## Health Insurance Coverage Status of Children Ages 0 to 17: 2006 to 2008

The Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC), a joint project between the U.S. Bureau of Labor Statistics and the U.S. Census Bureau, provides annual estimates of the number of people with and without health insurance by selected characteristics, including age. The Census Bureau recommends using 3 -year averages to compare estimates across states and 2 -year averages to evaluate change in state estimates over time.

North Dakota's 2006-08, 3-year average of uninsured children was 8.7 percent, with a 90 -percent confidence interval ranging from 3.4 percent to 14.0 percent (Table 1). Nationally, the 2006-08, 3 -year average uninsured rate for children was 10.9 percent. The 90 -percent confidence interval for the nation ranged from 10.8 percent to 11.0 percent.

Comparing states using 3 -year average uninsured rates for 2006-08 shows that Texas had the highest proportion of uninsured children in the nation ( 20.2 percent), while Massachusetts had the lowest ( 4.5 percent) (Table 1). However, when the 90 -percent confidence intervals are taken into account, there is less statistical difference among states. For example, to be 90 -percent confident in these estimates, the average for Texas could be as low as 18.2 percent or as high as 22.1 percent. Given this range, 11 other states have averages with confidence intervals overlapping that of Texas.

When examining the 2 -year averages for 2006-07 and 2007-08, six states and the nation overall had change that was statistically different from zero. California, Illinois, Massachusetts, North Carolina, Texas, and Utah showed a decrease in the proportion of uninsured youth (Table 1). Because the confidence intervals for the difference between these two time periods for every other state include zero, one cannot say with 90-percent confidence that there was any change between the 2006-07 and 2007-08 averages.

Although confidence intervals can be relatively large for states such as North Dakota that have a small population base, CPS statistics are one way of estimating the number of children at risk throughout the nation. For information on the methodology, source, and accuracy of these data, visit the following websites at http://www.census.gov/hhes/www/hlhhins/hlhhin08.html and http://www.census.gov/apsd/techdoc/cps/cps-main.html.


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Table 1. Percent of Children Ages 0 to 17 Without Health Insurance by State Using 2- and 3-Year Averages: 2006 to 2008
Notes: 'Details may not sum to totals because of rounding. *Statistically different from zero at the 90 -percent confidence level. Since the confidence interval for these estimates does not include zero, we can conclude with 90-percent confidence that the 2007-08 average is different from the 2006-07 average. For methodology, source, and accuracy of these data, visit http://www.census.gov/apsd/techdoc/cps/cps-main.html.
Source: U.S. Census Bureau, Current Population Survey, 2006 to 2008 Annual Social and Economic Supplements, http://www.census.gov/hhes/www/hlthins/hlthins.html

