



## Highlights from SHADAC's 6<sup>th</sup> Annual Current Population Survey (CPS) Conference Call

On August 27, 2008, the State Health Access Data Assistance Center (SHADAC) hosted a conference call featuring Charles T. Nelson, Assistant Division Chief for Income, Poverty and Health Statistics, Housing and Household Economic Statistics Division at the U.S. Census Bureau. Nelson discussed the recently issued findings from the Current Population Survey's Annual Social and Economic Supplement (CPS), published in the August 2008 report, [Income, Poverty and Health Insurance Coverage in the United States: 2007](#) by Carmen DeNavas-Walt, Bernadette D. Proctor, and Jessica C. Smith.

Sixty-four state health policy and data analysts representing 30 states, 3 federal agencies, and 5 research groups participated in the conference call.

### Major Findings

- The percent and number of people with health insurance coverage increased from 84.2 percent (249.8 million) in 2006 to 84.7 percent (253.4 million) in 2007. This represents a net gain of 3.6 million insured people. This is the first percentage increase in health insurance coverage since 2000.
- The percent and number of people without health insurance coverage decreased from 15.8 percent (47.0 million) in 2006 to 15.3 percent (45.7 million) in 2007.
- The percent and the number of children under 18 years of age without health insurance decreased from 11.7 percent (8.7 million) in 2006 to 11.0 percent (8.1 million) in 2007.

### By Type of Coverage

- The percent and number of people covered by private health insurance (employer-sponsored or direct purchase) decreased from 67.9 percent (201.7 million) in 2006 to 67.5 percent (202.0 million) in 2007.
- The percent and number of people covered by employer-sponsored insurance decreased from 59.7 percent (177.2 million) in 2006 to 59.3 percent (177.4 million) in 2007.
- The percent and number of people covered by government health insurance increased from 27.0 percent (80.3 million) in 2006 to 27.8 percent (83.0 million) in 2007.
- The percent and number of people covered by Medicaid or SCHIP increased from 12.9 percent (38.3 million) in 2006 to 13.2 percent (39.6 million) in 2007.

## By Economic Status

- The percent and the number of full-time workers without health insurance decreased from 17.9 percent (22.0 million) in 2006 to 17.0 percent (21.1 million) in 2007. The percent and the number of people living in households with less than \$25,000 of income without health insurance decreased from 13.9 percent (24.9 million) in 2006 to 13.5 percent (24.5 million) in 2007.

## By Region & States

- Among the [U.S. Census Regions](#), the Midwest and Northeast had the lowest uninsurance rate in 2007 (11.4 percent each), followed by the West (16.9 percent), and the South (18.4 percent). The rate of uninsurance declined significantly from 2006 to 2007 in the Northeast, West and South regions.
- Comparing across states using three-year average uninsurance rates for 2005–2007, states with the lowest rates of uninsurance include Hawaii (8.3 percent), Massachusetts (8.3 percent), Minnesota (8.5 percent), and Wisconsin (8.8 percent). States with the highest uninsurance rates include Texas (24.4 percent), New Mexico (21.9 percent), and Florida (20.5 percent).
- Comparing within states using two-year uninsurance rate averages (2004-2005 versus 2006-2007), states that had a significant decline in uninsurance include Wisconsin (1.2 percent decline), West Virginia (2.7 percent decrease), Connecticut (1.5 percent decline), Massachusetts (2.7 percent decrease), District of Columbia (2.2 percent decrease), and Indiana (2.1 percent decrease). Ten states had a significant increase in uninsurance, notably Louisiana (3.3 percent increase), Mississippi (3.0 percent increase), New Mexico (2.6 percent increase), and Nebraska (2.3 percent increase).

## Measurement Issues

*The Census Bureau has altered the way it tests for differences between years.* In previous reports the difference between two years was calculated by comparing estimates created from two-year averages in which both averages shared a common year. For example, the average from 2004-2005 was compared to the average from 2005-2006. This common year (2005 in this case) is referred to as an “overlapping year.”

