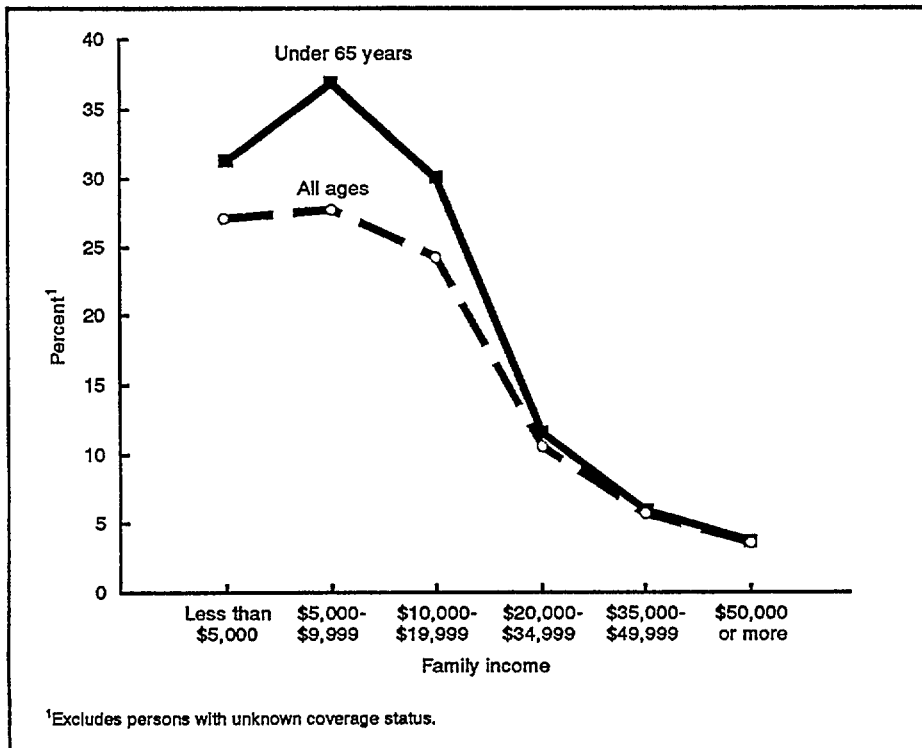


Figure 1. Percent of persons without health care coverage, by age and family income: United States, 1989

of persons covered by each of the types of plans.

### Persons with private health insurance coverage

About 76.1 percent (an estimated 185.3 million persons) of the civilian noninstitutionalized population were covered by private health insurance in 1989. Table 2 shows that the estimates do not greatly differ for persons under 65 years of age (75.9 percent) and those 65 years of age and over (77.2 percent). However, in general, these represent different types of plans: For the younger group private plans are the primary form of coverage, whereas for the older group most plans were purchased to supplement Medicare coverage.

Within sociodemographic categories, the proportion of persons covered was relatively high for white persons (79.3 percent), those not below the poverty line (84.3 percent), currently employed persons (83.6 percent), those with more than 12 years of education (88.2 percent), residents of the Northeast (81.3 percent) and Midwest

(81.7 percent) Regions, and persons living outside of central cities in MSA's (82.0 percent).

Figure 2 shows the proportion of persons covered by private health insurance by family income and age. Clearly the percent of persons covered was directly related to the amount of their family incomes, the range for all ages being from 30.5 percent for less than \$5,000 to 94.9 percent for \$50,000 or more. However, the relationship is not nearly so strong for persons 65 years of age and over (from 42.1 for the lowest to 86.7 percent for the highest income group) as it is for those under 65 years of age (28.7 to 95.2 percent being the corresponding estimates).

Private coverage is determined in the survey by first identifying all plans that pay all or part of hospital or doctor bills for any member of the family and then determining each person's status in relation to each of these plans. Persons are classified as covered if they are covered by one plan or more; they are classified as not covered if they are not covered by any of the plans. Persons not meeting either of these criteria are classified

as unknown. Plans covering only one type of condition (such as cancer or injuries) are not included in this definition of private coverage.

### Persons covered by Medicare

About 12.6 percent (an estimated 30.7 million persons) of the civilian noninstitutionalized population were covered by Medicare in 1989. Table 3 shows that coverage was 94.3 percent for persons 65 years of age and over and 1.4 percent for those under 65 years of age. Among the older persons, the proportion covered was less than 90 percent for only three of the groups shown in the table:

Persons other than white or black (78.1 percent), currently employed persons (87.7 percent), and members of families with an annual income of \$50,000 or more (88.3 percent).

