



Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January-September 2008

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Highlights

- From January-September 2008, 43.3 million persons of all ages (14.5%) were uninsured at the time of the interview, 55.2 million (18.5%) had been uninsured for at least part of the year prior to the interview, and 31.1 million (10.4%) had been uninsured for more than a year at the time of the interview.
- From January-September 2008, the percentage of children under the age of 18 years who were uninsured at the time of the interview was 8.5%.
- From January-September 2008, 59.6% of unemployed adults aged 18-64 years and 22.3% of employed adults in this age group had been uninsured for at least part of the past year. Also, 32.2% of unemployed adults aged 18-64 years and 13.5% of employed adults in this age group had been uninsured for more than a year.
- From January-September 2008, 18.9% of persons under 65 years of age with private health insurance were enrolled in a high deductible health plan (HDHP), 5.0% were enrolled in a consumer-directed health plan (CDHP), and 18.0% were in a family with a flexible spending account (FSA) for medical expenses.

Introduction

The Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) is releasing selected estimates of health insurance coverage for the civilian noninstitutionalized U.S. population based on data from the January-September 2008 National Health Interview Survey (NHIS), along with comparable estimates from the 1997-2007 NHIS.

Three measures of lack of health insurance coverage are provided: (i) uninsured at the time of the interview, (ii) uninsured at least part of the year prior to the interview (which also includes persons uninsured for more than a year), and (iii) uninsured for more than a year at the time of the interview. Estimates of public and private coverage are also presented.

For individuals with private health insurance, estimates are presented for enrollment in high deductible health plans (HDHPs), enrollment in consumer-directed health plans (CDHPs), and being in a family with a flexible spending account (FSA) for medical expenses. For more information about the NHIS and the Early Release (ER) Program, please see the [Technical Notes](#) and [Additional Early Release](#)

[Program Products](#) sections of this report.

This report is updated quarterly and is part of the NHIS ER Program, which releases updated selected estimates that are available from the NHIS website: <http://www.cdc.gov/nchs/nhis.htm>.

Results

Lack of health insurance coverage

From January-September 2008, the percentage of persons uninsured at the time of the interview was 14.5% (43.3 million) for persons of all ages, 16.5% (43.1 million) for persons under the age of 65 years, 19.6% (36.8 million) for persons aged 18-64 years, and 8.5% (6.3 million) for children under the age

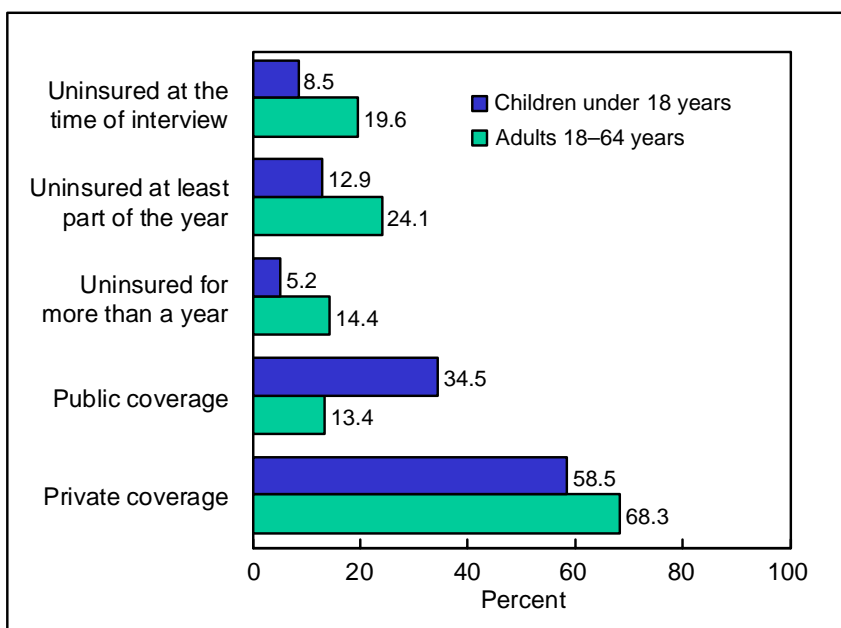


Figure 1. Percentage of persons without health insurance, by three measurements and age group, and percentage of persons with health insurance, by coverage type and age group: United States, January-September 2008

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



of 18 years (Tables 1 and 2). There was no significant change in the percentage of people under age 65 years who were uninsured at the time of the interview between 2007 and the first 9 months of 2008.

Based on data from the January-September 2008 NHIS, a total of 55.2 million (18.5%) persons of all ages were uninsured for at least part of the year prior to the interview (Tables 1 and 2). Adults aged 18-64 years were almost twice as likely to experience this lack of coverage (24.1%) as children under the age of 18 (12.9%).

Data from January-September 2008 also revealed that 11.8% (30.9 million) of persons under age 65 (14.4% of adults and 5.2% of children) had been uninsured for more than a year (Tables 1 and 2). Children were less likely than adults aged 18-64 years to have been uninsured for more than a year (Figure 1).

Public and private coverage

From January-September 2008, 19.4% of persons under 65 years of age were covered by public health plans at the time of the interview, and 65.5% were covered by private health insurance plans (Table 3). More than two-thirds (68.3%) of adults 18-64 years of age were covered by a private plan, compared with 58.5% of children under 18 years (Figure 1). The percentage of children or adults aged 18-64 years covered by a private health insurance plan was not significantly different from 2007 to the first 9 months of 2008 (Table 3).

More than one-third of children (34.5%) were covered by a public plan, compared with 13.4% of adults aged 18-64 years (Figure 1). The percentage of persons under 65 years of age covered by a public health plan increased from 2007 to the first 9 months of 2008.

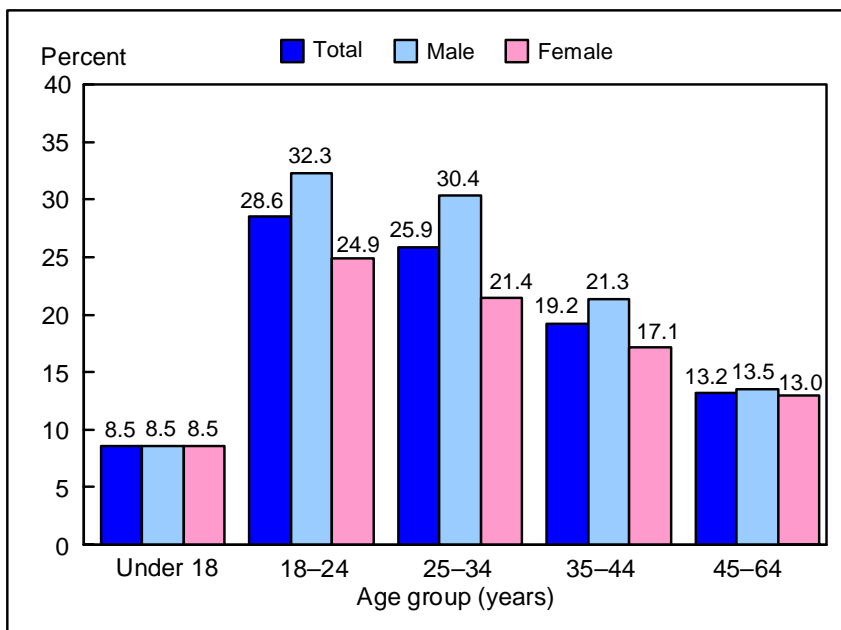


Figure 2. Percentage of persons under 65 years of age without health insurance coverage at the time of interview, by age group and sex: United States, January-September 2008

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

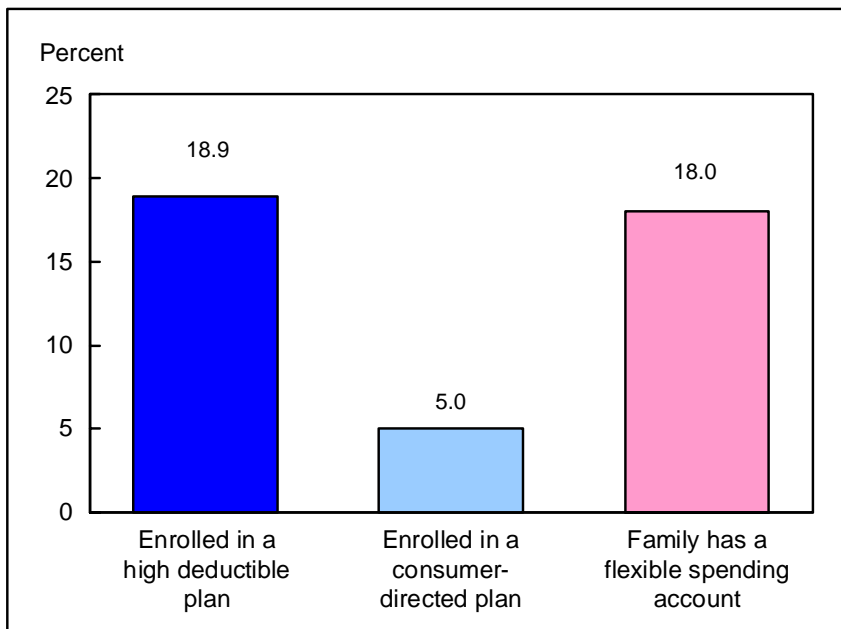


Figure 3. Percentage of persons under 65 years of age with private health insurance who are enrolled in a high deductible health plan, a consumer-directed health plan, or in a family with a flexible spending account for medical expenses: United States, January -September 2008

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population. A person can be counted in more than one category.



Insurance coverage, by poverty status

From January-September 2008, 12.0% of poor children and 14.9% of near poor children (see [Technical Notes](#) for definition of poverty) did not have health insurance coverage at the time of interview ([Table 4](#)).

Based on January-September 2008 data, 79.7% of poor children and 54.4% of near poor children were covered by a public health plan at the time of interview ([Table 5](#)). Public coverage increased for not poor children between 2007 (11.0%) and the first 9 months of 2008 (13.4%).

From January-September 2008, 10.6% of poor children and 32.9% of near poor children were covered by private health insurance at the time of interview ([Table 6](#)). Private coverage decreased for not poor children from 85.1% in 2007 to 83.1% in the first 9 months of 2008. Among poor adults aged 18-64 years, 22.6% were covered by private health insurance from January-September 2008.

Lack of coverage, by selected demographic characteristics

Race/ethnicity

Based on data from the January-September 2008 NHIS, Hispanic persons were considerably more likely than non-Hispanic white persons, non-Hispanic black persons, and non-Hispanic Asian persons to be uninsured at the time of interview, to have been uninsured for at least part of the past 12 months, and to have been uninsured for more than a year ([Table 7](#)).

Approximately one-third of Hispanic persons were uninsured at the time of interview or had been uninsured for at least part of the past year, and more than one-fourth of Hispanic persons had been without health insurance coverage for more than a year.