| State | 3 -year average: 2006-2008 |  | 2 -year average |  |  |  | Change in percentage points (2007-2008 average less 2006-2007 average) ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2006-2007 |  | 2007-2008 |  |  |  |
|  | Percent | $\begin{gathered} 90 \% \text { Confidence } \\ \text { Interval } \end{gathered}$ | Percent | $\begin{gathered} 90 \% \text { Confidence } \\ \text { Interval } \\ \hline \end{gathered}$ | Percent | $\begin{gathered} \hline 90 \% \text { Confidence } \\ \text { Interval } \\ \hline \end{gathered}$ | Percent | $\begin{gathered} 90 \% \text { Confidence } \\ \text { Interval } \\ \hline \end{gathered}$ |
| United States | 10.9 | 10.8 to 11.0 | 11.4 | 11.3 to 11.4 | 10.5 | 10.4 to 10.5 | *-0.9 | -1.0 to -0.8 |
| Alabama | 6.1 | 2.8 to 9.4 | 7.4 | 3.7 to 11.0 | 5.5 | 2.8 to 8.1 | -1.9 | -4.2 to 0.4 |
| Alaska | 12.1 | 5.7 to 18.4 | 10.9 | 5.5 to 16.2 | 13.0 | 6.7 to 19.2 | 2.1 | -2.0 to 6.2 |
| Arizona | 15.6 | 9.8 to 21.4 | 15.4 | 10.0 to 20.8 | 14.9 | 9.7 to 20.1 | -0.5 | -4.2 to 3.2 |
| Arkansas | 8.2 | 3.9 to 12.6 | 7.8 | 3.9 to 11.6 | 7.7 | 3.9 to 11.5 | -0.1 | -2.8 to 2.7 |
| California | 11.3 | 10.5 to 12.2 | 11.8 | 11.0 to 12.5 | 10.6 | 9.9 to 11.3 | *-1.2 | -1.7 to -0.6 |
| Colorado | 13.3 | 6.3 to 20.3 | 13.8 | 7.1 to 20.5 | 12.7 | 6.4 to 18.9 | -1.2 | -5.7 to 3.4 |
| Connecticut | 5.5 | 2.1 to 8.9 | 5.6 | 2.4 to 8.8 | 5.3 | 2.2 to 8.4 | -0.3 | -2.5 to 1.9 |
| Delaware | 9.4 | 4.0 to 14.8 | 9.6 | 4.4 to 14.8 | 8.3 | 3.8 to 12.8 | -1.3 | -4.7 to 2.1 |
| District of Columbia | 7.1 | 0.7 to 13.4 | 7.5 | 1.3 to 13.6 | 6.3 | 0.9 to 11.6 | -1.2 | -5.3 to 2.9 |
| Florida | 18.3 | 15.8 to 20.8 | 19.1 | 16.6 to 21.5 | 18.0 | 15.7 to 20.2 | -1.1 | -2.8 to 0.6 |
| Georgia | 11.6 | 8.9 to 14.3 | 12.2 | 9.5 to 14.8 | 11.0 | 8.7 to 13.3 | -1.2 | -2.9 to 0.6 |
| Hawaii | 5.5 | 2.4 to 8.6 | 5.6 | 2.6 to 8.5 | 5.1 | 2.4 to 7.8 | -0.5 | -2.5 to 1.6 |
| Idaho | 11.0 | 5.8 to 16.2 | 12.0 | 6.7 to 17.3 | 10.0 | 5.6 to 14.3 | -2.1 | -5.5 to 1.4 |
| Illinois | 7.5 | 6.0 to 9.0 | 8.1 | 6.6 to 9.5 | 6.5 | 5.2 to 7.8 | *-1.6 | -2.5 to -0.6 |
| Indiana | 6.3 | 3.9 to 8.7 | 6.5 | 4.2 to 8.8 | 5.6 | 3.6 to 7.6 | -0.9 | -2.4 to 0.6 |
| lowa | 5.5 | 2.1 to 8.9 | 5.6 | 2.3 to 8.8 | 5.1 | 2.1 to 8.0 | -0.5 | -2.7 to 1.7 |
| Kansas | 8.7 | 3.8 to 13.5 | 7.5 | 3.4 to 11.6 | 9.4 | 4.6 to 14.1 | 1.9 | -1.3 to 5.0 |
| Kentucky | 9.2 | 3.9 to 14.5 | 8.9 | 4.1 to 13.6 | 9.0 | 4.1 to 13.9 | 0.2 | -3.2 to 3.5 |
| Lovisiana | 13.2 | 6.5 to 20.0 | 14.2 | 7.5 to 20.9 | 11.9 | 6.2 to 17.6 | -2.3 | -6.7 to 2.1 |
| Maine | 5.7 | 1.2 to 10.3 | 5.8 | 1.5 to 10.0 | 5.4 | 1.3 to 9.5 | -0.4 | -3.3 to 2.6 |
| Maryland | 8.8 | 4.8 to 12.8 | 10.2 | 6.0 to 14.4 | 8.3 | 4.8 to 11.7 | -2.0 | -4.7 to 0.8 |
| Massachusetts | 4.5 | 2.6 to 6.3 | 5.0 | 3.1 to 6.9 | 3.2 | 1.9 to 4.5 | *-1.8 | -3.0 to -0.6 |