Among all of the other groups included in the table, coverage was greater than 90 percent, with the lowest percent of coverage among these groups being 90.7 percent for black persons.

Regarding persons under 65 years of age, only four groups had more than 4 percent covered by Medicare: Adults (18 years of age and over) who were not in the labor force (7.4 percent), adults who had less than 12 years of education (5.0 percent), persons 45-64 years of age (4.3 percent), and members of families with an annual income of \$5,000-\$9,999 (4.1 percent).

Coverage under Medicare was determined by asking the coverage status of all family members. Respondents were asked to show the Medicare card of persons covered to the interviewer, who determined whether they were covered by Part A, Part B, or both. Persons were classified as covered by Medicare if they were covered by either Part A or B or both.

### Persons with public assistance health care coverage

An estimated 15.1 million persons in the civilian noninstitutionalized

Table 2. Percent of persons with private health insurance coverage, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Total	Under 65 years				65 years and over
			Under 18 years	18-24 years	25-44 years	45-64 years	
All persons covered <sup>2</sup>	76.1	75.9	71.8	Percent <sup>1</sup>			77.2
Sex				64.4	79.0	82.6	
Male	76.3	76.1	71.9	65.1	78.9	83.5	78.1
Female	75.8	75.7	71.7	63.9	79.1	81.8	76.6
Race							
White	79.3	79.1	76.3	67.4	81.4	85.0	80.8
Black	56.6	57.8	51.6	48.8	64.4	64.8	43.7
Other	64.2	65.1	58.2	58.8	70.0	71.4	48.5
Family income							
Less than \$5,000	30.5	28.7	15.0	57.1	17.1	20.6	42.1
\$5,000-\$9,999	35.8	26.0	19.5	34.9	25.0	33.4	64.3
\$10,000-\$19,999	62.1	57.4	51.3	52.1	59.4	67.8	81.5
\$20,000-\$34,999	84.4	84.2	82.9	72.6	85.7	89.3	85.9
\$35,000-\$49,999	91.7	91.9	92.8	78.7	93.0	94.1	88.2
\$50,000 or more	94.9	95.2	96.5	85.6	95.7	96.8	86.7
Poverty status							
In poverty	28.3	26.3	21.4	43.4	23.9	24.0	46.2
Not in poverty	84.3	84.6	85.0	71.6	85.8	88.1	82.3
Employment status <sup>3</sup>							
Currently employed	83.6	83.5	...	70.0	84.6	89.0	86.0
Unemployed	48.4	47.6	...	42.1	44.7	64.4	81.5
Not in labor force	67.8	61.4	...	54.1	56.4	69.2	75.9
Education <sup>3</sup>							
Less than 12 years	58.4	54.3	...	42.2	48.8	64.8	67.0
12 years	78.5	77.5	...	61.9	77.6	86.7	84.3
More than 12 years	88.2	88.2	...	80.7	88.7	91.2	88.6
Region							
Northeast	81.3	81.9	78.9	71.7	84.1	87.2	77.5
Midwest	81.7	81.5	79.1	70.0	84.1	86.8	82.7
South	71.7	71.4	65.9	60.6	75.4	78.5	80.5
West	71.7	71.2	67.6	57.2	74.2	79.4	81.1
Place of residence							
MSA	76.7	76.5	72.1	64.8	79.6	83.7	76.1
Central city	68.4	67.8	60.1	59.7	71.9	76.7	72.8
Not central city	82.0	82.0	79.7	68.7	84.4	87.9	81.6
Not MSA	74.0	73.8	70.8	63.1	76.8	78.8	75.2

<sup>1</sup>Percent calculated excluding the 8.6 million persons for whom coverage status was not determined.

<sup>2</sup>Includes persons with unknown sociodemographic characteristics.

<sup>3</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.

population of the United States (6.2 percent) were covered by public assistance health care programs in 1989. Table 4 shows that proportionately far more persons under 18 years of age (11.1 percent) than adults had this form of coverage. Among persons under 18 years, 60.9 percent of those in families with an annual income of less than \$5,000 and 50.3 percent in families in the \$5,000-\$9,999 income range had public assistance health care coverage. For those living below the poverty level, the corresponding

estimate is 46.3 percent. Among the other age groups shown in the table, persons 65 years of age and over had the highest proportion of persons eligible for this form of coverage (6.2 percent).