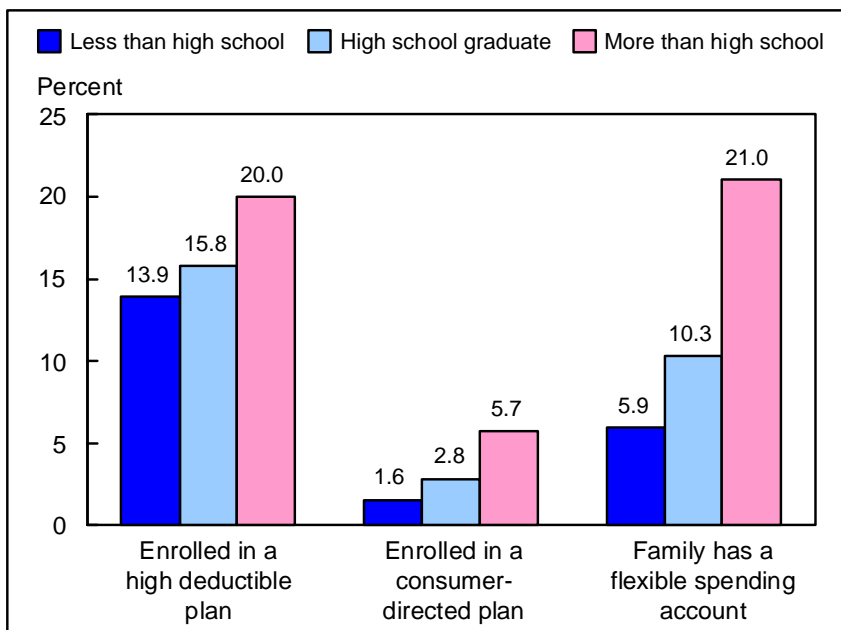


Figure 4. Percentage of persons 25-64 years of age with private health insurance who are enrolled in a high deductible health plan, a consumer-directed health plan, or in a family with a flexible spending account for medical expenses, by education: United States, January-September 2008

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population. A person can be counted in more than one category.

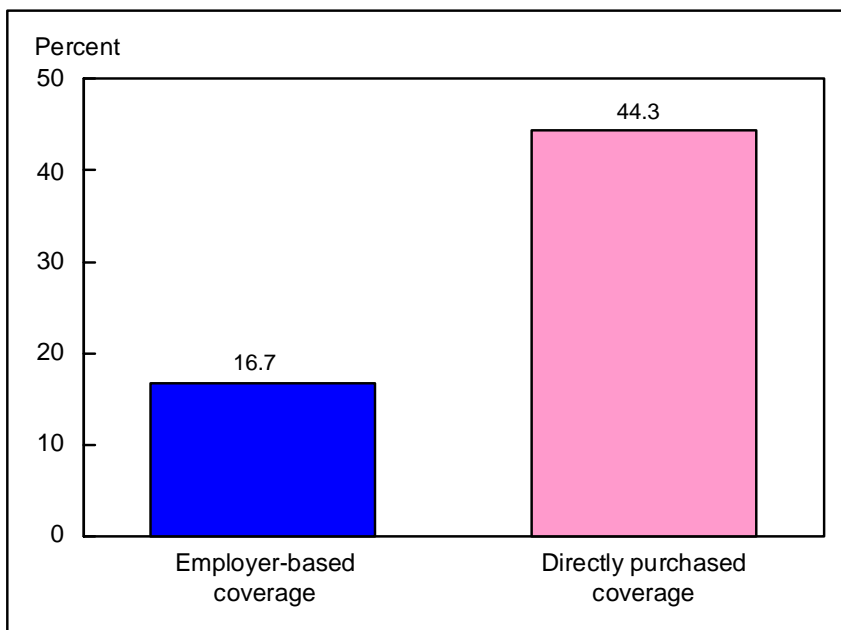


Figure 5. Percentage of persons under 65 years of age with private health insurance who are enrolled in a high deductible health plan, by source of coverage: United States, January-September 2008

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



Age and sex

For all persons under 65 years of age, the percentage of persons who were uninsured at the time of the interview was highest among those aged 18-24 years (28.6%) and lowest among those under 18 years (8.5%) (Figure 2). Starting at age 18, younger adults were more likely than older adults to lack health insurance coverage. Among adults in age groups 18-24, 25-34, and 35-44 years, men were more likely than women to lack health insurance coverage at the time of interview.

Other demographic characteristics

Lack of health insurance coverage was greatest in the South and West regions of the United States. Among adults who lacked a high school diploma, 31.8% were uninsured at the time of interview, 35.2% were uninsured for at least part of a year, and 26.4% had been uninsured for more than a year at the time of the interview (Table 7). These rates are two to more than three times as high as those for persons with more than a high school education. Among currently unemployed adults 18-64 years of age, 59.6% had been uninsured for at least part of the past year, and 32.2% had been uninsured for more than a year. Among employed adults 18-64 years of age, 22.3% had been uninsured for at least part of the past year, and 13.5% had been uninsured for more than a year. Married or widowed adults were more likely to have coverage than those who were divorced, separated, living with a partner, or never married.

Estimates of enrollment in HDHPs, CDHPs and FSAs

Based on data from the January-September 2008 NHIS, 18.9% of persons under 65 years of age with private health insurance were enrolled in a HDHP, 5.0% were enrolled in a CDHP, and 18.0% were in a family with a FSA for medical expenses (Figure 3). Adults aged 25-64 years with more than a high school diploma

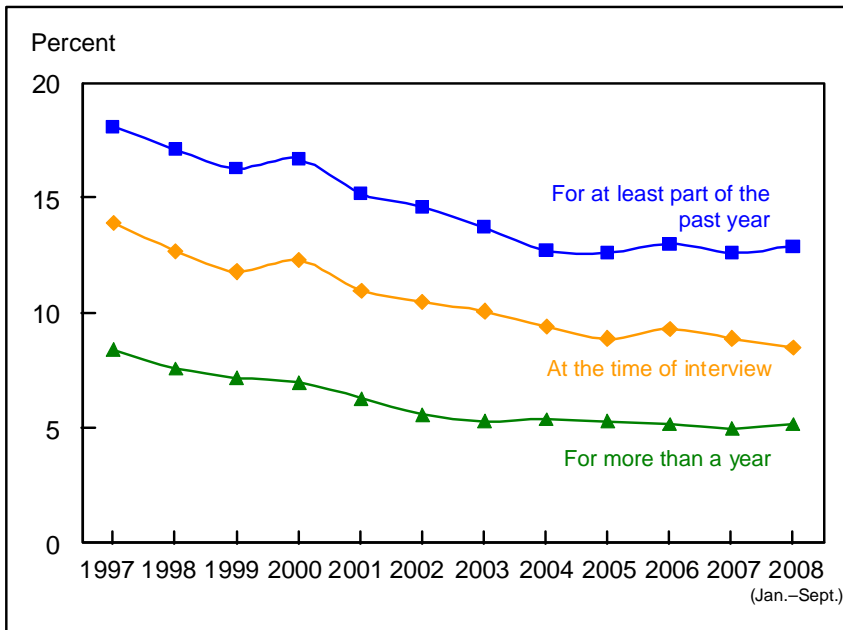


Figure 6. Percentage of children under 18 years of age who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

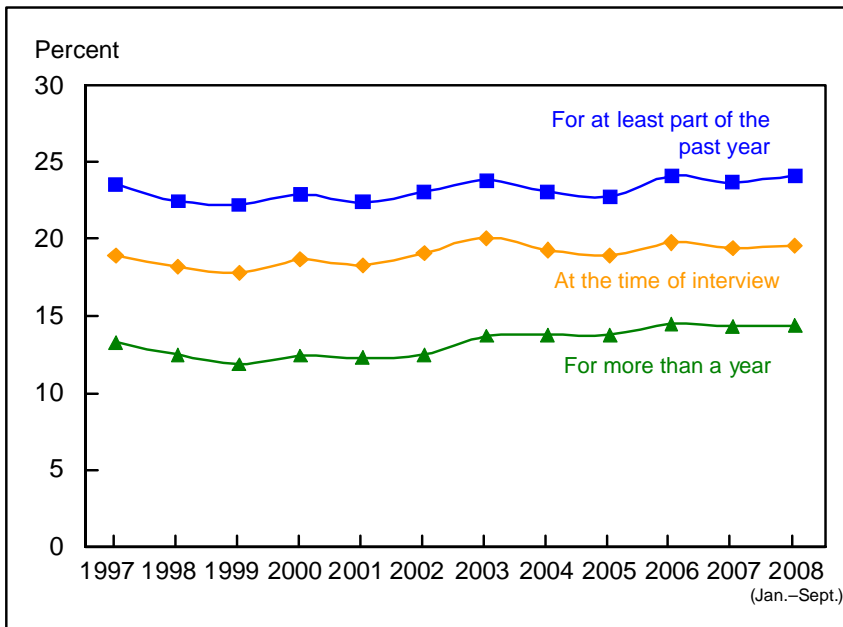


Figure 7. Percentage of adults 18-64 years of age who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



were more likely to be covered by a HDHP, more likely to be covered by a CDHP, and more likely to be in a family with a FSA for medical expenses than those who had only a high school diploma or were not high school graduates (Figure 4).

Approximately 17% of persons under 65 years of age with employer-based private coverage were enrolled in a HDHP, compared with over 44% enrolled in a HDHP among those with a private plan that was directly purchased or obtained through means other than an employer (Figure 5).

Trends in coverage

Lack of health insurance coverage

The percentage of children uninsured at the time of interview decreased from 13.9% in 1997 to 8.5% in the first 9 months of 2008 (Figure 6). Since 2002, the percentage of adults aged 18-64 years uninsured at the time of interview has remained relatively stable and has ranged between 18.9% and 20.1% (Table 1).

The percentage of children uninsured during at least part of the year prior to the interview decreased from 18.1% in 1997 to 12.9% in the first 9 months of 2008 (Figure 6). However, since 2003, the percentage of children uninsured during at least part of the year prior to interview has remained relatively stable and has ranged from 12.6% to 13.7%. Between 1997 and the first 9 months of 2008, the percentage of adults aged 18-64 years who lacked coverage for at least part of the year prior to the interview fluctuated between 22.2% and 24.1% (Figure 7 and Table 1).

Among adults aged 18-64 years, the percentage uninsured for more than a year fluctuated between 11.9% and 14.5% between 1997 and the first 9 months of 2008 (Figure 7). By contrast, the percentage of children uninsured for more than a year decreased from 8.4% in 1997 to 5.3% in 2003 (Figure 6). Since 2003, the percentage of children uninsured for more than a year has

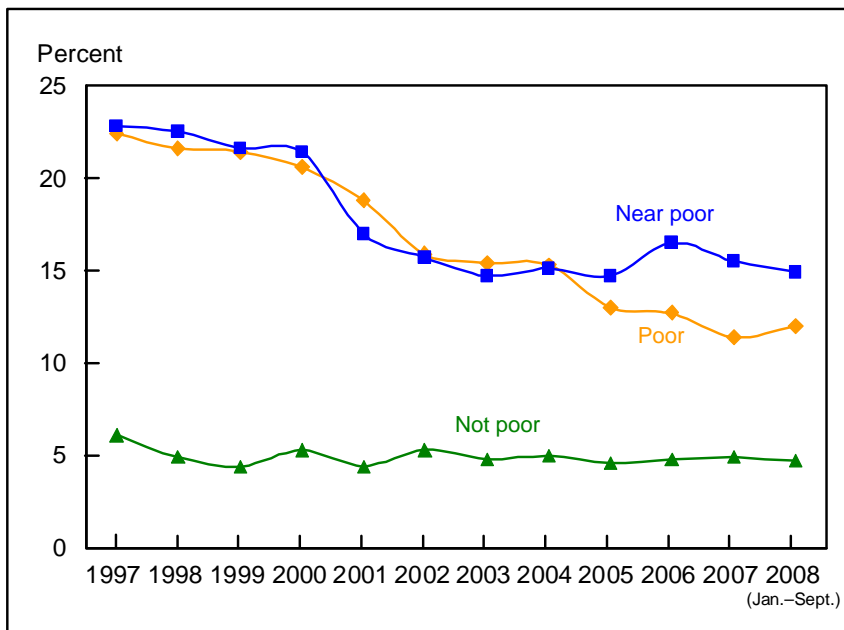


Figure 8. Percentage uninsured at the time of interview, by poverty status, for children under 18 years of age: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

