INTRODUCTION
This report uses longitudinal data from the 1996 panel of the Survey of Income and Program Participation (SIPP) to examine the health insurance coverage of people from 1996 to 1999. During the 48-month survey period, respondents reported their health insurance status for each month, providing the opportunity to observe how long people are covered by health insurance or how long they go without coverage.

This report focuses on the dynamics of health insurance coverage and how patterns vary across economic and demographic groups. The number of months without health insurance varied for different groups, 96.7 percent of all people were covered for at least 1 month of the 48-month study period and 32.1 percent lacked health insurance at least 1 month.1

HIGHLIGHTS
- Women's higher coverage rates were due to government health insurance, which covered 11.6 percent of men and 15.3 percent of women in all 48 months. Private health insurance rates (57.9 percent for men and 57.7 percent for women for all months) were equal.
- Although not all year-to-year changes were significant, the health insurance coverage rate was higher in 1999 than in 1996. The percentage of people covered throughout the calendar year was 78.2 percent in 1996 and 80.4 percent in 1999.
- The gender gap in health insurance coverage rates did not change from 1996 to 1999. In 1996, the women's entire-year coverage rate was higher than that of men by 3.0 percentage points (79.6 percent compared with 76.6 percent), not different from the gaps in successive years of the panel.
- Hispanics (of any race) were the most likely and non-Hispanic Whites were the least likely to be without health insurance.2 In 1999, 14.6 percent of non-Hispanic Whites, 28.8 percent of Blacks, and 40.6 percent of Hispanics experienced at least 1 month of no coverage.

1 Because Hispanics may be of any race, data in this report for Hispanics overlap slightly with data for the Black population. Based on data in the 1996 SIPP panel and using the panel weight, 3.5 percent of the Black population was of Hispanic origin. Data for Asians and Pacific Islanders and American Indians and Alaskan Natives are not shown in this report because of their small sample sizes.
• Compared with other age groups, people aged 18 to 24 were the least likely to have health insurance — only 62.0 percent were insured all 12 months in 1999. As the teenagers became adults, health insurance coverage rates decreased. An estimated 9.1 percent of 17-year-olds lacked health insurance for all of 1996, but the rate for the same cohort increased to 15.4 percent at age 20 in 1999.

• During the 48-month period, people in the Northeast and the Midwest had the highest probability of continuous coverage at just over 73 percent. People in the Northeast were also the most likely to have continuous government health insurance.

• Suburban residents were the most likely to have continuous health insurance coverage (72.6 percent) followed by people living outside metropolitan areas (64.7 percent) and those who lived in central cities (62.2 percent).

• Health insurance coverage rates rose with educational level. In 1999, only 3.0 percent of college graduates were without health insurance for the entire year; this was lower than the rates for people with some college (7.1 percent), high school graduates (8.7 percent), and people who did not complete high school (15.5 percent).

• People not in the labor force were more likely than those in the labor force (employed and unemployed) to have continuous health insurance coverage; and, among those in the labor force, full-time employed people were the most likely to have so.\(^3\) In 1996, 83.7 percent of people not in the labor force reported continuous coverage, higher than the corresponding rates for full-time employed (81.7 percent), part-time employed (70.5 percent), and unemployed (38.5 percent) people.

• Marriage also lowered the risk of being without health insurance. About 20.7 percent of currently married people reported at least 1 month of no health insurance during 48 months. Comparable rates were higher for previously married people (28.6 percent) and never-married people (44.6 percent).

• Among all people with at least one spell of no health insurance

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\(^3\) Those not in the labor force include the retired population and others not looking for a job.
coverage over the 48-month period, the median spell without health insurance was 5.6 months. People experiencing median spells without health insurance coverage longer than others included people not completing high school (8.8 months), unemployed people (8.7 months), Hispanics (8.3 months), and previously married people (8.1 months).

HEALTH INSURANCE COVERAGE RATES: 1996 - 1999

About two-thirds of all people (67.9 percent) had some kind of health insurance for the entire 48-month period and only 3.3 percent had no health insurance coverage the whole period.¹

Women were more likely than men to have continuous coverage.

Women were more likely then men to be covered by health insurance for at least 1 month in the 48-month period, and women were also more likely to report continuous coverage. About 97.3 percent of women and 96.0 percent of men were covered by health insurance for at least a month. Continuous coverage was reported by

69.0 percent of women and 66.7 percent of men (see Figure 1).

This difference largely reflects higher coverage from government health insurance for women (15.3 percent of women and 11.6 percent of men received government health insurance for the entire 48 months). Men and women reported similar private coverage for the same period (57.9 percent of women and 57.7 percent of men).