Disregarding age, the highest proportions of eligible persons were females, persons who are not white, persons with low family income or family income below the poverty level, persons not currently employed, those with less than 12 years of education, and persons living in the central cities of MSA's.

The 1989 NHIS questionnaire included several questions related to eligibility for public assistance health care. Among these were questions on the receipt of Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (SSI), whether the person had a valid Medicaid card, and whether he or she was covered by any public assistance program that paid for medical care. Coverage by public assistance is ascribed to the person if a positive response was obtained to any of these questions. Persons are classified as

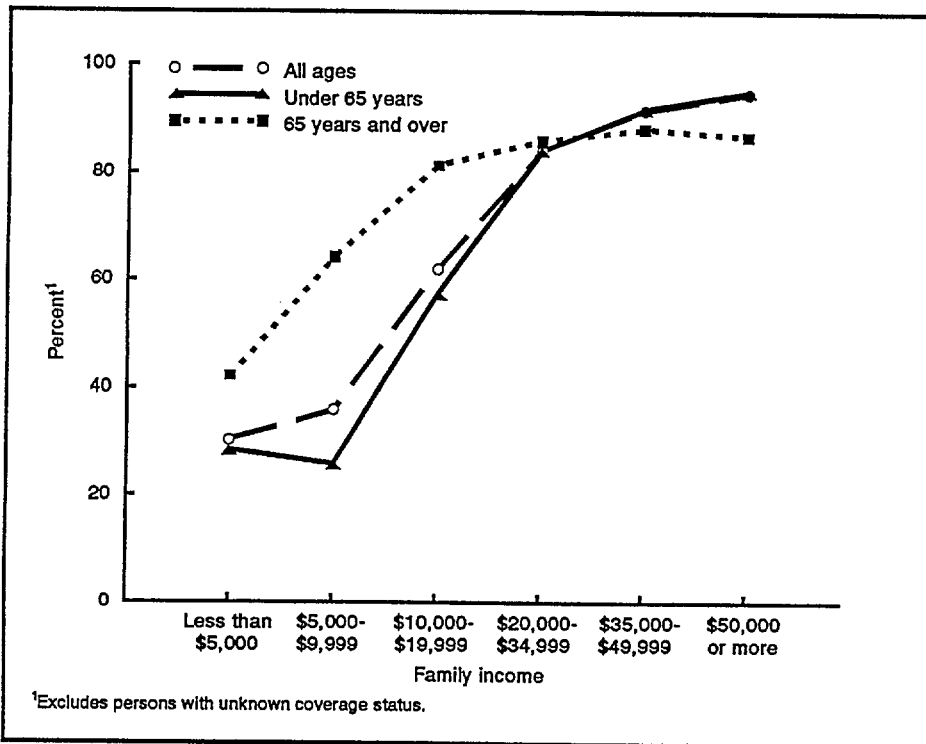


Figure 2. Percent of persons with private health insurance coverage, by age and family income: United States, 1989

not covered if a negative response or no response was obtained for all four questions.

Because the eligibility criteria for Medicaid coverage are defined by the States and because many are not aware of the criteria in their State, it is difficult to obtain point-prevalence estimates of this population based on a household survey using a national rather than a State sampling frame. Thus, extreme caution should be used in comparing the results described in this section with estimates from other sources of the number and characteristics of the Medicaid or public assistance population. Any such comparison should be focused on the criteria used to define this type of coverage and the procedure used to collect the data that serve as the basis of the estimates.

### Persons with military-Veterans' Administration health care coverage

An estimated 6.3 million persons in the civilian noninstitutionalized population (2.6 percent) were

covered by military and/or Veterans' Administration health care programs in 1989. Among the sociodemographic categories included in table 5, the proportion of persons covered was more than 3 percent for the following groups: Persons 45-64 years of age (4.5 percent) and 65 years and over (4.0 percent); males (3.3 percent); persons of other races—that is, not black or white (3.1 percent); members of families with an annual income of \$20,000-\$34,999 (3.1 percent); persons 18 years of age and over not currently employed (3.1 and 3.9 percent for the unemployed and for those not in the labor force, respectively); and persons living in the South (3.6 percent) and West (3.3 percent) Regions of the country.