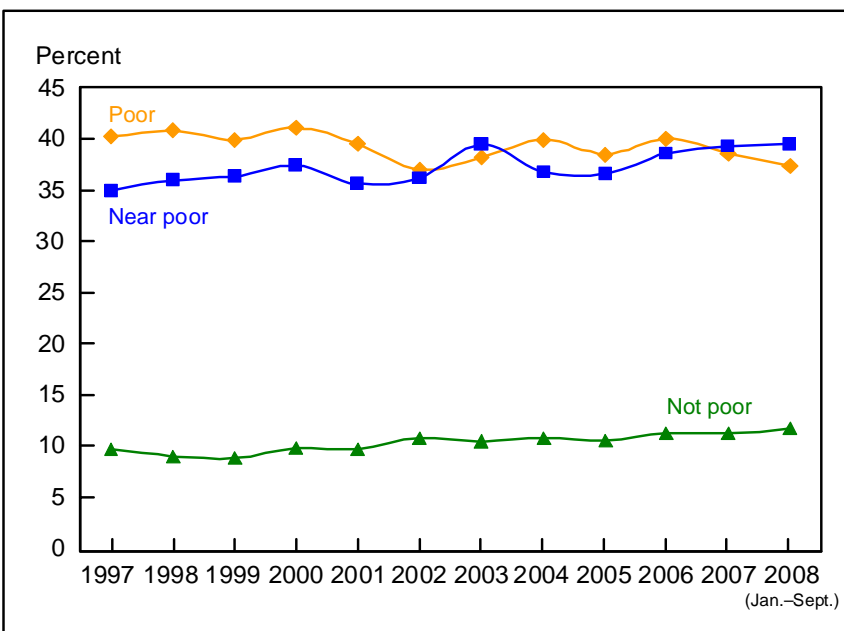


Figure 9. Percentage uninsured at the time of interview, by poverty status, for adults 18-64 years of age: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



remained relatively steady and has ranged between 5.0% and 5.4%.

Public and private coverage

Public coverage rates among both children and adults aged 18-64 years are now higher than in 1997 (Table 3). Conversely, private health care coverage rates among both children and working-age adults are now lower than in 1997.

Insurance coverage, by poverty status

The percentage of poor children who were uninsured at the time of the interview decreased from 1997 through September 2008 (Figure 8). From 1997 to September 2008, the percentage of poor adults who were uninsured remained relatively stable (Figure 9).

Among children, all poverty status groups experienced an increase in public coverage between 1997 and the first 9 months of 2008 (Table 5). However, the largest increase was seen among near poor children, for whom coverage by a public plan more than doubled between 1997 and September 2008.

The rate of private coverage among near poor children was 22.1 percentage points lower in the first 9 months of 2008 than in 1997 (Table 6). As shown in Figure 10, among near poor children, lack of health insurance and private health insurance coverage has declined since 1997, while public coverage has increased. Private coverage decreased among near poor adults 18-64 years of age from 52.6% in 1997 to 38.5% in the first 9 months of 2008 (Figure 11). Private coverage among not poor adults decreased from 87.1% in 1997 to 82.4% in the first 9 months of 2008.

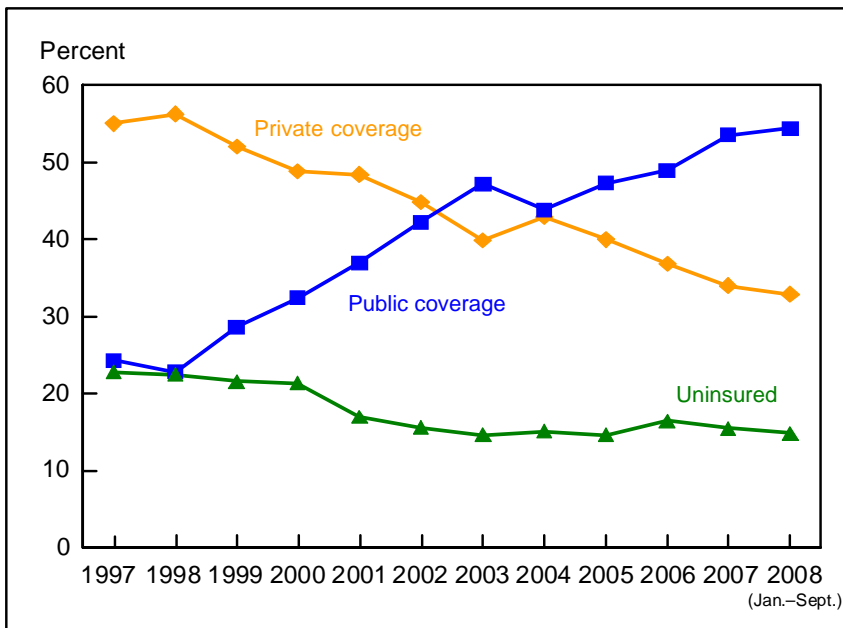


Figure 10. Percentage with health insurance, by coverage type and percentage uninsured at the time of interview, for near poor children under 18 years of age: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

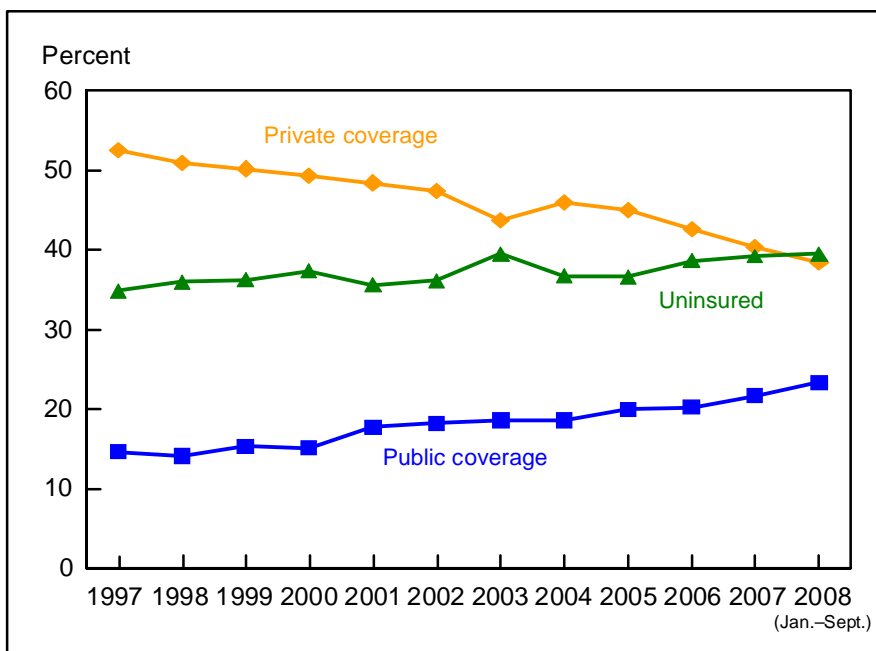


Figure 11. Percentage with health insurance, by coverage type and percentage uninsured at the time of interview, for near poor adults 18-64 years of age: United States, 1997-September 2008

DATA SOURCE: Family Core component of the 1997-2008 National Health Interview Surveys. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



References

1. National Center for Health Statistics. Health, United States, 2007 with Chartbook on Trends in the Health of Americans. Hyattsville, MD. 2007.
2. United States Government Accountability Office. Consumer-directed health plans: Early enrollee experiences with health savings accounts and eligible health plans. GAO-06-798. Washington. 2006.
3. Cohen RA, Martinez ME. Impact of Medicare and Medicaid probe questions on health insurance estimates from the National Health Interview Survey, 2004. Health E-stats. Hyattsville, MD: National Center for Health Statistics. 2005.
4. Lamison-White L. Poverty in the United States, 1996. Current population reports, series P60-198. U.S. Bureau of the Census. Washington. 1997.
5. Dalaker J, Naifeh M. Poverty in the United States, 1997. Current population reports, series P60-201. U.S. Bureau of the Census. Washington. 1998.
6. Dalaker J. Poverty in the United States, 1998. Current population reports, series P60-207. U.S. Census Bureau. Washington. 1999.
7. Dalaker J, Proctor B. Poverty in the United States, 1999. Current population reports, series P60-210. U.S. Census Bureau. Washington. 2000.
8. Dalaker J. Poverty in the United States, 2000. Current population reports, series P60-214. U.S. Census Bureau. Washington. 2001.
9. Proctor B, Dalaker J. Poverty in the United States, 2001. Current population reports, series P60-219. U.S. Census Bureau. Washington. 2002.
10. Proctor B, Dalaker J. Poverty in the United States, 2002. Current population reports, series P60-222. U.S. Census Bureau. Washington. 2003.
11. DeNavas-Walt C, Proctor B, Mills R. Income, poverty, and health insurance coverage in the United States: 2003. Current population reports, P60-226. U.S. Census Bureau. Washington. 2004.
12. DeNavas-Walt C, Proctor B, Lee C. Income, poverty, and health insurance coverage in the United States: 2004. Current population reports, P60-229. U.S. Census Bureau. Washington. 2005.
13. DeNavas-Walt C, Proctor B, Lee C. Income, poverty, and health insurance coverage in the United States: 2005. Current population reports, P60-231. U.S. Census Bureau. Washington. 2006.
14. DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2006. Current population reports, P60-233. U.S. Census Bureau. Washington. 2007.
15. DeNavas-Walt C, Proctor B, Smith J. Income, poverty, and health insurance coverage in the United States: 2007. Current population reports, P60-235. U.S. Census Bureau. Washington. 2008.
16. Pleis JR, Dahlhamer JM, Meyer PS. 2007. Unfolding the answers? Income nonresponse and income brackets in the National Health Interview Survey. Proceedings of the 2006 Joint Statistical Meetings [CD-ROM]. American Statistical Association, Alexandria, Virginia.
17. Plies JR, Cohen RA. Impact of income bracketing on poverty measures used in the National Health Interview Survey's (NHIS) Early Release Program: Preliminary data from the 2007 NHIS. December 2007. Available from: <http://www.cdc.gov/nchs/about/major/nhis/methods.htm>.
18. Barnes P, Schiller J, Heyman KM. Early release of selected estimates based on data from the January-September 2008 National Health Interview Survey. National Center for Health Statistics. March 2009. Available from: <http://www.cdc.gov/nchs/nhis.htm>.
19. Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates based on data from the National Health Interview Survey, 2008. National Center for Health Statistics. December 2008.

Available from:

<http://www.cdc.gov/nchs/nhis.htm>.