ANNUAL HEALTH INSURANCE RATES

Coverage rates improved every year from 1996 to 1999.

Health insurance coverage rates increased over the years (see Figure 3).¹ Although not all year-to-year changes were significant, the health insurance coverage rate was higher in 1999 than in 1996.⁶ For example, 8.8 percent of all people lacked health insurance for the entire year in 1996, decreasing to 8.0 percent in 1999. About 14.3 percent of all people were covered for no more than 6 months in 1996, decreasing to 12.8 percent in 1999. The percentage of people covered throughout the calendar year was 78.2 percent in 1996, and 80.4 percent in 1999.

A gender gap in health insurance coverage did not change during the panel years.

The entire-year coverage rate was higher for women than for men by 3.0 percentage points in 1996 (79.6 compared with 76.6 percent), which was not different from the gap of 2.6 percentage points in 1997 and

¹ These rates are based on the observed 48-month reference period with no regard to left- and right-censored spells. Survival analysis later in the report will take account of the censored spells.

² As in all longitudinal surveys, year-to-year changes in the SIPP health insurance rates may in part reflect selection bias due to sample loss.

⁶ The entire year coverage rates in 1996 and 1997 were not statistically different.
2.1 percentage points in both 1998 and 1999. However, a gap in 0-to-6 month coverage rates between men and women narrowed from 3.0 percentage points (15.8 percent compared with 12.8 percent) in 1996 to 2.1 percentage points in 1999 (13.9 percent compared with 11.8 percent).

**Hispanics were the least likely to have continuous coverage.**

Among the race-ethnicity groups, non-Hispanic Whites were the most likely and Hispanics were the least likely to have continuous coverage every year during the survey period. In 1999, while 14.6 percent of non-Hispanic Whites and 28.8 percent of Blacks experienced less than 12 months of coverage, the comparable rate for Hispanics was 40.6 percent. The likelihood of no coverage for the entire year was also highest among Hispanics. In 1999, 21.1 percent of Hispanics, 10.9 percent of Blacks, and 5.5 percent of non-Hispanic Whites lacked health insurance for the entire year (see Figure 3).
People aged 18 to 24 were the least likely to be insured of all age groups.7

People aged 55 to 64 were the most likely and those aged 18 to 24 were the least likely to have entire-year coverage.8 In 1999, while 90.8 percent of people aged 55 to 64 reported entire-year coverage, only 62.0 percent of those aged 18 to 24 did so. Additionally, people aged 55 to 64 were the least likely and those aged 18 to 24 were the most likely to have zero months of coverage.9 In 1999, while 4.9 percent of people aged 55 to 64 had no coverage in any month in the year, the comparable figure for those aged 18 to 24 was 14.5 percent (see Figure 4).

COVERAGE RATES BY REGION AND METROPOLITAN AREA

The Midwest had the highest private and one of the lowest government health insurance coverage rates.

During the 48-month period, the Northeast and the Midwest had the highest probability of continuous coverage at 73.2 percent and 73.4 percent, respectively.10 However, the private health insurance rates and government health insurance rates in these regions differed. People in the Midwest were the least likely to have continuous government health insurance and the most likely to have continuous private health insurance.11 On the other hand, people in the Northeast were the most likely to have continuous government health insurance.

The South and West had similar private health insurance rates (52.8 and 53.1, respectively) and

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7 People aged 65 or over have been omitted from this analysis as they generally have Medicare coverage (93.0 percent for the entire year in 1999); 98.6 percent of people aged 65 or over had health insurance coverage for the entire year in 1999.
8 The entire year coverage rates were not statistically different between people aged 45 to 54 and 55 to 64 in both 1996 and 1997; between people aged 17 or less and 45 to 54 in 1998; and between people aged 17 or less and 35 to 44 in 1999.
9 The zero-month coverage rates were not statistically different for people aged 17 or less, 45 to 54, and 55 to 64 in both 1996 and 1997; between people aged 17 or less and 45 to 54 in 1998; and between people aged 17 or less and 35 to 44 in 1999.
10 These rates are not statistically different.
11 Government health insurance rates in the Midwest and in the West were not statistically different.
government health insurance rates (13.6 and 12.9, respectively).

Their overall health insurance rates were also equal.

Their overall health insurance rates were also equal.

People in suburbs had the highest coverage rates among geographic areas.