As was the case with public assistance health care plans, coverage for civilians under military or VA health benefits is much more difficult to define than coverage under private health insurance or Medicare. This is especially so in the case of VA health benefits, which operate for most veterans and their eligible dependents under a system of priority eligibility.

In this report persons are classified as covered by military-VA health benefits if it was determined that (a) they received a military or VA pension; (b) they were covered by CHAMPUS (Civilian Health and Medical Program of the Uniformed Services), CHAMPVA (Civilian Health and Medical Program of the Veterans' Administration), or any other program that provides health care for military dependents or survivors of military persons; or (c) they received compensation for a disability from the VA. Other circumstantial criteria by which a person might qualify for military-VA health care benefits (such as advanced age or low income) were not used.

### Trends

Although data on health care coverage have been collected by means of NHIS since the 1960's, the questions related to public assistance and military-VA coverage were periodically changed until 1984. Because these types of coverage are included in the more general category of health care coverage it is not possible to show trends in coverage for the earlier periods. However, since 1984 the questions used to determine coverage have undergone only minimal changes. Thus, comparisons between the levels of coverage and noncoverage from 1984 to 1989 are possible.

The percent of persons with no health care coverage increased from 13.0 percent in 1984 to 13.9 percent in 1989 (table 6). For persons under 65 years of age the increase was from 14.6 to 15.7 percent. Of all of the sociodemographic characteristics shown in table 1, the largest differential change occurred for family income groups. Figure 3 shows the ratio of the 1989 to the 1984 estimates of noncoverage by income category. The largest increases were in the income range \$10,000-\$49,999, the ratio of increase being 1.7 for persons in families with an annual income of \$35,000-\$49,999. Some of this increase is only apparent, though,

Table 3. Percent of persons with Medicare coverage, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Total	Under 65 years				65 years and over
			Under 18 years	18-24 years	25-44 years	45-64 years	
All persons covered <sup>2</sup>	12.6	1.4	0.2	0.4	0.9	4.3	94.3
Sex							
Male	11.0	1.5	0.2	0.5	1.0	4.9	93.4
Female	14.0	1.2	0.2	0.4	0.8	3.8	95.0
Race							
White	13.3	1.3	0.1	0.4	0.8	4.0	94.9
Black	9.4	2.1	0.5	*0.5	1.7	7.5	90.7
Other	5.0	0.7	*0.8	-	*0.1	*2.3	78.1
Family income							
Less than \$5,000	15.7	2.9	*1.0	*0.3	3.1	13.3	95.0
\$5,000-\$9,999	27.5	4.1	*0.2	*0.9	4.1	15.1	95.4
\$10,000-\$19,999	20.7	2.3	*0.2	*0.7	1.6	8.3	96.2
\$20,000-\$34,999	9.7	1.1	*0.2	*0.5	0.6	3.7	94.4
\$35,000-\$49,999	4.6	0.4	*0.1	*0.1	0.3	1.3	91.4
\$50,000 or more	4.0	0.4	*0.2	*0.1	0.3	0.9	88.3
Poverty status							
In poverty	11.5	2.4	*0.4	*0.5	2.6	13.1	94.1
Not in poverty	11.5	1.1	0.2	0.4	0.7	3.4	94.5
Employment status <sup>3</sup>							
Currently employed	3.3	0.3	...	*0.2	0.3	0.6	87.7
Unemployed	2.8	*0.6	...	*0.6	*0.4	*1.2	93.5
Not in labor force	46.1	7.4	...	1.1	4.4	13.0	95.4
Education <sup>3</sup>							
Less than 12 years	34.1	5.0	...	0.9	2.7	9.0	95.1
12 years	14.4	1.5	...	*0.3	0.8	3.3	94.9
More than 12 years	9.5	0.8	...	*0.3	0.5	2.0	92.5
Region							
Northeast	14.3	1.3	*0.3	*0.3	0.9	3.7	93.5
Midwest	12.3	1.2	*0.1	*0.4	0.8	3.9	96.0
South	12.7	1.6	0.2	0.5	1.1	5.3	94.5
West	10.9	1.2	*0.3	*0.5	0.7	3.8	92.9
Place of residence							
MSA	11.7	1.3	0.2	0.5	0.8	4.1	93.7
Central city	12.5	1.6	0.3	*0.4	1.1	5.0	93.0
Not central city	11.3	1.1	0.2	0.5	0.7	3.5	94.2
Not MSA	15.5	1.7	*0.2	*0.4	1.2	5.1	96.0

<sup>1</sup>Percent calculated excluding the 6.9 million persons for whom coverage status was not determined.