Table 1. Percentage of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year, by age group: United States, 1997-September 2008

Age group and year	Uninsured ¹ at the time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than a year ²
Percent (standard error)			
All ages			
1997	15.4 (0.21)	19.5 (0.24)	10.4 (0.18)
1998	14.6 (0.23)	18.6 (0.26)	9.8 (0.19)
1999	14.2 (0.22)	18.2 (0.25)	9.3 (0.19)
2000	14.9 (0.22)	18.7 (0.24)	9.6 (0.18)
2001	14.3 (0.23)	18.0 (0.26)	9.3 (0.18)
2002	14.7 (0.22)	18.3 (0.24)	9.3 (0.17)
2003	15.2 (0.24)	18.6 (0.26)	10.0 (0.19)
2004 (Method 1) ³	14.7 (0.21)	18.0 (0.23)	10.1 (0.17)
2004 (Method 2) ³	14.6 (0.20)	17.9 (0.23)	10.1 (0.17)
2005 ³	14.2 (0.21)	17.6 (0.23)	10.0 (0.18)
2006 ^{3,4}	14.8 (0.26)	18.6 (0.29)	10.5 (0.22)
2007 ³	14.5 (0.29)	18.2 (0.34)	10.3 (0.24)
2008 ³ (January–September)	14.5 (0.29)	18.5 (0.32)	10.4 (0.25)
Under 65 years			
1997	17.4 (0.24)	21.9 (0.28)	11.8 (0.21)
1998	16.5 (0.26)	20.9 (0.29)	11.0 (0.21)
1999	16.0 (0.25)	20.4 (0.28)	10.5 (0.21)
2000	16.8 (0.24)	21.0 (0.26)	10.8 (0.20)
2001	16.2 (0.26)	20.3 (0.29)	10.5 (0.21)
2002	16.5 (0.24)	20.6 (0.27)	10.4 (0.19)
2003	17.2 (0.27)	20.9 (0.28)	11.2 (0.21)
2004 (Method 1) ³	16.6 (0.23)	20.2 (0.26)	11.4 (0.19)
2004 (Method 2) ³	16.4 (0.23)	20.1 (0.26)	11.4 (0.19)
2005 ³	16.0 (0.24)	19.9 (0.26)	11.3 (0.21)
2006 ^{3,4}	16.8 (0.29)	20.9 (0.32)	11.8 (0.25)
2007 ³	16.4 (0.33)	20.5 (0.38)	11.7 (0.27)
2008 ³ (January–September)	16.5 (0.33)	20.9 (0.35)	11.8 (0.28)
18-64 years			
1997	18.9 (0.23)	23.6 (0.26)	13.3 (0.21)
1998	18.2 (0.27)	22.5 (0.30)	12.5 (0.23)
1999	17.8 (0.26)	22.2 (0.29)	11.9 (0.23)
2000	18.7 (0.27)	22.9 (0.29)	12.4 (0.23)
2001	18.3 (0.27)	22.4 (0.29)	12.3 (0.22)
2002	19.1 (0.26)	23.1 (0.29)	12.5 (0.21)
2003	20.1 (0.29)	23.8 (0.31)	13.7 (0.25)
2004 (Method 1) ³	19.4 (0.26)	23.2 (0.29)	13.8 (0.21)
2004 (Method 2) ³	19.3 (0.26)	23.1 (0.29)	13.8 (0.21)
2005 ³	18.9 (0.26)	22.8 (0.28)	13.8 (0.23)
2006 ^{3,4}	19.8 (0.33)	24.1 (0.36)	14.5 (0.29)
2007 ³	19.4 (0.36)	23.7 (0.40)	14.3 (0.32)
2008 ³ (January–September)	19.6 (0.38)	24.1 (0.39)	14.4 (0.34)

See footnotes at end of table.

Table 1. Percentage of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year, by age group: United States, 1997-September 2008, continued

Age group and year	Uninsured ¹ at the time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than a year ²
Percent (standard error)			
Under 18 years			
1997	13.9 (0.36)	18.1 (0.41)	8.4 (0.29)
1998	12.7 (0.34)	17.1 (0.40)	7.6 (0.27)
1999	11.8 (0.32)	16.3 (0.39)	7.2 (0.26)
2000	12.3 (0.32)	16.7 (0.35)	7.0 (0.23)
2001	11.0 (0.34)	15.2 (0.41)	6.3 (0.25)
2002	10.5 (0.32)	14.6 (0.37)	5.6 (0.24)
2003	10.1 (0.34)	13.7 (0.37)	5.3 (0.25)
2004 (Method 1) ³	9.6 (0.29)	12.9 (0.33)	5.4 (0.25)
2004 (Method 2) ³	9.4 (0.29)	12.7 (0.33)	5.4 (0.25)
2005 ³	8.9 (0.29)	12.6 (0.33)	5.3 (0.24)
2006 ^{3,4}	9.3 (0.34)	13.0 (0.40)	5.2 (0.26)
2007 ³	8.9 (0.40)	12.6 (0.48)	5.0 (0.28)
2008 ³ (January–September)	8.5 (0.38)	12.9 (0.46)	5.2 (0.31)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

²A year is defined as the 12 months prior to interview.

³Beginning in the third quarter of 2004, two additional questions were added to the National Health Interview Survey (NHIS) insurance section to reduce potential errors in reporting Medicare and Medicaid status. Persons aged 65 years and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons under 65 years old with no reported coverage were asked explicitly about Medicaid coverage. Estimates of uninsurance for 2004 were calculated without using the additional information from these questions (noted as Method 1) and with the responses to these questions (noted as Method 2). Respondents who were reclassified as covered by the additional questions received the appropriate follow-up questions concerning periods of noncoverage for insured respondents. These reclassified respondents were excluded in the tabulation of *uninsured for more than a year* using Method 1 in 2004. Beginning in 2005, all estimates were calculated using Method 2. See "Technical Notes" for additional information.

⁴In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

DATA SOURCE: Family Core component of the 1997-2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 2. Number of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year, by age group: United States, 1997-September 2008

Age group and year	Uninsured ¹ at the time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than a year ²
Number in millions			
All ages			
1997	41.0	51.9	27.7
1998	40.1	49.9	26.3
1999	38.7	49.4	25.3
2000	41.3	51.8	26.6
2001	40.2	50.4	26.1
2002	41.5	51.7	26.2
2003	43.6	53.1	28.5
2004 (Method 1) ³	42.5	52.0	29.2
2004 (Method 2) ³	42.1	51.6	29.2
2005 ³	41.2	51.3	29.2
2006 ^{3,4}	43.6	54.5	30.7
2007 ³	43.1	53.9	30.6
2008 ³ (January–September)	43.3	55.2	31.1
Under 65 years			
1997	40.7	51.4	27.6
1998	39.0	49.5	26.2
1999	38.3	48.9	25.1
2000	40.8	51.3	26.4
2001	39.8	49.9	25.9
2002	41.1	51.2	25.9
2003	43.2	52.5	28.3
2004 (Method 1) ³	42.0	51.3	28.9
2004 (Method 2) ³	41.7	51.0	28.9
2005 ³	41.0	50.9	29.0
2006 ^{3,4}	43.3	54.0	30.5
2007 ³	42.8	53.5	30.4
2008 ³ (January–September)	43.1	54.8	30.9
18-64 years			
1997	30.8	38.5	21.7
1998	30.0	37.2	20.7
1999	29.8	37.1	19.9
2000	32.0	39.2	21.3
2001	31.9	38.9	21.4
2002	33.5	40.6	21.9
2003	35.9	42.5	24.5
2004 (Method 1) ³	35.0	41.9	25.0
2004 (Method 2) ³	34.9	41.8	25.0
2005 ³	34.5	41.7	25.2
2006 ^{3,4}	36.5	44.5	26.8
2007 ³	36.3	44.2	26.8
2008 ³ (January–September)	36.8	45.3	27.1

See footnotes at end of table.

Table 2. Number of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year, by age group: United States, 1997-September 2008, continued

Age group and year	Uninsured ¹ at the time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than a year ²
Number in millions			
Under 18 years			
1997	9.9	12.9	6.0
1998	9.1	12.3	5.5
1999	8.5	11.8	5.2
2000	8.9	12.0	5.1
2001	7.9	11.0	4.5
2002	7.6	10.6	4.1
2003	7.3	10.0	3.9
2004 (Method 1) ³	7.0	9.4	4.0
2004 (Method 2) ³	6.8	9.3	3.9
2005 ³	6.5	9.3	3.9
2006 ^{3,4}	6.8	9.5	3.8
2007 ³	6.5	9.3	3.7
2008 ³ (January–September)	6.3	9.5	3.9

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

²A year is defined as the 12 months prior to interview.

³Beginning in the third quarter of 2004, two additional questions were added to the National Health Interview Survey (NHIS) insurance section to reduce potential errors in reporting Medicare and Medicaid status. Persons aged 65 years and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons under 65 years old with no reported coverage were asked explicitly about Medicaid coverage. Estimates of uninsurance for 2004 were calculated without using the additional information from these questions (noted as Method 1) and with the responses to these questions (noted as Method 2). Respondents who were reclassified as covered by the additional questions received the appropriate follow-up questions concerning periods of noncoverage for insured respondents. These reclassified respondents were excluded in the tabulation of *uninsured for more than a year* using Method 1 in 2004. Beginning in 2005, all estimates were calculated using Method 2. See "Technical Notes" for additional information.

⁴In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

DATA SOURCE: Family Core component of the 1997-2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 3. Percentage of persons under the age of 65 years with public health plan or private health insurance coverage at the time of interview, by age group: United States, 1997-September 2008

Type of coverage and year	Under 65 years	Under 18 years	18-64 years
Percent (standard error)			
Public health plan coverage ¹			
1997	13.6 (0.25)	21.4 (0.48)	10.2 (0.20)
1998	12.7 (0.26)	20.0 (0.49)	9.5 (0.21)
1999	12.4 (0.24)	20.4 (0.46)	9.0 (0.19)
2000	12.9 (0.26)	22.0 (0.50)	9.1 (0.19)
2001	13.6 (0.26)	23.6 (0.50)	9.4 (0.21)
2002	15.2 (0.29)	27.1 (0.54)	10.3 (0.23)
2003	16.0 (0.31)	28.6 (0.58)	10.9 (0.24)
2004 (Method 1) ³	16.1 (0.29)	28.5 (0.54)	11.1 (0.22)
2004 (Method 2) ³	16.2 (0.29)	28.7 (0.54)	11.1 (0.23)
2005 ³	16.8 (0.29)	29.9 (0.56)	11.5 (0.22)
2006 ^{3,4}	18.1 (0.35)	32.3 (0.69)	12.4 (0.26)
2007 ³	18.1 (0.40)	32.7 (0.77)	12.3 (0.31)
2008 ³ (January–September)	19.4 (0.42)	34.5 (0.78)	13.4 (0.35)
Private health insurance coverage ²			
1997	70.8 (0.35)	66.2 (0.57)	72.8 (0.30)
1998	72.0 (0.36)	68.5 (0.55)	73.5 (0.32)
1999	73.1 (0.36)	69.1 (0.55)	74.7 (0.33)
2000	71.8 (0.34)	67.1 (0.53)	73.8 (0.32)
2001	71.6 (0.37)	66.7 (0.57)	73.7 (0.33)
2002	69.8 (0.39)	63.9 (0.61)	72.3 (0.35)
2003	68.2 (0.40)	62.6 (0.60)	70.6 (0.36)
2004 ³	68.6 (0.39)	63.1 (0.59)	70.9 (0.36)
2005 ³	68.4 (0.39)	62.4 (0.60)	70.9 (0.36)
2006 ^{3,4}	66.5 (0.48)	59.7 (0.72)	69.2 (0.43)
2007 ³	66.8 (0.53)	59.9 (0.82)	69.6 (0.47)
2008 ³ (January–September)	65.5 (0.57)	58.5 (0.84)	68.3 (0.51)

¹The health plan category “public health plan coverage” includes Medicaid, State Children’s Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, Medicare (disability), and military plans.