In the current report, the difference between years was determined from a pair of two-year averages that do not have an overlapping year. For example, the average of 2004-2005 was compared to the average of 2006-2007. This new method creates a more independent and cleaner estimation of the difference that is not overly influenced by the overlap year. Data users should note that the new method alters the computation of the standard error of the difference.

The standard error estimation for this new calculation is described on the next page.

**Exhibit 1: Standard Error Estimation between Non-overlapping Two-year Estimates**

**Illustration 15**

Suppose you want to calculate the standard error of the difference between the 2004, 2005 and 2006, 2007 averages of the percentage of people in California without health insurance. Use the following information along with Formula (2) and Tables 5, 6, and 9 to get

	2004	2005	2006	2007
Percentage of people in CA without health insurance ( <i>p</i> )	18.0	18.8	18.8	18.2
Base ( <i>y</i> )	35,854,000	35,940,000	36,208,000	36,295,000
b parameter ( <i>b</i> )	2,652 <sup>1</sup>	2,652 <sup>1</sup>	2,652 <sup>1</sup>	2,652
California state factor	1.25	1.25	1.25	1.25
State b parameter ( <i>b<sub>state</sub></i> )	3,315	3,315	3,315	3,315
Standard error <sup>2</sup>	0.37	0.38	0.37	0.37

<sup>1</sup>These parameters are calculated by multiplying the year factors from Table 6 by the current parameter.

<sup>2</sup>See “Standard Errors of State Estimates” for instructions and illustrations on calculating state standard errors.

Use this information, Formulas (15), (16), and (17), and the appropriate correlation coefficient from Table 7 to get

Illustration 15				
	2004, 2005	2005, 2006	2006, 2007	avg(2004, 2005) - avg(2006, 2007)
Average percentage of people in CA without health insurance ( $\bar{x}$ )	18.4	-	18.5	0.1
Correlation coefficient ( <i>r</i> )	0.30	0.30	0.30	-
Standard error	0.30*	-	0.30*	0.40
90-percent confidence interval	17.9 to 18.9	-	18.0 to 19.0	-0.6 to 0.8

\*See “Standard Errors of Data for Combined Years” for instructions and illustrations on calculating these standard errors.

The standard error of the difference of the two 2-year averages is calculated as

$$s_{x_{1,2}-x_{3,4}} = \sqrt{0.30^2 + 0.30^2 - \frac{1}{2} \times 0.30 \times 0.38 \times 0.37} = 0.40$$

and the 90-percent confidence interval around the difference of the 2-year averages is calculated as  $0.1 \pm 1.645 \times 0.40$ . Since this interval does include zero, we cannot conclude with 90 percent confidence that the 2006-2007 average percentage of people in California without health insurance was higher than the 2004-2005 average percentage of people in California without health insurance.

Source: “Source of the Data and Accuracy of the Estimates for the 2008 Annual Social and Economic Supplement Microdata File” (page 26), available at: [http://www.census.gov/hhes/www/p60\\_235sa.pdf](http://www.census.gov/hhes/www/p60_235sa.pdf)

*The questions regarding SCHIP participation changed for the 2007 data.* In previous years families with children were only asked about SCHIP participation if the child was not reported to participate in Medicaid. In the 2007 questionnaire, all families with children were asked about SCHIP participation regardless of their reported Medicaid status.

This change resulted in an overall increase in the number of children reporting SCHIP enrollment, from 3.4 million in 2006 to 8.2 million in 2007. This will not have a noticeable effect on tables produced by Census because they already aggregated these two types of coverage into a simply a “yes” or “no” and they do not double-count the enrollment. However, this will affect micro-data users interested in SCHIP coverage.