<sup>2</sup>Includes persons with unknown sociodemographic characteristics.

<sup>3</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.

because inflation tends to move families to higher income categories over time without necessarily improving their health care coverage. Thus, higher income groups appear to be losing coverage. However, inflation is taken into account in the definition of poverty status, and the increase in noncoverage during this period was greater for those above the poverty level (10.8 percent) than it was for those below the poverty level (5.2 percent). This indicates that the increases noted above are not solely a function of inflation.

The NHIS questions related to private health insurance coverage have changed little since 1974. Table 7 shows the proportions of persons covered by private health insurance for each of the survey years from 1974 to 1989. There has been a slow decline in this type of coverage from 79.9 percent in 1974 to 75.9 percent in 1989.

Two previously published reports (3,4) include more extensive information on NHIS estimates of health care coverage prior to 1989.

## References

1. Short PF. Estimates of the uninsured population, calendar year 1987. Data Summary no 2. Rockville, Maryland: Agency for Health Care Policy and Research. 1990.
2. U.S. Bureau of the Census: Preliminary unpublished estimates from the Current Population Survey. Washington. 1990.
3. Ries PW. Health care coverage by sociodemographic and health characteristics: United States, 1984. National Center for Health Statistics. Vital Health Stat 10(162). 1987.

Table 4. Percent of persons with public assistance coverage, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Under 65 years					65 years and over
		Total	Under 18 years	18-24 years	25-44 years	45-64 years	
All persons covered <sup>2</sup>	6.2	6.2	11.1	Percent <sup>1</sup>			6.2
Sex							
Male	4.8	4.9	10.8	2.2	2.0	2.7	4.4
Female	7.5	7.5	11.3	8.8	5.8	4.6	7.6
Race							
White	4.4	4.4	7.6	4.2	2.9	2.7	4.8
Black	16.8	16.6	26.9	12.5	10.1	10.8	18.4
Other	12.7	12.1	19.9	10.7	7.3	9.5	22.8
Family income							
Less than \$5,000	37.8	38.4	60.9	13.0	39.7	37.7	34.2
\$5,000-\$9,999	28.5	34.3	50.3	18.7	29.4	22.8	12.0
\$10,000-\$19,999	7.9	8.9	15.1	6.6	6.0	5.6	3.6
\$20,000-\$34,999	2.2	2.2	3.6	3.3	1.2	1.3	2.8
\$35,000-\$49,999	1.0	0.9	1.7	*1.0	0.5	0.8	*2.1
\$50,000 or more	0.5	0.4	0.6	*0.8	0.3	*0.2	*1.5
Poverty status							
In poverty	35.1	35.8	46.3	17.6	32.3	32.0	28.3
Not in poverty	2.3	2.1	3.3	2.7	1.3	1.8	3.5
Employment status <sup>3</sup>							
Currently employed	1.1	1.0	...	1.5	1.1	0.7	2.3
Unemployed	9.7	9.8	...	11.1	10.8	5.1	*1.8
Not in labor force	11.1	14.4	...	15.9	17.9	10.6	6.9
Education <sup>3</sup>							
Less than 12 years	11.5	12.0	...	13.0	13.7	10.0	10.4
12 years	3.6	3.6	...	5.5	3.9	2.1	3.2
More than 12 years	1.3	1.2	...	1.3	1.2	1.1	2.4
Region							
Northeast	5.1	5.2	9.2	4.2	3.8	3.6	4.4
Midwest	6.4	6.8	12.2	6.6	4.4	3.3	3.2
South	6.0	5.7	10.1	4.8	3.4	3.8	8.5
West	7.3	7.2	12.9	6.9	4.3	4.1	8.3
Place of residence							
MSA	6.0	6.0	11.2	5.2	3.7	3.5	5.6
Central city	9.6	9.9	18.7	7.2	6.0	6.2	7.6
Not central city	3.6	3.6	6.4	3.7	2.3	1.8	4.2
Not MSA	7.0	6.8	10.8	7.1	4.7	4.5	7.9

<sup>1</sup>Persons not administered the supplement were classified as not covered. About 2.0 million persons for whom unknown responses were obtained were excluded in calculating the percents.

<sup>2</sup>Includes persons with unknown sociodemographic characteristics.