People in suburbs reported the highest continuous health insurance coverage (72.6 percent) followed by people outside metropolitan areas (64.7 percent). People in central cities reported the lowest rate at 62.2 percent. In terms of private health insurance coverage rates, those in the suburbs reported the highest at 64.3 percent and those in central cities reported the lowest at 50.0 percent. Regarding government health insurance, 12.1 percent of the suburban population was

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12 Both comparisons are not statistically different.

13 In this report, “suburbs” refers to metropolitan areas outside central cities.
continuously covered by this source, the lowest among all areas of residence. People living outside metropolitan areas were the most likely to have continuous government health insurance at 16.1 percent.

**HEALTH INSURANCE RATES BY EDUCATION AND JOB MARKET STATUS**

As education level increased, so did the health insurance coverage rates.

People who had not completed high school were the most likely to be without coverage — 15.5 percent did not have health insurance for the entire 1999. The corresponding rates were lower for high school graduates (8.7 percent), those with some college but no degree (7.1 percent), and college graduates (3.0 percent). College (education) or aged 18 or over (work) have been included in the analysis.
Figure 7.
Number of Months Covered in a Year by the Level of Education: 1996 - 1999
(In percent. People aged 25 or over)

Less than high school

High school graduates

Some college, no degree

College graduates

Figure 8.
Number of Months Covered in a Year by Job Market Status: 1996 - 1999
(In percent. People aged 18 or over)

Full-time employed

<table>
<thead>
<tr>
<th>Year</th>
<th>0 months</th>
<th>1 to 6 months</th>
<th>7 to 11 months</th>
<th>12 months</th>
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<tr>
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<td>1998</td>
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<td>6.1</td>
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<tr>
<td>1999</td>
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<td>82.3</td>
<td>83.1</td>
<td>84.1</td>
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</table>

Part-time employed

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<th>7 to 11 months</th>
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<td>12.6</td>
<td>12.6</td>
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<tr>
<td>1997</td>
<td>8.0</td>
<td>7.7</td>
<td>6.9</td>
<td>6.5</td>
</tr>
<tr>
<td>1998</td>
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<td>9.0</td>
<td>8.5</td>
<td>7.4</td>
</tr>
<tr>
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<td>69.7</td>
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Unemployed

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<th>12 months</th>
</tr>
</thead>
<tbody>
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<td>31.5</td>
<td>30.4</td>
</tr>
<tr>
<td>1997</td>
<td>15.2</td>
<td>18.7</td>
<td>15.7</td>
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</tr>
<tr>
<td>1998</td>
<td>15.4</td>
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<td>12.8</td>
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<tr>
<td>1999</td>
<td>38.5</td>
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<td>40.1</td>
<td>38.4</td>
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</table>

Not in the labor force

<table>
<thead>
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<th>1 to 6 months</th>
<th>7 to 11 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7.5</td>
<td>6.7</td>
<td>6.9</td>
<td>7.4</td>
</tr>
<tr>
<td>1997</td>
<td>3.9</td>
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<tr>
<td>1998</td>
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<td>4.6</td>
<td>4.8</td>
<td>4.2</td>
</tr>
<tr>
<td>1999</td>
<td>83.7</td>
<td>85.0</td>
<td>84.6</td>
<td>85.0</td>
</tr>
</tbody>
</table>

graduates were the most likely to have health insurance coverage (see Figure 7).

People not in the labor force had the best chance of coverage.

Since the SIPP collects the job status information for each week, it is possible to isolate people who are not in the labor force from those who are in the labor force. Those in the labor force include employed and unemployed people, and those not in the labor force include the retired population and other nonworkers who are not looking for a job. People not in the labor force were the most likely to have continuous health insurance coverage — an estimated 83.7 percent in 1996 — mainly because this group includes people aged 65 and over, mostly covered by medicare.

Among those who are in the labor force, full-time employed people reported the highest entire year coverage rate (81.7 percent in 1996) followed by part-time employed (70.5 percent) and unemployed (38.5 percent) people.

An estimated 30.4 percent of unemployed people were without health insurance for the entire year in 1999, the highest rate among job market groups. The corresponding rates of zero months of coverage were 12.6 percent, 7.1 percent, and 7.4 percent for part-time employed, full-time employed, and those not in the labor force, respectively.\(^{15}\)

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\(^{15}\) The zero-month coverage rates for full-time employed and those not in the labor force were not statistically different in 1996, 1998, and 1999.

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Figure 9.
Percentage of Teenage People Without Health Insurance: 1996 - 1999

![Figure 9](source: U.S. Census Bureau, 1996 Survey of Income and Program Participation.)