| Michigan | 5.2 | 3.9 to 6.5 | 5.5 | 4.1 to 6.8 | 5.5 | 4.2 to 6.7 | 0.0 | -0.9 to 0.9 |
| Minnesota | 7.1 | 3.7 to 10.5 | 7.4 | 4.1 to 10.6 | 6.5 | 3.5 to 9.5 | -0.9 | -3.1 to 1.4 |
| Mississippi | 14.8 | 7.8 to 21.8 | 15.5 | 8.8 to 22.2 | 12.8 | 6.9 to 18.6 | -2.8 | -7.2 to 1.7 |
| Missouri | 8.8 | 5.0 to 12.5 | 9.8 | 5.9 to 13.6 | 8.6 | 5.3 to 11.9 | -1.2 | -3.7 to 1.4 |
| Montana | 12.5 | 5.1 to 19.9 | 13.6 | 6.2 to 20.9 | 11.6 | 5.2 to 17.9 | -2.0 | -6.9 to 2.9 |
| Nebraska | 10.1 | 4.4 to 15.7 | 10.1 | 4.8 to 15.3 | 10.1 | 4.8 to 15.3 | 0.0 | -3.7 to 3.7 |
| Nevada | 17.4 | 8.7 to 26.1 | 16.6 | 8.6 to 24.5 | 16.7 | 8.9 to 24.5 | 0.2 | -5.4 to 5.7 |
| New Hampshire | 5.9 | 2.0 to 9.7 | 7.0 | 2.8 to 11.2 | 5.1 | 2.0 to 8.1 | -2.0 | -4.6 to 0.7 |
| New Jersey | 12.5 | 8.9 to 16.1 | 13.1 | 9.6 to 16.6 | 12.1 | 8.9 to 15.3 | -1.0 | -3.4 to 1.4 |
| New Mexico | 16.5 | 7.0 to 26.0 | 16.7 | 7.7 to 25.7 | 15.8 | 7.2 to 24.4 | -0.9 | -7.1 to 5.3 |
| New York | 8.1 | 6.9 to 9.4 | 8.7 | 7.5 to 9.8 | 8.0 | 6.9 to 9.1 | -0.7 | -1.5 to 0.2 |
| North Carolina | 11.8 | 8.7 to 14.9 | 13.1 | 9.8 to 16.3 | 10.7 | 8.1 to 13.3 | *-2.4 | -4.4 to -0.3 |
| North Dakota | 8.7 | 3.4 to 14.0 | 9.1 | 3.9 to 14.3 | 7.9 | 3.4 to 12.4 | -1.2 | -4.6 to 2.2 |
| Ohio | 6.7 | 5.1 to 8.3 | 7.2 | 5.7 to 8.6 | 7.2 | 5.6 to 8.8 | 0.0 | -1.0 to 1.1 |
| Oklahoma | 10.8 | 4.9 to 16.6 | 12.6 | 6.4 to 18.7 | 9.9 | 4.9 to 14.9 | -2.7 | -6.6 to 1.3 |
| Oregon | 11.8 | 4.4 to 19.1 | 11.9 | 5.0 to 18.7 | 11.1 | 4.5 to 17.7 | -0.8 | -5.5 to 4.0 |
| Pennsylvania | 7.1 | 5.5 to 8.7 | 7.4 | 5.8 to 8.9 | 7.1 | 5.6 to 8.5 | -0.3 | -1.3 to 0.7 |
| Rhode Island | 6.9 | 1.9 to 11.9 | 6.5 | 2.2 to 10.7 | 8.4 | 2.9 to 13.8 | 1.9 | -1.6 to 5.4 |
| South Carolina | 12.6 | 5.9 to 19.3 | 12.5 | 6.3 to 18.6 | 13.5 | 7.0 to 20.0 | 1.1 | -3.4 to 5.5 |
| South Dakota | 9.0 | 4.7 to 13.3 | 8.6 | 4.7 to 12.5 | 9.0 | 5.0 to 12.9 | 0.4 | -2.4 to 3.1 |
| Tennessee | 8.3 | 4.9 to 11.7 | 7.8 | 4.8 to 10.7 | 9.3 | 5.7 to 12.8 | 1.5 | -0.8 to 3.8 |
| Texas | 20.2 | 18.2 to 22.1 | 21.3 | 19.5 to 23.1 | 19.7 | 17.9 to 21.4 | *-1.7 | -2.9 to -0.4 |
| Utah | 11.6 | 7.6 to 15.7 | 12.7 | 8.6 to 16.8 | 10.0 | 6.7 to 13.2 | *-2.8 | -5.4 to -0.1 |
| Vermont | 7.1 | 1.5 to 12.6 | 8.7 | 2.5 to 14.9 | 6.6 | 1.9 to 11.3 | -2.1 | -6.0 to 1.8 |
| Virginia | 9.1 | 6.1 to 12.0 | 10.2 | 7.1 to 13.2 | 8.6 | 6.0 to 11.1 | -1.6 | -3.6 to 0.4 |
| Washington | 6.8 | 4.0 to 9.7 | 6.9 | 4.1 to 9.6 | 6.8 | 4.2 to 9.4 | 0.0 | -1.9 to 1.8 |
| West Virginia | 6.5 | 2.9 to 10.0 | 6.6 | 3.2 to 9.9 | 5.5 | 2.5 to 8.4 | -1.1 | -3.3 to 1.1 |
| Wisconsin | 5.5 | 2.8 to 8.2 | 5.4 | 2.9 to 7.8 | 5.8 | 3.2 to 8.4 | 0.5 | -1.3 to 2.2 |
| Wyoming | 8.9 | 3.0 to 14.7 | 8.9 | 3.4 to 14.4 | 9.2 | 3.7 to 14.7 | 0.3 | -3.6 to 4.2 |