<sup>3</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.

4. Ries PW. Health care coverage by age, sex, race, and family income: United States, 1986. Advance data from vital and health statistics; no 139. Hyattsville, Maryland: National Center for Health Statistics. 1987.
5. Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1989. National Center for Health Statistics. Vital Health Stat 10(176). 1990.

Table 5. Percent of persons with military–Veterans' Administration coverage, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Total	Under 65 years				65 years and over
			Under 18 years	18–24 years	25–44 years	45–64 years	
				Percent <sup>1</sup>			
All persons covered <sup>2</sup> . . . . .	2.6	2.4	2.1	1.9	1.5	4.5	4.0
Sex							
Male . . . . .	3.3	2.6	2.2	1.0	1.5	6.3	8.7
Female . . . . .	1.9	2.1	2.0	2.8	1.5	2.9	0.7
Race							
White . . . . .	2.5	2.3	2.0	1.8	1.4	4.5	4.1
Black . . . . .	2.5	2.4	2.2	2.1	2.0	4.0	3.5
Other . . . . .	3.1	3.2	2.7	*3.8	2.2	5.7	*2.0
Family income							
Less than \$5,000 . . . . .	1.5	1.4	*0.6	2.1	*1.0	*3.2	*1.6
\$5,000–\$9,999 . . . . .	1.6	1.4	*0.8	*0.9	*1.0	3.9	2.2
\$10,000–\$19,999 . . . . .	2.7	2.6	3.0	2.6	1.7	3.5	3.4
\$20,000–\$34,999 . . . . .	3.1	2.9	2.7	2.2	1.9	5.6	5.8
\$35,000–\$49,999 . . . . .	3.0	2.7	2.5	1.9	1.7	5.5	8.4
\$50,000 or more . . . . .	2.3	2.1	1.2	1.5	1.1	4.8	5.5
Poverty status							
In poverty . . . . .	1.2	1.2	0.9	1.5	0.9	2.5	*1.3
Not in poverty . . . . .	2.8	2.6	2.4	2.1	1.6	4.8	4.5
Employment status <sup>3</sup>							
Currently employed . . . . .	2.1	2.0	...	1.6	1.3	3.8	5.5
Unemployed . . . . .	3.1	3.0	...	*1.5	2.6	6.3	*6.2
Not in labor force . . . . .	3.9	4.0	...	2.8	2.5	5.8	3.8
Education <sup>3</sup>							
Less than 12 years . . . . .	2.3	2.0	...	1.3	1.0	3.2	3.1
12 years . . . . .	2.8	2.7	...	2.2	1.6	4.7	4.0
More than 12 years . . . . .	2.9	2.6	...	2.0	1.6	5.2	5.9
Region							
Northeast . . . . .	1.4	1.1	0.5	*0.7	0.7	2.9	2.9
Midwest . . . . .	1.4	1.2	0.9	*0.6	1.0	2.2	2.6
South . . . . .	3.6	3.5	3.4	3.2	2.1	6.2	4.6
West . . . . .	3.3	3.0	2.7	2.6	1.9	5.9	5.9
Place of residence							
MSA . . . . .	2.5	2.3	2.1	1.9	1.5	4.4	4.1
Central city . . . . .	2.5	2.4	2.3	1.7	1.6	4.4	3.8
Not central city . . . . .	2.5	2.3	2.0	2.0	1.4	4.5	4.2
Not MSA . . . . .	2.6	2.4	2.0	2.0	1.6	4.6	3.8

<sup>1</sup>Persons not administered the supplement were classified as not covered. About 2.0 million persons for whom unknown responses were obtained were excluded in calculating the percents.

<sup>2</sup>Includes persons with unknown sociodemographic characteristics.

<sup>3</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.