HEALTH INSURANCE STATUS AS CHILDREN GROW UP

Children lose health insurance as they grow up.

Compared with people aged 17, the uninsured rates were successively higher for those aged 18, 19, and 20 in each year of the panel except 1997.\(^{16}\) When following each of these cohorts over time, their uninsured rates also rose each year they aged.\(^{17}\) Among 17-year-olds in 1996, 9.1 percent were without health insurance for the entire year, but the rate for the same cohort increased to 10.1 percent in 1997, 11.9 percent in 1998, and 15.4 percent in 1999.\(^{18}\)

\(^{16}\) The uninsured rates were not statistically different between people aged 18 and 19 in 1996 and 1998, between 17 and 18 in 1997, and between 19 and 20 in 1999; and, in 1997, people aged 19 were more likely than those aged 20 to be without health insurance. However, a comparison of 4-year averages shows a higher coverage rate at age 17 than at 18, 19, or 20.

\(^{17}\) The uninsured rates for the cohort of 18-year-olds in 1996 did not differ as they turned 19 in 1997 and 20 in 1998. Ages shown are as of the first month of the year.

\(^{18}\) Data tabulation by single year of age produces estimates based on small sample sizes. Thus, these estimates have relatively large standard errors. Readers should therefore use caution while interpreting estimates based on small sample sizes.

LOSING AND REGAINING HEALTH INSURANCE

About 1 in 3 people were without health insurance for at least 1 month.

While 67.9 percent of all people had health insurance coverage for the entire 48 months, the remaining 32.1 percent had at least 1 month of no coverage. An analysis of various groups indicates that unemployed people were the most likely and people aged 65 or over were the least likely to experience at least 1 month of no coverage. At 20.7 percent, currently married people were less likely to experience no coverage than most of all other groups — only two groups had lower uninsured rates: those aged 65 or over (2.3 percent) and those with a college degree (15.5 percent) (see Figure 10).\(^{19}\)

Median spell duration without health insurance was 5.6 months.

Some people regained health insurance sooner than others after losing it. While some people had only
Figure 10.
Percent With at Least 1 Month With No Health Insurance in the 48-Month Period: 1996 - 1999

Figure 11.
Median Number of Months Without Health Insurance During 1996 - 1999

one spell of no health insurance, others had more spells. The median spell duration without health insurance was 5.6 months for all people who experienced at least one spell of no health insurance, excluding spells underway during the first month of the SIPP survey (see Figure 11).  

The median spell of no health insurance was highest among people who did not complete high school (8.8 months), followed by unemployed people (8.7 months), Hispanics of any race (8.3 months), and previously married people (8.1 months). The shortest median spell was experienced by people aged 65 or over (4.7 months), followed by people aged 17 or less (4.9 months), people with a college degree (4.9 months), people in the Midwest (4.9 months), non-Hispanic Whites (5.0 months), and never married people (5.0 months).  

**SOURCE OF THE DATA**

The population represented (the population universe) in the 1996 Survey of Income and Program Participation (SIPP) is the civilian noninstitutionalized population of the United States. The SIPP is conducted at 4-month intervals. The data in this report refer to the period from January 1996 through December 1999. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized population in Census 2000).  

**ACCURACY OF THE ESTIMATES**

Statistics from surveys are subject to sampling and nonsampling error. All comparisons presented in this report have taken sampling error into account and are significant at the 90-percent confidence level. This means the 90-percent confidence interval for the difference between the estimates being compared does not include zero. Nonsampling errors in surveys may be attributed to a variety of sources, such as how the survey was designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately the answers are coded and classified. The Census Bureau employs quality control procedures throughout the production process including the overall design of surveys, the wording of questions, review of the work of interviewers and coders, and statistical review of reports to minimize these errors.  

The Survey of Income and Program Participation weighting procedure uses ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than the age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.  

For further information on the source of the data and accuracy of the estimates including standard errors and confidence intervals, go to www.sipp.census.gov/sipp/sourceac/s&s96_040501.pdf or contact Dennis Sissel of the Census Bureau Demographic Statistical Methods Division on the Internet at charles.d.sissel@census.gov  

**MORE INFORMATION**

The report is available on the Internet (www.census.gov); search for health insurance data by clicking on the “Subjects A-Z” link and selecting “health insurance data” under “H.” Additional tables presenting health insurance information from the SIPP are also available on the Internet site.  

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**USER COMMENTS**

The Census Bureau welcomes the comments and advice of users of its data and reports. If you have any suggestions or comments, please send an e-mail inquiry to: hhes-info@census.gov