²The health plan category “private health insurance coverage” excludes plans that paid for only one type of service such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

³Beginning in the third quarter of 2004, two additional questions were added to the National Health Interview Survey (NHIS) insurance section to reduce potential errors in reporting Medicare and Medicaid status. Persons aged 65 years and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons under 65 years old with no reported coverage were asked explicitly about Medicaid coverage. Estimates of uninsurance for 2004 were calculated without using the additional information from these questions (noted as Method 1) and with the responses to these questions (noted as Method 2). Respondents who were reclassified as covered by the additional questions received the appropriate follow-up questions concerning periods of noncoverage for insured respondents. The two additional questions added beginning in the third quarter of 2004 did not affect the estimates of private coverage. Beginning in 2005, all estimates were calculated using Method 2. See “Technical Notes” for additional information.

⁴In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

DATA SOURCE: Family Core component of the 1997–2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 4. Percentage uninsured at the time of interview for persons under the age of 65 years, by age group and poverty status: United States, 1997–September 2008

Age group and year	Poverty status ¹				
	Total	Poor	Near poor	Not poor	Unknown
Percent uninsured ² (standard error)					
Under 65 years					
1997	17.4 (0.24)	32.7 (0.80)	30.4 (0.70)	8.9 (0.22)	21.6 (0.59)
1998	16.5 (0.26)	32.7 (0.84)	30.8 (0.79)	8.0 (0.22)	20.7 (0.59)
1999	16.0 (0.25)	32.1 (0.93)	30.7 (0.73)	7.8 (0.20)	20.1 (0.48)
2000	16.8 (0.24)	32.7 (0.89)	31.3 (0.69)	8.7 (0.22)	19.7 (0.51)
2001	16.2 (0.26)	31.0 (0.99)	28.6 (0.69)	8.4 (0.21)	20.3 (0.53)
2002	16.5 (0.24)	28.6 (0.80)	28.3 (0.70)	9.5 (0.24)	20.7 (0.55)
2003	17.2 (0.27)	29.4 (0.91)	30.2 (0.70)	9.1 (0.25)	21.3 (0.52)
2004 (Method 1) ^{3,4}	16.6 (0.23)	30.5 (0.93)	29.1 (0.67)	9.4 (0.23)	18.7 (0.48)
2004 (Method 2) ^{3,4}	16.4 (0.23)	30.1 (0.91)	28.9 (0.67)	9.4 (0.23)	18.6 (0.48)
2005 ³	16.0 (0.24)	28.4 (0.78)	28.6 (0.63)	9.1 (0.22)	18.5 (0.48)
2006 ^{3,5}	16.8 (0.29)	29.2 (0.98)	30.8 (0.80)	9.7 (0.29)	17.5 (0.49)
2007 ⁶	16.4 (0.33)	28.0 (1.04)	30.2 (0.91)	9.8 (0.27)	20.8 (0.74)
2008 ³ (Jan.–Sept.)	16.5 (0.33)	27.5 (1.04)	30.1 (0.90)	10.1 (0.28)	20.7 (0.76)
Under 18 years					
1997	13.9 (0.36)	22.4 (0.99)	22.8 (0.96)	6.1 (0.33)	18.3 (0.90)
1998	12.7 (0.34)	21.6 (1.02)	22.5 (0.97)	4.9 (0.29)	16.5 (0.75)
1999	11.8 (0.32)	21.4 (1.13)	21.6 (0.92)	4.4 (0.29)	14.9 (0.69)
2000	12.3 (0.32)	20.6 (1.04)	21.4 (0.93)	5.3 (0.30)	15.0 (0.72)
2001	11.0 (0.34)	18.8 (1.24)	17.0 (0.85)	4.4 (0.26)	15.5 (0.84)
2002	10.5 (0.32)	15.9 (0.97)	15.7 (0.84)	5.3 (0.36)	14.1 (0.76)
2003	10.1 (0.34)	15.4 (1.06)	14.7 (0.88)	4.8 (0.33)	13.5 (0.67)
2004 (Method 1) ^{3,4}	9.6 (0.29)	16.2 (1.23)	15.5 (0.81)	5.0 (0.30)	10.5 (0.56)
2004 (Method 2) ^{3,4}	9.4 (0.29)	15.3 (1.17)	15.1 (0.81)	5.0 (0.30)	10.3 (0.56)
2005 ³	8.9 (0.29)	13.0 (0.92)	14.7 (0.79)	4.6 (0.30)	11.0 (0.66)
2006 ^{3,5}	9.3 (0.34)	12.7 (1.06)	16.5 (1.05)	4.8 (0.39)	10.0 (0.63)
2007 ⁶	8.9 (0.40)	11.4 (1.08)	15.5 (1.10)	4.9 (0.34)	11.8 (1.01)
2008 ³ (Jan.–Sept.)	8.5 (0.38)	12.0 (0.94)	14.9 (1.13)	4.7 (0.36)	10.2 (0.85)
18-64 years					
1997	18.9 (0.23)	40.2 (0.88)	34.9 (0.71)	9.9 (0.22)	22.9 (0.58)
1998	18.2 (0.27)	40.8 (1.02)	36.0 (0.83)	9.2 (0.23)	22.2 (0.60)
1999	17.8 (0.26)	39.9 (1.11)	36.3 (0.81)	9.0 (0.20)	22.2 (0.50)
2000	18.7 (0.27)	41.1 (1.05)	37.4 (0.77)	10.0 (0.24)	21.5 (0.53)
2001	18.3 (0.27)	39.5 (1.19)	35.6 (0.78)	9.9 (0.22)	22.1 (0.52)
2002	19.1 (0.26)	37.0 (1.09)	36.2 (0.77)	11.0 (0.25)	23.2 (0.56)
2003	20.1 (0.29)	38.2 (1.19)	39.5 (0.81)	10.6 (0.27)	24.2 (0.56)
2004 (Method 1) ^{3,4}	19.4 (0.26)	40.1 (1.10)	36.9 (0.72)	11.0 (0.26)	21.7 (0.54)
2004 (Method 2) ^{3,4}	19.3 (0.26)	39.9 (1.09)	36.8 (0.73)	11.0 (0.26)	21.6 (0.54)
2005 ³	18.9 (0.26)	38.5 (0.95)	36.6 (0.73)	10.7 (0.24)	21.2 (0.52)
2006 ^{3,5}	19.8 (0.33)	40.0 (1.33)	38.6 (0.89)	11.4 (0.31)	20.3 (0.54)
2007 ⁶	19.4 (0.36)	38.6 (1.47)	39.3 (1.01)	11.4 (0.29)	23.8 (0.79)
2008 ³ (Jan.–Sept.)	19.6 (0.38)	37.4 (1.54)	39.5 (1.03)	11.9 (0.30)	24.2 (0.87)

¹Poverty status is based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those below the poverty threshold, "near poor" persons have incomes of 100% to less than 200% of the poverty threshold, and "not poor" persons have incomes of 200% of the poverty threshold or greater. The percentage of respondents with unknown poverty status was 19.1% in 1997, 23.6% in 1998, 26.4% in 1999, 27.0% in 2000, 27.1% in 2001, 28.1% in 2002, 31.5% in 2003, 29.6% in 2004, 28.9% in 2005, 30.7% in 2006, 18.0% in 2007, and 16.2% in the first three quarters of 2008. For more information on the unknown income and poverty status categories, see the National Health Interview Survey (NHIS) Survey Description Document for years 1997-2005, available from: <http://www.cdc.gov/nchs/nhis.htm>. Estimates may differ from estimates based on both reported and imputed income. See "Technical Notes" for a discussion of the use of imputed income in the stratification of health insurance coverage by poverty status.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of the interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

³Beginning in the third quarter of 2004, two additional questions were added to the NHIS insurance section to reduce potential errors in reporting Medicare and Medicaid status. Persons aged 65 years and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons aged under 65 years old with no reported coverage were asked explicitly about Medicaid coverage. Estimates of uninsurance for 2004 were calculated without using the additional information from these questions (noted as Method 1) and with the responses to these questions (noted as Method 2). Respondents who were reclassified as covered by the additional questions received the appropriate follow-up questions concerning periods of noncoverage for insured respondents. Beginning in 2005, all estimates were calculated using Method 2. See "Technical Notes" for additional information.

⁴In 2004, a much larger than expected proportion of respondents reported a family income of "\$2." Based on extensive review, these "\$2" responses were coded to "not ascertained" for the final 2004 NHIS data files. Effective with the March 2006 Early Release report, the 2004 estimates were recalculated to reflect this editing decision. For a complete discussion, see the NHIS Survey Description Document for 2004, available from: <http://www.cdc.gov/nchs/nhis.htm>. The problem with the "\$2" income reports was fixed in the 2005 NHIS.

⁵In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

⁶In 2007, the income section of the NHIS was redesigned, and estimates by poverty status may not be directly comparable with earlier years.

See "Technical Notes" for further information on the income question changes.

DATA SOURCE: Family Core component of the 1997-2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 5. Percentage of persons under the age of 65 years with public health plan coverage at the time of interview, by age group and poverty status: United States, 1997–September 2008