**Table 6. Percent of persons without health care coverage, by family income: United States, 1984 and 1989**

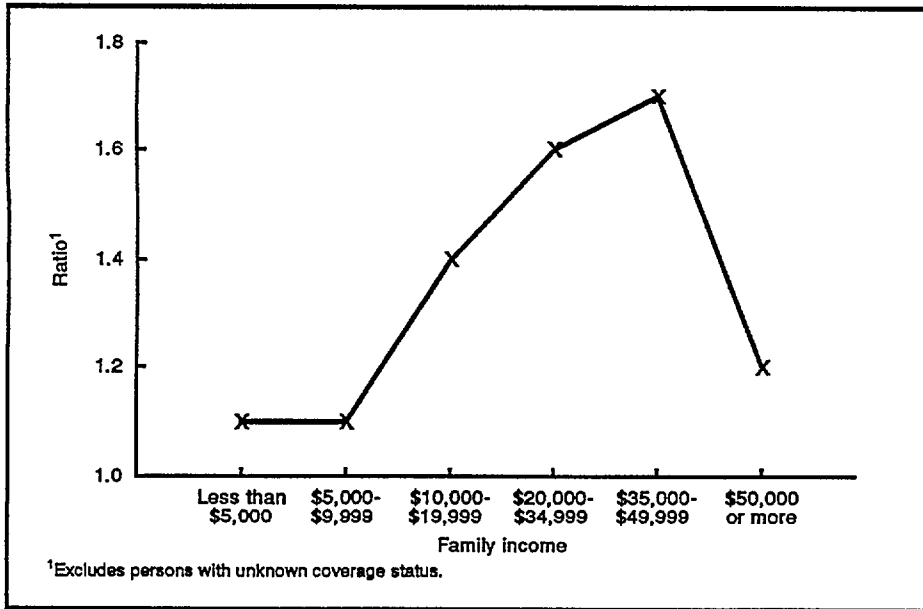
Family Income	1984	1989
	Percent <sup>1</sup>	
All incomes <sup>2</sup> . . . . .	13.0	13.9
Less than \$5,000 . . . . .	25.8	27.1
\$5,000-\$9,999 . . . . .	28.0	27.7
\$10,000-\$19,999 . . . . .	17.4	24.3
\$20,000-\$34,999 . . . . .	6.7	10.6
\$35,000-\$49,999 . . . . .	3.5	5.8
\$50,000 or more . . . . .	3.1	3.6

<sup>1</sup>Excludes persons with unknown coverage status.  
<sup>2</sup>Includes unknown income.

**Table 7. Percent of persons with private health care coverage: United States, 1974-89**

Year	Percent <sup>1</sup>
1974. . . . .	79.9
1976. . . . .	78.9
1978. . . . .	79.3
1980. . . . .	79.4
1982. . . . .	78.1
1984. . . . .	76.7
1986. . . . .	76.6
1989. . . . .	75.9

<sup>1</sup>Excludes persons with unknown coverage status.



**Figure 3. Ratio of 1989 to 1984 percents of persons without health care coverage, by family income: United States**

**Symbols**

- Data not available
- . . . Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Z Quantity more than zero but less than 500 where numbers are rounded to thousands
- \* Figure does not meet standard of reliability or precision (estimate has relative standard error of more than 30 percent)
- # Figure suppressed to comply with confidentiality requirements

## Technical notes

The estimates shown in this report are based on data obtained in household interviews in a continuing nationwide survey. Each week a probability sample of households is interviewed by personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of the civilian noninstitutionalized population of the United States.

During 1989, interviews were conducted in approximately 45,711 households containing about 116,929

family members and unrelated individuals. The total noninterview rate was about 5.1 percent. The weights of interviewed persons in the segments containing sample households for which data were not obtained were inflated to compensate for household nonresponse.

All persons 17 years of age and over were asked to participate in the interview. When this was not possible, proxy responses were accepted from family members meeting the NHIS respondent rules. All information on persons under 17 years of age was

obtained from adult family members or guardians.

The appendixes of Vital and Health Statistics, Series 10, No. 176 should be consulted for a more detailed discussion of the sample design and weighting procedures (appendix I) and for a copy of the questionnaire used during 1989 (5).

Because the estimates shown in this report are based on a sample, they are subject to sampling error. The standard error is a measure of the sampling error. Approximate

Table I. Number of persons, by age and sociodemographic characteristics: United States, 1989