Since children who are covered under SCHIP may be reported under the Medicaid question and the SCHIP question it is possible that they will be “double-counted”. However, the “double counting” issue has no impact on the “uninsured” numbers (and therefore does not impact the SCHIP funding formula which uses the CPS estimates of uninsured children). The SCHIP universe change was only for people who already report being covered by Medicaid. In previous years of the CPS this group did not get the SCHIP question. This year those people who report Medicaid also got the SCHIP question. Many of the people who had already reported Medicaid (over one-third) also reported SCHIP. This made the SCHIP reporting much larger than it was in previous years. Again, the only people impacted by the change were those who already reported Medicaid coverage. In general, SHADAC recommends that most researchers combine the two programs into a “Medicaid/SCHIP” category in their analyses. Such a variable would not be impacted by the change. For those who look only at SCHIP they will see a big gain (but this is generally not recommended by SHADAC nor was it recommended before the change). In general it is best to combine the two programs for analysis purposes.

Documentation of this change is in progress. SHADAC will continue to monitor this issue and report pertinent information for states as more information becomes available.

### Summary of Conference Call Questions and Answers

- **Q:** When will more information about small area estimates be available?  
**A:** The Census Bureau’s Small Area Health Insurance Estimates (SAHIE) page is at: <http://www.census.gov/hhes/www/sahie/index.html>  
Updated estimates are expected later in 2008. SHADAC will monitor this data release and host a public conference call with the SAHIE group when the new estimates are available.
- **Q:** Did the CPS ask about whether adults were covered under SCHIP?  
**A:** No. Only children were allowed to be reported as having coverage under SCHIP. Adults with SCHIP coverage are counted as having Medicaid. However, it is possible for an adult to say “SCHIP” in response the “other, please specify” or the “verification” question and to be coded as SCHIP in response to those items.
- **Q:** Now that overlapping years of data are not being used, what sorts of comparisons require two-year averages versus three-year averages?

**A:** The Census Bureau recommends that within-state trends be calculated using two-year averages and across-state comparisons be calculated using three-year averages. Table 8 of the report contains uninsurance estimates by state, using both two-year and three-year averages.

- **Q:** Is the decrease in the number of uninsured children a real decline or the result of different ways in which the SCHIP and Medicaid questions are asked?  
**A:** The Census Bureau thinks that the estimated decline in the children's uninsurance rate is a genuine reflection of the experience of children in 2007 and not a methodological artifact. The increase in health insurance coverage is fairly large, but comparable to gains in other years. In addition, the increase in coverage through means-tested insurance programs is consistent with the increase in enrollment data.

- **Q:** Where is SCHIP reported in Tables HI01-HI05?  
**A:** Those with SCHIP are included in the Medicaid totals. In these tables, Medicaid represents any state-administered means-tested public insurance program.

- **Q:** Is there an undercount of SCHIP cases similar to the undercount of Medicaid cases?  
**A:** There is limited information on whether an undercount exists for SCHIP estimates. SHADAC has conducted an undercount study that specifically looked at the Medicaid estimates. SCHIP was left out of the Medicaid undercount project conducted by SHADAC for a variety of reasons. The detailed reports on this project are available at: <http://www.census.gov/did/www/shadac/shadac.html>

SHADAC and the research team on this project are preparing the launch a new phase of the undercount project that will include SCHIP enrollees. SHADAC expects to report on the preliminary findings in the next six months.

- **Q:** Are there single year state-level estimates similar to the multi-year averages reported in Table 8?  
**A:** Using multi-year averages reduces the standard errors and the influence of outliers. The Census Bureau recommends that analysts always use multi-year averages. However, single year state-level estimates are available at: [http://pubdb3.census.gov/macro/032008/health/h05\\_000.htm](http://pubdb3.census.gov/macro/032008/health/h05_000.htm)

SHADAC will release these data in more user-friendly tables by mid-September. Notice will be sent to all call participants and posted at [www.shadac.org](http://www.shadac.org).