Date of Release: October 20, 2009

## Uninsured Children in North Dakota Could Fill Stadium to Capacity

Current estimates indicate that the 2006-2008, 3-year average of uninsured children in North Dakota is 8.7 percent (approximately 13,000 children), which is roughly equivalent to the seating capacity for football games at the Alerus Center in Grand Forks.

This month's "Economic Brief," a monthly publication from the North Dakota State Data Center at North Dakota State University, focuses on those children ages 0 to 17 without health insurance in North Dakota. The Current Population Survey's (CPS) Annual Social and Economic Supplement (ASEC), a joint project between the U.S. Bureau of Labor Statistics and the U.S. Census Bureau, provides annual estimates of the number of people with and without health insurance by selected characteristics. The CPS ASEC is designed to collect statistically reliable estimates primarily at the national level.

Because state estimates are less reliable (due to relatively small sample sizes which can cause state estimates to fluctuate widely year-to-year), the Census Bureau recommends using three-year averages to compare estimates across states and two-year averages to evaluate changes in state estimates over time. Although confidence intervals around the estimates can be relatively large for states such as North Dakota, CPS statistics are one way of estimating the number of children at risk.

Three-year averages from the 2006-2008 CPS ASEC indicate that while the majority of North Dakota children have health insurance coverage, 8.7 percent of the state's children had no form of health insurance. Nationally, 10.9 percent of children were without health insurance coverage.

Comparisons of all states using three-year average uninsured rates for 2006-08 show that Texas had the highest proportion of uninsured children in the nation (20.2 percent), while Massachusetts had the lowest (4.5 percent).
"When examining the two-year averages between 2006-07 and 2007-08 for North Dakota, it initially appears that we reduced the proportion of uninsured children in our state by more than a percentage point," said Richard Rathge, Director of the State Data Center. "This may reflect our relatively strong economy in the western part of North Dakota due to energy development activity," said Rathge.
"However, because of small sample size, this amount of change is not statistically significant. This means that the difference in the two periods may be an artifact of the sample rather than a true representation of the state," said Rathge. In addition to the nation overall, only six states had a statistically significant change in the proportion of uninsured children. California, Illinois, Massachusetts, North Carolina, Texas, Utah, and the U.S. overall showed a decrease in the proportion of uninsured youth.