Sociodemographic characteristic	All ages	Under 65 years					65 years and over
		Total	Under 18 years	18-24 years	25-44 years	45-64 years	
Number in thousands							
All persons <sup>1</sup>	243,532	214,313	64,003	25,401	78,795	46,114	29,219
Sex							
Male	118,009	105,866	32,752	12,396	38,648	22,070	12,143
Female	125,523	108,447	31,251	13,005	40,147	24,044	17,076
Race							
White	205,312	179,000	51,549	20,886	66,543	40,022	26,312
Black	29,891	27,437	9,959	3,562	9,204	4,712	2,453
Other	8,329	7,875	2,495	952	3,048	1,380	454
Family income							
Less than \$5,000	9,367	8,067	2,702	2,404	1,899	1,063	1,300
\$5,000-\$9,999	16,819	12,506	4,745	2,009	3,452	2,300	4,312
\$10,000-\$19,999	41,040	33,038	10,640	4,699	11,216	6,483	8,002
\$20,000-\$34,999	56,718	51,476	15,776	5,239	20,617	9,843	5,242
\$35,000-\$49,999	39,450	37,635	11,159	3,435	15,319	7,722	1,816
\$50,000 or more	40,752	39,085	10,329	3,596	14,960	10,199	1,668
Poverty status							
In poverty	26,053	23,465	10,589	4,293	5,963	2,619	2,588
Not in poverty	195,674	174,027	48,595	18,704	67,414	39,313	21,647
Employment status <sup>2</sup>							
Currently employed	117,227	113,372	...	17,654	64,307	31,411	3,855
Unemployed	4,714	4,601	...	1,370	2,378	853	113
Not in labor force	57,588	32,337	...	6,377	12,111	13,850	25,251
Education <sup>2</sup>							
Less than 12 years	39,809	26,963	...	5,307	10,218	11,438	12,846
12 years	68,563	59,142	...	10,829	30,052	18,261	9,420
More than 12 years	69,369	62,862	...	9,042	37,870	15,949	6,507
Region							
Northeast	48,930	42,013	11,332	5,048	15,838	9,796	6,918
Midwest	59,540	52,623	15,784	6,274	19,142	11,422	6,917
South	83,148	73,225	22,415	8,688	26,516	15,606	9,923
West	51,913	46,452	14,472	5,391	17,299	9,290	5,461
Place of residence							
MSA	189,860	168,473	49,588	20,177	63,021	35,687	21,388
Central city	74,410	65,563	19,209	8,646	24,339	13,368	8,848
Not central city	115,450	102,910	30,379	11,531	38,682	22,318	12,540
Not MSA	53,672	45,840	14,415	5,224	15,775	10,427	7,831

<sup>1</sup>Includes persons with unknown sociodemographic characteristics.

<sup>2</sup>Excludes persons under 18 years of age.

NOTE: MSA is metropolitan statistical area.

standard errors for estimated percents in this report are determined using the formula

$$SE = \sqrt{\frac{3,640 (p) (1-p)}{y}}$$

where SE is the standard error,  $p$  is the estimated percent, and  $y$  is the estimated base of the percent. The bases of the percents are shown in table I.

The approximate standard error of a difference between percents is given by the formula

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

where  $x_1$  and  $x_2$  are the two percents being compared,  $x_1 - x_2$  is the difference between them, and  $SE(x_1)$  and  $SE(x_2)$  are the standard errors of the two percents.

For economy of space only the percents of persons with no health care coverage or of persons covered by one of the four plans discussed are shown in this report. The percents for the complementary group (that is, persons with health care coverage, persons not covered by private health insurance, and so on) may be obtained by subtracting the reported estimate from 100.0 percent. It should be noted that the percents were obtained by excluding the unknown cases. The number of excluded unknown cases is shown in a footnote to tables 1-5. The percents of unknown coverage are 3.5 percent for private health insurance, 2.9 percent for Medicare, 1.0 percent for public assistance, 1.0 percent for military-Veterans' Administration health benefits, and 4.0 percent for any health care coverage. These percents do not include the 5.1 percent survey nonresponse noted above. Respondents representing about 6 million persons not administered the questions on public assistance and military-Veterans' Administration benefits were classified as not covered by these two plans. The estimated frequencies mentioned in the text are the product of the percents shown times the population shown in table I.

---

**Suggested citation**

Ries P. Characteristics of persons with and without health care coverage: United States, 1989. Advance data from vital and health statistics; no 201. Hyattsville, Maryland: National Center for Health Statistics. 1991.

---

**Copyright information**

This report may be reprinted without further permission.

---

U.S. DEPARTMENT OF HEALTH AND  
HUMAN SERVICES  
Public Health Service  
Centers for Disease Control  
National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, Maryland 20782

BULK RATE POSTAGE & FEES PAID PHS/NCHS PERMIT No. G-281
--

---

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

---

To receive this publication regularly, contact  
the National Center for Health Statistics by  
calling 301-436-8500

---

DHHS Publication No. (PHS) 91-1250