- **Q:** Could the decline in uninsurance be driven by a few states such as Massachusetts?  
**A:** This a great question that deserves further investigation.
- **Q:** Will the lack of an overlapping year change the way standard errors are calculated?  
**A:** Yes. Due to a change in years included there is a change to the covariance term (which represents overlap in the CPS sample from one year to the next) and a change in the way the standard error of the difference is calculated. SHADAC will distribute

training materials regarding this change. Further information about the standard error of the difference in the CPS can be obtained from Appendix G of the Technical Documentation to the Current Population Survey (essential pieces are excerpted on page 3 of this document). <http://www.census.gov/apsd/techdoc/cps/cpsmar08.pdf>

- **Q:** Are there number estimates using the 2-year averages or just percents, as reported in Table 8?  
**A:** SHADAC has constructed a table with state-level average numbers for 2004-2005 and 2006-2007, at the end of this document. A second table with age breakouts for 2006-2007 is also included (see Tables 1 and 2 below).
- **Q:** How are locally-funded insurance programs treated in the questionnaire?  
**A:** There is not a specific question addressing locally-funded health care programs. However, these programs would be included in a question that asks respondents if they are covered by any other insurance program not otherwise asked about in the survey. These data are available in the public-use file.

#### **Resources:**

- The link to the Medicaid undercount report released by the Census Bureau is: <http://www.census.gov/did/www/shadac/shadac.html>
- The CPS files containing the information needed to adjust the CPS data for the pre-2004 calendar year estimates (pre-2005 CPS data files) are available from the Census website (the 2005, 2006 and 2007 CPS microdata files that are available from the ferret web site are already reflect the change): <http://www.census.gov/hhes/www/hlthins/usernote/extracts/extracts.html>
- The Census Bureau microdata are available at: <http://www.bls.census.gov/ferretftp.htm>
- The CPS table creator is repaired and available at: [http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html)
- The SHADAC Issue Brief, "Medicaid Under-reporting in the Current Population Survey and One Approach for a Partial Correction," is available at: [http://www.shadac.umn.edu/img/assets/18528/CPSMedicaid\\_Adj\\_Oct2007.pdf](http://www.shadac.umn.edu/img/assets/18528/CPSMedicaid_Adj_Oct2007.pdf)
- An updated the Issue Brief prepared for the Robert Wood Johnson Foundation, "Comparing Federal Government Surveys that Count Uninsured People in America" is available at: [http://www.shadac.umn.edu/img/assets/30697/RWJF\\_CompareSurveysIB\\_Aug2008.pdf](http://www.shadac.umn.edu/img/assets/30697/RWJF_CompareSurveysIB_Aug2008.pdf)

**Table 1: 2-Year Average of the Number of Uninsured by State - All Persons, 2004-2005 and 2006-2007**

	2004-2005		2006-2007	
	Population	Observations	Population	Observations
Alabama	609,652	638	618,913	560
Alaska	110,235	931	115,824	961
Arizona	1,071,869	1151	1,237,322	1,192
Arkansas	461,939	770	485,849	757
California	6,598,937	7151	6,701,890	7,355
Colorado	745,308	1457	813,188	1,440
Connecticut	380,711	934	325,516	779
Delaware	106,123	798	100,560	758
District of Columbia	69,328	585	60,803	557
Florida	3,499,008	3564	3,738,230	3,565
Georgia	1,561,543	1452	1,660,156	1,643
Hawaii	107,196	570	103,025	564
Idaho	206,762	757	217,759	744
Illinois	1,685,087	1813	1,737,876	1,712
Indiana	839,702	898	732,256	699
Iowa	253,540	587	291,009	713
Kansas	281,884	655	340,373	718
Kentucky	526,699	708	604,929	799
Louisiana	715,848	659	848,463	712
Maine	125,510	643	118,935	605
Maryland	743,905	1109	769,007	1,276
Massachusetts	651,547	616	498,451	429
Michigan	1,070,776	1093	1,096,821	1,038
Minnesota	420,887	746	453,544	837
Mississippi	480,506	658	572,555	783
Missouri	669,149	815	750,218	815
Montana	155,199	685	153,006	636
Nebraska	182,658	664	224,689	764
Nevada	428,840	1204	468,808	1,244
New Hampshire	128,243	712	143,754	863
New Jersey	1,232,983	1329	1,344,323	1,426
New Mexico	385,235	970	441,351	987
New York	2,438,111	2286	2,590,364	2,333
North Carolina	1,282,045	1280	1,547,212	1,423
North Dakota	65,805	548	68,412	540
Ohio	1,240,445	1213	1,229,768	1,150
Oklahoma	644,016	921	646,363	950
Oregon	574,479	878	648,169	919
Pennsylvania	1,263,458	1259	1,206,115	1,155
Rhode Island	115,401	741	101,869	596
South Carolina	664,939	809	696,484	889
South Dakota	86,852	716	85,566	656
Tennessee	781,982	713	845,728	740
Texas	5,399,199	5553	5,832,884	6,046
Utah	366,211	943	391,392	831
Vermont	68,323	571	66,140	541
Virginia	968,773	1084	1,070,636	1,264
Washington	793,502	899	741,450	788
West Virginia	296,477	712	249,384	617
Wisconsin	530,106	694	465,761	615
Wyoming	69,153	681	72,811	660

Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement 2005-2008

**Table 2: 2-Year Average of the Percent and Number of Uninsured by State and Age, 2006-2007**

State	0-17 Years		0-64 Years	
	Percent	Number	Percent	Number
Alabama	7.3%	81,982	15.4%	607,559
Alaska	10.8%	19,868	18.5%	114,982
Arizona	15.4%	258,410	21.8%	1,220,821
Arkansas	7.8%	54,796	19.8%	483,465
California	11.8%	1,119,008	20.4%	6,593,156
Colorado	13.8%	166,696	18.4%	804,395
Connecticut	5.6%	45,929	10.7%	322,345
Delaware	9.6%	19,880	13.3%	99,543
Dist. of Columbia	7.4%	8,443	11.6%	59,040
Florida	19.1%	778,402	24.3%	3,683,924
Georgia	12.1%	301,601	19.2%	1,644,031
Hawaii	5.6%	16,508	9.2%	100,415
Idaho	12.0%	48,878	16.7%	216,622
Illinois	8.0%	255,982	15.2%	1,713,205
Indiana	6.5%	102,716	13.0%	722,376
Iowa	5.5%	39,136	11.4%	290,178
Kansas	7.5%	52,516	14.2%	335,413
Kentucky	8.9%	89,835	16.4%	597,950
Louisiana	14.2%	153,474	23.0%	841,626
Maine	5.8%	16,369	10.5%	118,156
Maryland	10.2%	141,390	15.4%	760,429
Massachusetts	5.0%	72,975	8.9%	489,479
Michigan	5.5%	132,424	12.4%	1,073,871
Minnesota	7.3%	91,679	9.9%	448,809
Mississippi	15.5%	120,076	22.0%	564,343
Missouri	9.8%	138,733	14.8%	744,026
Montana	13.5%	29,156	18.6%	151,818
Nebraska	10.1%	45,034	14.3%	222,775
Nevada	16.5%	108,153	20.7%	463,381
New Hampshire	7.0%	20,785	12.4%	142,425
New Jersey	13.1%	273,618	17.6%	1,319,125
New Mexico	16.7%	84,794	25.6%	436,466
New York	8.6%	387,308	15.4%	2,555,591
North Carolina	13.0%	289,431	19.4%	1,530,326
North Dakota	9.1%	13,207	12.6%	67,983
Ohio	7.1%	198,141	12.3%	1,223,843
Oklahoma	12.5%	114,851	21.0%	640,859
Oregon	11.9%	103,049	19.6%	641,977
Pennsylvania	7.4%	204,695	11.3%	1,182,688
Rhode Island	6.5%	15,384	10.9%	100,423
South Carolina	12.5%	132,069	18.5%	693,995
South Dakota	8.6%	16,794	12.8%	85,129
Tennessee	7.7%	114,276	16.1%	840,547
Texas	21.3%	1,413,509	27.4%	5,741,038
Utah	12.7%	103,354	16.3%	387,218
Vermont	8.7%	11,394	12.3%	66,037
Virginia	10.2%	185,969	15.6%	1,051,356
Washington	6.9%	105,482	12.8%	732,315
West Virginia	6.6%	25,892	15.9%	248,318
Wisconsin	5.3%	69,898	9.6%	463,737
Wyoming	8.9%	11,146	16.1%	72,566

Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement 2007-2008