Age group and year	Poverty status ¹				
	Total	Poor	Near poor	Not poor	Unknown
Percent of persons with public health plan coverage ² (standard error)					
Under 65 years					
1997	13.6 (0.25)	46.1 (1.01)	18.2 (0.56)	5.3 (0.19)	13.2 (0.49)
1998	12.7 (0.26)	44.7 (1.05)	17.5 (0.57)	5.1 (0.23)	13.4 (0.45)
1999	12.4 (0.24)	43.4 (1.04)	20.5 (0.63)	4.8 (0.18)	13.2 (0.43)
2000	12.9 (0.26)	43.7 (1.11)	21.7 (0.62)	5.3 (0.21)	12.8 (0.42)
2001	13.6 (0.26)	45.0 (1.14)	25.0 (0.39)	5.7 (0.21)	13.1 (0.42)
2002	15.2 (0.29)	47.0 (1.07)	27.5 (0.72)	6.1 (0.24)	16.6 (0.45)
2003	16.0 (0.31)	48.8 (1.16)	29.3 (0.75)	6.6 (0.27)	15.8 (0.48)
2004 (Method 1) ^{3,4}	16.1 (0.29)	50.7 (1.02)	27.6 (0.69)	6.9 (0.23)	16.0 (0.47)
2004 (Method 2) ^{3,4}	16.2 (0.29)	51.1 (1.01)	27.8 (0.68)	6.9 (0.23)	16.1 (0.47)
2005 ³	16.8 (0.29)	50.6 (0.98)	30.0 (0.72)	7.4 (0.22)	16.4 (0.48)
2006 ^{3,5}	18.1 (0.35)	51.5 (1.17)	30.5 (0.78)	7.5 (0.28)	17.9 (0.64)
2007 ⁶	18.1 (0.40)	53.3 (1.34)	33.9 (0.91)	7.6 (0.30)	18.6 (0.77)
2008 ³ (Jan.–Sept.)	19.4 (0.52)	56.0 (1.28)	35.3 (0.92)	8.6 (0.30)	19.2 (0.95)
Under 18 years					
1997	21.4 (0.48)	62.1 (1.31)	24.3 (0.93)	6.3 (0.32)	21.4 (0.97)
1998	20.0 (0.49)	61.1 (1.34)	22.9 (0.95)	6.0 (0.39)	22.1 (0.95)
1999	20.4 (0.46)	60.7 (1.37)	28.7 (1.15)	6.0 (0.32)	22.2 (0.88)
2000	22.0 (0.50)	61.8 (1.48)	32.4 (1.13)	7.4 (0.39)	22.1 (0.85)
2001	23.6 (0.50)	65.2 (1.47)	37.0 (1.23)	8.1 (0.39)	23.1 (0.94)
2002	27.1 (0.54)	69.0 (1.33)	42.2 (1.18)	8.9 (0.45)	30.7 (0.99)
2003	28.6 (0.58)	72.3 (1.32)	47.2 (1.27)	9.8 (0.48)	28.5 (1.00)
2004 (Method 1) ^{3,4}	28.5 (0.54)	72.5 (1.36)	43.4 (1.20)	9.7 (0.45)	30.4 (1.01)
2004 (Method 2) ^{3,4}	28.7 (0.54)	73.4 (1.34)	43.8 (1.20)	9.7 (0.45)	30.6 (1.01)
2005 ³	29.9 (0.56)	73.3 (1.32)	47.3 (1.21)	10.7 (0.47)	30.8 (1.05)
2006 ^{3,5}	32.3 (0.69)	75.8 (1.32)	49.0 (1.45)	10.4 (0.53)	33.1 (1.25)
2007 ⁶	32.7 (0.77)	78.7 (1.38)	53.5 (1.44)	11.0 (0.60)	34.0 (1.54)
2008 ³ (Jan.–Sept.)	34.5 (0.78)	79.7 (1.27)	54.4 (1.54)	13.4 (0.62)	34.2 (1.74)
18-64 years					
1997	10.2 (0.20)	34.3 (0.93)	14.6 (0.51)	5.0 (0.18)	10.1 (0.41)
1998	9.5 (0.21)	32.9 (1.08)	14.1 (0.53)	4.8 (0.21)	10.0 (0.34)
1999	9.0 (0.19)	30.8 (0.98)	15.4 (0.52)	4.4 (0.17)	9.6 (0.33)
2000	9.1 (0.19)	31.1 (1.00)	15.2 (0.54)	4.5 (0.19)	9.1 (0.33)
2001	9.4 (0.21)	30.8 (1.10)	17.8 (0.62)	4.8 (0.20)	9.4 (0.33)
2002	10.3 (0.23)	32.5 (1.10)	18.3 (0.66)	5.1 (0.22)	11.2 (0.35)
2003	10.9 (0.24)	34.0 (1.19)	18.6 (0.68)	5.5 (0.24)	11.1 (0.37)
2004 (Method 1) ^{3,4}	11.1 (0.22)	36.1 (1.03)	18.5 (0.61)	5.9 (0.21)	10.8 (0.35)
2004 (Method 2) ^{3,4}	11.1 (0.23)	36.3 (1.03)	18.6 (0.60)	5.9 (0.21)	10.9 (0.35)
2005 ³	11.5 (0.22)	35.6 (0.98)	20.0 (0.61)	6.2 (0.20)	11.3 (0.36)
2006 ^{3,5}	12.4 (0.26)	35.6 (1.25)	20.3 (0.68)	6.5 (0.25)	12.3 (0.48)
2007 ⁶	12.3 (0.31)	37.0 (1.41)	21.7 (0.85)	6.5 (0.27)	13.4 (0.61)
2008 ³ (Jan.–Sept.)	13.4 (0.35)	40.8 (1.47)	23.4 (0.88)	7.1 (0.29)	14.2 (0.84)

¹Poverty status is based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those below the poverty threshold, "near poor" persons have incomes of 100% to less than 200% of the poverty threshold, and "not poor" persons have incomes of 200% of the poverty threshold or greater. The percentage of respondents with unknown poverty status was 19.1% in 1997, 23.6% in 1998, 26.4% in 1999, 27.0% in 2000, 27.1% in 2001, 28.1% in 2002, 31.5% in 2003, 29.6% in 2004, 28.9% in 2005, 30.7% in 2006, 18.0% in 2007, and 16.2% in the first three quarters of 2008. For more information on the unknown income and poverty status categories, see the National Health Interview Survey (NHIS) Survey Description Document for years 1997-2005, available from: <http://www.cdc.gov/nchs/nhis.htm>. Estimates may differ from estimates based on both reported and imputed income. See "Technical Notes" for a discussion of the use of imputed income in the stratification of health insurance coverage by poverty status.

²The category "public health plan coverage" includes Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plans, Medicare (disability), and military plans. A small number of persons were covered by both public and private plans and were included in both categories. See Table 6 for persons covered by private plans.

³Beginning in the third quarter of 2004, two additional questions were added to the NHIS insurance section to reduce potential errors in reporting Medicare and Medicaid status. Persons aged 65 years and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons aged under 65 years with no reported coverage were asked explicitly about Medicaid coverage. Estimates of uninsurance for 2004 were calculated without using the additional information from these questions (noted as Method 1) and with the responses to these questions (noted as Method 2). Respondents who were reclassified as covered by the additional questions received the appropriate follow-up questions concerning periods of noncoverage for insured respondents. Beginning in 2005, all estimates were calculated using Method 2. See "Technical Notes" for additional information.

⁴ In 2004, a much larger than expected proportion of respondents reported a family income of "\$2." Based on extensive review, these "\$2" responses were coded to "not ascertained" for the final 2004 NHIS data files. Effective with the March 2006 Early Release report, the 2004 estimates were recalculated to reflect this editing decision. For a complete discussion, see the NHIS Survey Description Document for 2004, available from: <http://www.cdc.gov/nchs/nhis.htm>. The problem with the "\$2" income reports was fixed in the 2005 NHIS.

⁵In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

⁶In 2007, the income section of the NHIS was redesigned, and estimates by poverty status may not be directly comparable with earlier years. See "Technical Notes" for further information on the income question changes.

DATA SOURCE: Family Core component of the 1997-2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 6. Percentage of persons under the age of 65 years with private health insurance coverage at the time of interview, by age group and poverty status: United States, 1997–September 2008

Age group and year	Poverty status ¹				
	Total	Poor	Near poor	Not poor	Unknown
Percent of persons with private health insurance coverage ² (standard error)					
Under 65 years					
1997	70.8 (0.35)	22.9 (0.93)	53.5 (0.80)	87.6 (0.27)	66.7 (0.71)
1998	72.0 (0.36)	23.1 (1.02)	53.0 (0.92)	88.1 (0.29)	67.1 (0.71)
1999	73.1 (0.36)	26.1 (1.12)	50.9 (0.86)	88.9 (0.24)	68.0 (0.65)
2000	71.8 (0.34)	25.2 (1.00)	49.1 (0.87)	87.4 (0.28)	68.8 (0.63)
2001	71.6 (0.37)	25.5 (1.13)	48.4 (0.85)	87.2 (0.27)	67.8 (0.69)
2002	69.8 (0.39)	26.0 (1.14)	46.5 (0.89)	86.0 (0.33)	63.9 (0.71)
2003	68.2 (0.40)	23.4 (1.21)	42.3 (0.90)	85.8 (0.34)	64.1 (0.68)
2004 ³	68.6 (0.39)	20.0 (1.11)	44.9 (0.85)	85.0 (0.32)	66.3 (0.70)
2005	68.4 (0.39)	22.1 (0.89)	43.2 (0.89)	84.7 (0.30)	66.2 (0.68)
2006 ⁴	66.5 (0.48)	20.6 (1.29)	40.6 (0.91)	84.1 (0.41)	65.7 (0.79)
2007 ⁵	66.8 (0.53)	20.1 (1.41)	37.9 (1.00)	83.8 (0.40)	61.7 (1.04)
2008 ³ (Jan.–Sept.)	65.5 (0.57)	17.9 (1.26)	36.4 (1.03)	82.6 (0.40)	61.2 (1.24)
Under 18 years					
1997	66.2 (0.57)	17.5 (1.09)	55.0 (1.15)	88.9 (0.43)	61.7 (1.18)
1998	68.5 (0.55)	19.3 (1.17)	56.3 (1.22)	89.9 (0.48)	62.1 (1.13)
1999	69.1 (0.55)	20.2 (1.16)	52.1 (1.23)	90.6 (0.39)	63.8 (1.02)
2000	67.1 (0.53)	19.5 (1.21)	48.8 (1.23)	88.4 (0.47)	64.2 (0.99)
2001	66.7 (0.57)	18.1 (1.12)	48.4 (1.23)	88.4 (0.40)	62.2 (1.16)
2002	63.9 (0.61)	17.2 (1.08)	44.9 (1.29)	86.9 (0.54)	56.3 (1.19)
2003	62.6 (0.60)	14.4 (1.06)	39.9 (1.28)	86.5 (0.56)	58.8 (1.07)
2004 ³	63.1 (0.59)	12.6 (0.97)	43.0 (1.29)	86.4 (0.52)	60.0 (1.11)
2005	62.4 (0.60)	15.0 (1.10)	40.0 (1.31)	85.6 (0.52)	59.3 (1.16)
2006 ⁴	59.7 (0.72)	13.1 (1.10)	36.9 (1.37)	85.9 (0.63)	57.8 (1.28)
2007 ⁵	59.9 (0.82)	11.9 (1.08)	34.0 (1.46)	85.1 (0.63)	54.8 (1.82)
2008 ³ (Jan.–Sept.)	58.5 (0.84)	10.6 (1.02)	32.9 (1.55)	83.1 (0.68)	56.1 (1.94)
18-64 years					
1997	72.8 (0.30)	26.8 (1.09)	52.6 (0.76)	87.1 (0.26)	68.6 (0.65)
1998	73.5 (0.32)	25.8 (1.17)	50.9 (0.90)	87.4 (0.27)	69.1 (0.66)
1999	74.7 (0.33)	30.4 (1.39)	50.2 (0.85)	88.2 (0.24)	69.7 (0.60)
2000	73.8 (0.32)	29.2 (1.16)	49.3 (0.83)	87.1 (0.27)	70.6 (0.61)
2001	73.7 (0.33)	31.7 (1.41)	48.4 (0.82)	86.8 (0.28)	69.9 (0.61)
2002	72.3 (0.35)	31.8 (1.50)	47.5 (0.85)	85.7 (0.30)	66.9 (0.62)
2003	70.6 (0.36)	29.0 (1.60)	43.7 (0.88)	85.5 (0.33)	66.0 (0.62)
2004 ³	70.9 (0.36)	24.9 (1.39)	46.0 (0.79)	84.6 (0.31)	68.6 (0.65)
2005	70.9 (0.36)	26.8 (1.03)	45.0 (0.85)	84.4 (0.29)	68.7 (0.61)
2006 ⁴	69.2 (0.43)	25.5 (1.72)	42.6 (0.92)	83.6 (0.40)	68.6 (0.71)
2007 ⁵	69.6 (0.47)	25.4 (1.92)	40.4 (1.01)	83.4 (0.38)	64.0 (0.92)
2008 ³ (Jan.–Sept.)	68.3 (0.51)	22.6 (1.75)	38.5 (0.97)	82.4 (0.38)	62.9 (1.17)

¹Poverty status is based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those below the poverty threshold, "near poor" persons have incomes of 100% to less than 200% of the poverty threshold, and "not poor" persons have incomes of 200% of the poverty threshold or greater. The percentage of respondents with unknown poverty status was 19.1% in 1997, 23.6% in 1998, 26.4% in 1999, 27.0% in 2000, 27.1% in 2001, 28.1% in 2002, 31.5% in 2003, 29.6% in 2004, 28.9% in 2005, 30.7% in 2006, 18.0% in 2007, and 16.2% in the first three quarters of 2008. For more information on the unknown income and poverty status categories, see the National Health Interview Survey (NHIS) Survey Description Document for years 1997-2005, available from: <http://www.cdc.gov/nchs/nhis.htm>. Estimates may differ from estimates based on both reported and imputed income. See "Technical Notes" for a discussion of the use of imputed income in the stratification of health insurance coverage by poverty status.

²The category "private health insurance" excludes plans that paid for only one type of service such as accidents or dental care. A small number of persons were covered by both public and private plans and thus were included in both categories. See Table 5 for persons covered by public plans.

³In 2004, a much larger than expected proportion of respondents reported a family income of "\$2." Based on extensive review, these "\$2" responses were coded to "not ascertained" for the final 2004 NHIS data files. Effective with the March 2006 Early Release report the 2004 estimates were recalculated to reflect this editing decision. For a complete discussion, see the NHIS Survey Description Document for 2004, available from: <http://www.cdc.gov/nchs/nhis.htm>. The problem with the "\$2" income reports was fixed in the 2005 NHIS.

⁴In 2006, NHIS underwent a sample redesign. The impact of the new sample design on estimates presented in this report is expected to be minimal.

⁵In 2007, the income section of the NHIS was redesigned, and estimates by poverty status may not be directly comparable with earlier years.

See "Technical Notes" for further information on the income question changes.

DATA SOURCE: Family Core component of the 1997-2008 NHIS. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Table 7. Percentage of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, or for more than a year, by selected demographic characteristics: United States, January–September 2008

Selected characteristic	Uninsured ¹ at the time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than a year ²
Percent (standard error)			
Age			
All ages	14.5 (0.29)	18.5 (0.32)	10.4 (0.25)
Under 65 years	16.5 (0.33)	20.9 (0.35)	11.8 (0.28)
Under 18 years	8.5 (0.38)	12.9 (0.46)	5.2 (0.31)
18-64 years	19.6 (0.38)	24.1 (0.39)	14.4 (0.34)
65 years and over	0.6 (0.09)	1.2 (0.13)	0.5 (0.07)
Sex			
Male	16.0 (0.35)	19.8 (0.36)	12.0 (0.30)
Female	13.0 (0.30)	17.2 (0.34)	8.9 (0.25)
Race/ethnicity			
Hispanic or Latino	31.4 (0.85)	35.6 (0.83)	25.3 (0.80)
Non-Hispanic			
White, single race	10.3 (0.28)	14.3 (0.32)	7.1 (0.23)
Black, single race	16.2 (0.47)	20.3 (0.55)	10.4 (0.43)
Asian, single race	11.5 (0.88)	14.3 (0.94)	8.6 (0.77)
Other races and multiple races	16.7 (2.18)	21.3 (2.16)	7.6 (0.93)
Region			
Northeast	10.2 (0.58)	13.9 (0.72)	7.0 (0.38)
Midwest	11.6 (0.47)	15.9 (0.54)	8.1 (0.42)
South	17.4 (0.55)	21.2 (0.57)	12.9 (0.50)
West	16.1 (0.62)	20.3 (0.66)	11.4 (0.48)
Education ³			
Less than high school	31.8 (0.79)	35.2 (0.81)	26.4 (0.75)
High school diploma or GED ⁴	19.0 (0.48)	23.2 (0.48)	14.1 (0.41)
More than high school	10.6 (0.28)	14.5 (0.34)	7.0 (0.22)
Employment status ⁵			
Employed	17.9 (0.39)	22.3 (0.40)	13.5 (0.35)
Unemployed	51.4 (1.50)	59.6 (1.45)	32.2 (1.33)
Not in workforce	19.8 (0.64)	24.0 (0.66)	14.8 (0.57)
Marital status ³			
Married	11.7 (0.37)	14.7 (0.40)	8.9 (0.33)
Widowed	4.9 (0.42)	6.1 (0.49)	3.8 (0.38)
Divorced or separated	20.6 (0.63)	25.3 (0.72)	14.7 (0.57)
Living with partner	31.9 (1.16)	39.4 (1.20)	23.6 (0.95)
Never married	25.8 (0.58)	31.4 (0.63)	18.5 (0.53)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

²A year is defined as the 12 months prior to interview.

³Education and marital status are shown only for persons aged 18 years and over.

⁴GED is General Educational Development high school equivalency diploma.

⁵Employment status is shown only for persons 18-64 years of age.

DATA SOURCE: Family Core component of the 2008 National Health Interview Survey. The estimates for 2008 are based on data collected in January through September. Data are based on household interviews of a sample of the civilian noninstitutionalized population.



Technical Notes

Introduction

The Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) is releasing selected estimates of health insurance coverage for the civilian noninstitutionalized U.S. population based on data from the January-September 2008 National Health Interview Survey (NHIS), along with comparable estimates from the 1997-2007 NHIS.

Three measures of lack of health insurance coverage are provided: (i) uninsured at the time of the interview, (ii) uninsured at least part of the year prior to the interview (which also includes persons uninsured for more than a year), and (iii) uninsured for more than a year at the time of the interview. Different time frames are used to measure lack of insurance coverage, to reflect different policy-relevant perspectives. The measure of uninsured at the time of the interview provides an estimate of persons who at any given time may experience barriers to obtaining needed health care. The estimate of persons who were uninsured at any time in the year prior to interview provides an annual caseload of persons who may experience these barriers. This measure includes persons who have insurance at the time of interview, but had a period of noncoverage in the year prior to the interview, as well as those who are currently uninsured and who may have had been uninsured for a long period of time. Finally, the measure of lack of coverage for more than a year provides an estimate of those with a persistent lack of coverage who may be at high risk of not obtaining preventive services as well as care for illness and injury. These three measures of lack of coverage are not mutually exclusive, and a given individual may be counted in more than one of the three measures. Estimates of enrollment in public and private coverage are also provided.

This report also includes estimates of three types of consumer-directed private health care. Consumer-directed health care enables individuals to have more control over when and how they access care, what types of care they use,

and how much they spend on health care services. National attention to consumer-directed health care has increased following the enactment of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (P.L. 108-173), which established tax-advantaged health savings accounts (2). In 2007, three additional questions were added to the health insurance section of the NHIS to monitor enrollment in consumer-directed health care among persons with private health insurance. Estimates for 2008 are provided for enrollment in high deductible health plans (HDHPs); plans with high deductibles coupled with health savings accounts (CDHPs); and being in a family with a flexible spending account (FSA) for medical expenses not otherwise covered. For a more complete description of consumer-directed health care, see "Definitions of selected terms" below.

The 2008 health insurance estimates are being released prior to final data editing and final weighting, to provide access to the most recent information from NHIS. The resulting estimates for persons without health insurance are generally 0.1-0.3 percentage points lower than those based on the editing procedures used for the final data files. Occasionally, due to decisions made for the final data editing and weighting, estimates based on preliminary editing procedures may differ by more than 0.3 percentage points from estimates based on final files.

Due to small sample sizes, estimates based on less than a year of data may have large variances. Caution should therefore be used in interpreting estimates with large variances. Patterns described in this report may change as more data become available.

Estimates for 2008 are stratified by age group, sex, race/ethnicity, poverty status, marital status, employment status, region, and educational attainment.

Data Source

NHIS is the source of data for this report. NHIS is a multistage probability sample survey of the civilian noninstitutionalized population of the

United States. The survey is conducted continuously throughout the year for NCHS by interviewers of the U.S. Census Bureau.

NHIS is a comprehensive health survey that can be used to relate health insurance coverage to health outcomes and health care utilization. It has a low item nonresponse rate (about 1%) for the health insurance questions. Because NHIS is conducted throughout the year, yielding a nationally representative sample each week, data can be analyzed weekly or quarterly to monitor health insurance coverage trends.

The sample for the NHIS is redesigned about every ten years. A new sample design for the NHIS was implemented in 2006. The fundamental structure of the new 2006 NHIS sample design is very similar to the previous 1995-2005 NHIS sample design. Oversampling of the black and Hispanic populations has been retained, and the new sample design also oversamples the Asian population. In addition, persons 65 years and over have a higher probability of being selected as a sample adult. The impact of the new sample design on estimates presented in this report is expected to be minimal. Visit the NCHS website (<http://www.cdc.gov/nchs/nhis.htm>) for more information on the design, content, and use of the NHIS.

The data for this report are derived from the Family Core component of the 1997-2008 NHIS, which collects information on all family members in each household. Data analyses for the January-September 2008 NHIS were based on 63,126 persons in the Family Core.

Estimation procedures

NCHS creates survey weights for each calendar quarter of the NHIS sample. The NHIS data weighting procedure has been described in more detail elsewhere ([view/download PDF](#)). Estimates were calculated by using the NHIS survey weights, which are calibrated to census totals for sex, age, and race/ethnicity of the U.S. civilian noninstitutionalized population. The weights for the 1997-1999 NHIS data were derived from 1990-census-based population estimates. Weights for the



2000-2008 NHIS data were derived from 2000-census-based population estimates.

Point estimates and estimates of their variances were calculated using SUDAAN software to account for the complex sample design of NHIS. The Taylor series linearization method was chosen for variance estimation.

Both of the June 2007 Early Release (ER) reports used final in-house design variables for estimating variance for the 2006 estimates. ER reports other than the June 2007 update use ER interim design variables to estimate variance.

All estimates shown meet the NCHS standard of having less than or equal to 30% relative standard error unless otherwise noted. Differences between percentages or rates were evaluated using two-sided significance tests at the 0.05 level. Logistic regression was used to evaluate the significance of time trends in the percentage of health insurance coverage. Terms such as “greater than” and “less than” indicate a statistically significant difference. Terms such as “similar” and “no difference” indicate that the estimates being compared were not significantly different. Lack of comments regarding the difference between any two estimates does not necessarily mean that the difference was tested and found to be not significant.

Definitions of selected terms

Health insurance coverage—The “private health insurance coverage” category excludes plans that paid for only one type of service, such as accidents or dental care. The “public health plan coverage” category includes Medicaid, State Children’s Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plans, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories. A person was defined as “uninsured” if he or she did not have any private health insurance, Medicare, Medicaid, SCHIP, state-sponsored or other government-sponsored health plan, or military plan at the time of the

interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care. The analyses excluded persons with unknown health insurance status (about 1% of respondents each year).

The terms HIKIND, MCAREPRB, and MCAIDPRB refer to questions in NHIS. The data on type of health insurance are collected through the HIKIND question “*What kind of health insurance or health care coverage [fill: do you/does person’s name] have? INCLUDE those that pay for only one type of service (nursing home care, accidents, or dental care). EXCLUDE private plans that only provide extra cash while hospitalized.*” Respondents can indicate private and public plans or indicate that they or family members are not covered by insurance.

Two additional questions were added to the health insurance section of NHIS beginning with the third quarter of 2004. One question, MCAREPRB, was asked of persons aged 65 years and over who had not indicated that they had Medicare. The MCAREPRB question is: “*People covered by Medicare have a card which looks like this. [fill: Are you/Is person’s name] covered by Medicare?*” The other question, MCAIDPRB, was asked of persons under the age of 65 years who had not indicated any type of coverage. The MCAIDPRB question is: “*There is a program called Medicaid that pays for health care for persons in need. In this State it is also called (* fill State name). [fill: Are you/Is person’s name] covered by Medicaid?*”

Respondents who were considered insured at the time of interview were asked about periods of noncoverage in the past year. For persons who did not have health insurance at the time of interview, a question was asked concerning the length of time since the respondent had coverage. These questions were used in the estimates of intermittent and long term uninsurance. Respondents who originally classified themselves as uninsured, but whose classification was changed to Medicare or Medicaid on the basis of a “yes” response to either probe question,

subsequently received appropriate follow-up questions concerning periods of noncoverage for insured respondents.

Method 1 estimates are based solely on one question (HIKIND). Method 2 estimates are based on responses to three questions (HIKIND, MCAREPRB, and MCAIDPRB). Prior to 2004, estimates in earlier releases of this report were generated using Method 1. Estimates for 2004 are presented using Method 2 in the figures and both Method 1 and Method 2 in the tables. Estimates using Method 1 for the “uninsured for more than a year” measure excluded persons whose classification was changed from uninsured to either Medicare or Medicaid coverage by either additional probe question. As a result, these respondents did not receive the follow-up question concerning how long had it been since they had coverage. However, they were asked the questions concerning noncoverage in the past 12 months for insured persons. All estimates beginning in 2005 are calculated by using the two additional questions (Method 2).

Of the 892 people (unweighted) who were eligible to receive the MCAREPRB question in the third and fourth quarters of 2004, 55.4% indicated that they were covered by Medicare. Of the 9,146 people (unweighted) who were eligible to receive the MCAIDPRB question in the third and fourth quarters of 2004, 3.0% indicated that they were covered by Medicaid.

From July through December 2004 (the third and fourth quarters combined), the estimates (weighted) for the “uninsured at the time of interview” measure decreased from 10.4% to 9.9% for persons under 18 years of age, from 19.7% to 19.5% for adults 18-64 years of age, and from 1.7% to 1.2% for persons 65 years of age and over with the use of Method 2 as compared with Method 1. The estimates for public coverage increased from 28.1% to 29.6% for children under 18 years of age, from 11.3% to 11.4% for adults 18-64 years of age, and from 89.5% to 93.3% for persons 65 years of age and over with the use of Method 2 as compared with Method 1. The



tabulation of “uninsured for more than a year” using Method 1 excludes respondents whose classification was changed to Medicare or Medicaid by either probe question because these individuals did not receive the question concerning duration of noncoverage for persons who are uninsured. There was no impact of the two additional questions on the estimates for private coverage. Additional information on the impact of these two probe questions on health insurance estimates can be found in “Impact of Medicare and Medicaid probe questions on health insurance estimates from the National Health Interview Survey, 2004” (3).

For persons with private health insurance, a new question regarding the annual deductible of each private health insurance plan was added beginning in 2007. For plans considered to be *High Deductible Health Plans* (HDHPs), a follow-up question was asked regarding special accounts or funds used to pay for medical expenses: a health savings account (HSA) or a Health Reimbursement Account (HRA). Lastly, a new question about family enrollment in a flexible spending account (FSA) for medical expenses was added.

Data on health insurance status were edited using an automated system based on logic checks and keyword searches. For comparability, the estimates for all years were created using these same procedures.

High Deductible Health Plan (HDHP)-A HDHP is defined as a private health plan with an annual deductible of not less than \$1,100 for self-only coverage or \$2,200 for family coverage.

Consumer-Directed Health Plan (CDHP)-A CDHP is defined as a HDHP with a special account to pay for medical expenses; unspent funds are carried over to subsequent years. A person is considered to have a CDHP if there was a “yes” response to the following question: “*With this plan, is there a special account or fund that can be used to pay for medical expenses? The accounts are sometimes referred to as Health Savings Accounts (HSAs), Health Reimbursement Accounts (HRAs), Personal Care accounts,*

Personal Medical funds, or Choice funds, and are different from Flexible Spending Accounts.”

Flexible spending account (FSA) for medical expenses-A person is considered to be in a family with an FSA if there was a “yes” response to the following question: “*[fill 1: Do you/Does anyone in your family] have a Flexible Spending Account for health expenses? These accounts are offered by some employers to allow employees to set aside pre-tax dollars of their own money for their use throughout the year to reimburse themselves for their out-of-pocket expenses for health care. With this type of account, any money remaining in the account at the end of the year, following a short grace period, is lost to the employee.*”

The measures of HDHP enrollment, CDHP enrollment and being in a family with a FSA for medical expenses are not mutually exclusive. Therefore, a person may be counted in more than one measure.

Directly purchased coverage-Private insurance that was originally obtained through direct purchase or through other means not related to employment.

Employer-based coverage-Private insurance that was originally obtained through a present or former employer or union or professional association.

Education-The categories of education are based on the years of school completed or highest degree obtained for persons aged 18 years and over. Only years completed in a school that advances a person toward an elementary or high school diploma, General Educational Development high school equivalency diploma (GED), college, university, or professional degree are included. Education in other schools or home schooling is counted only if the credits are accepted in a regular school system.

Employment-Employment status is assessed at the time of interview and is obtained for persons aged 18 years and over. In this release, it is presented only for persons aged 18-64 years.

Hispanic or Latino origin and race-Hispanic or Latino origin and race are two separate and distinct categories. Persons of Hispanic or Latino origin

may be of any race. Hispanic or Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or Spanish origins. Race is based on the family respondent’s description of his or her own race background as well as the race background of other family members. For conciseness, the text, tables, and figures in this report use shorter versions of the 1997 Office of Management and Budget (OMB) race and Hispanic or Latino origin terms. For example, the category “not Hispanic or Latino, black or African American, single race” is referred to as “non-Hispanic black, single race” in the text, tables, and figures. Estimates for non-Hispanic persons of races other than white only, black only, Asian only, or of multiple races are combined into the “other races or multiple race” category.

Poverty status-Poverty categories are based on the ratio of the family’s income in the previous calendar year to the appropriate poverty threshold (given the family’s size and number of children) defined by the U.S. Census Bureau for that year (4-15). Persons who are categorized as poor had a ratio less than 1.0 (i.e., their family income was below the poverty threshold), near poor persons have incomes of 100% to less than 200% of the poverty threshold, and not poor persons have incomes that are 200% of the poverty threshold or greater. The remaining group of respondents is coded as “unknown” with respect to poverty status. The percentage of respondents with unknown poverty status (19.1% in 1997, 23.6% in 1998, 26.4% in 1999, 27.0% in 2000, 27.1% in 2001, 28.1% in 2002, 31.5% in 2003, 29.6% in 2004, 28.9% in 2005, 30.7% in 2006, 18.0% in 2007, and 16.2% in the first three quarters of 2008) is disaggregated by insurance status and age in [Tables 4, 5, and 6](#).

In 2004, the NHIS instrument recorded a much larger than expected proportion of respondents with a family income for the previous calendar year of “\$2.” The ER updates from March 2005 through December 2005 used these preliminary data. Following extensive review, the “\$2” responses were coded to “not ascertained” for the



final 2004 NHIS microdata files. The 2004 estimates of coverage by poverty status were recalculated using the final microdata. The revised estimates were released in the March 2006 ER update, and continue to be used in subsequent ER updates. The problem with the “\$2” income reports was fixed in the 2005 NHIS.

See the NHIS Survey Description Documents for 1997-2007 for more information on the unknown income and unknown poverty status categories: available from:

[http:// www.cdc.gov/nchs/nhis.htm](http://www.cdc.gov/nchs/nhis.htm).

Prior to 2007, the “Income and Assets” section in the Family Core of the NHIS instrument allowed respondents to report their family income in several ways. Respondents were first asked to provide their combined family income before taxes from all sources for the previous calendar year in a dollar amount (from \$0 to \$999,995). Respondents who did not know or refused to state an amount were then asked if their combined family income in the previous calendar year was \$20,000 or more, or less than \$20,000. If they again refused to answer or said that they did not know, they were not asked any more questions about their family income. Respondents who did reply to the “above-below \$20,000” question were then handed a list (flash card) of detailed income categories (top-coded at \$75,000 or more) and asked to pick the interval containing their best estimate of their combined family income. Thus, NHIS respondents fell into one of four categories with respect to combined family income information: those willing to supply a dollar amount, those who indicated their combined family income from a fairly detailed set of intervals, those who said that their combined family income was either \$20,000 or more, or less than \$20,000, and those unwilling to provide any information whatsoever. However, the flash card approach had a very low item response rate (15%-18%) and this led to income variables such as poverty ratio having relatively high levels of missing data (approximately 30% item nonresponse rate).

In the 2007 NHIS, the family income section of the questionnaire was redesigned to improve the collection of income information and to reduce the amount of income nonresponse. Questions used to collect income data from respondents who initially would not indicate the amount of their family’s income in the last calendar year were changed from using a flash card approach to using a set of unfolding brackets. The unfolding bracket method asks a series of closed-ended income range questions (e.g., “is it less than \$50,000?”) if the respondent did not provide an answer to an exact income amount question. These questions utilize a series of income intervals, and respondents answering the complete path of questions would answer either two or three questions. The first follow-up income question asks a respondent if the family’s income is less than \$50,000. With this as a starting point, for respondents who answered “yes” to this question, additional questions are asked to determine if the family’s income is below \$35,000 and if the family’s income is below the poverty threshold. Alternately, for respondents who answered “no” to the less than \$50,000 question, additional questions are asked to determine if the family income is below \$100,000 and below \$75,000. A description of the pilot test used to develop these new questions is available elsewhere (16).

Based on preliminary data from the first quarter of 2007, 56% of the respondents eligible for the modified income follow-up questions answered all the questions in the applicable path. Initial evaluations of the distribution of poverty among selected demographic variables in the first quarter of 2007 suggest that poverty estimates are generally comparable to years 2006 and earlier (17). Readers should note that as a result of the changes in questions, the 2007 and 2008 poverty ratio variable has fewer missing values compared to prior years. This reflects improved income item response rates.

NCHS imputes income for approximately 30% of NHIS records. Beginning with survey year 2007, the imputation procedure was modified to take into account the changes made to

the income section. The imputed income files are released a few months after the annual release of NHIS microdata and are not available for the Early Release updates. Therefore, Early Release health insurance estimates stratified by poverty are based only on the reported income and may differ from similar estimates produced later (e.g., in *Health, United States* (1)) that are based on both reported and imputed income.

Region-In the geographic classification of the U.S. population, states are grouped into the following four regions used by the U.S. Census Bureau:

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

Additional Early Release Program Products

Two additional reports are published via the ER Program. “Early



Release of Estimates Based on Data from the National Health Interview Survey” (18) is published quarterly and provides estimates of 15 selected measures of health, including insurance coverage. Other measures of health include estimates of usual place to go for medical care, obtaining needed medical care, influenza vaccination, pneumococcal vaccination, obesity, leisure-time physical activity, current smoking, alcohol consumption, HIV testing, general health status, personal care needs, serious psychological distress, diagnosed diabetes, and asthma episodes and current asthma. A third report, “Wireless Substitution: Early Release of Estimates from the National Health Interview Survey” (19) is published in May and December and provides selected estimates of telephone coverage in the United States.

New measures may be added as work continues and in response to changing data needs. Feedback on these releases is welcome (**e-mail**).

Announcements about Early Releases, other new data releases, publications, or corrections related to NHIS will be sent to members of the HISUSERS Listserv. To join, visit the CDC website (**<http://www.cdc.gov/subscribe.html>**).

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