## covering kids" ${ }^{\text {" }}$ \&families

## The State of Kids' Coverage

August 9, 2006

Prepared for the Robert Wood Johnson Foundation by the State Health Access Data Assistance Center, University of Minnesota - Using data from the U.S. Centers for Disease Control and Prevention's National Center for Health Statistics 2003 National Survey of Children's Health (NSCH) and the U.S. Census Bureau's 1998, 1999, 2004 and 2005 Current Population Survey (CPS).

## The State of Kids' Coverage

This report is being released to kick off Covering Kids \& Families' Back to School Campaign, a nationwide effort to enroll eligible children in public coverage programs during the back-to-school season. Covering Kids \& Families is a national program of the Robert Wood Johnson Foundation, and has benefited from the work of coalitions in all 50 states and the District of Columbia with members representing more than 5,500 organizations.

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The University of Minnesota's State Health Access Data Assistance Center (SHADAC) helps states monitor rates of health insurance coverage and understand factors associated with being uninsured. SHADAC provides targeted policy analysis and technical assistance to states that are conducting their own health insurance surveys and/or using data from national surveys. Information can be located at www.shadac.org.

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## The State of Kids' Coverage

The Robert Wood Johnson Foundation commissioned analyses of data on uninsured children by SHADAC. The resulting report uses data from the Centers for Disease Control and Prevention's National Center for Health Statistics 2003 National Survey of Children's Health (NSCH) and the U.S. Census Bureau's 1998, 1999, 2004 and 2005 Current Population Survey (CPS). ${ }^{1}$

## Summary

The research in this report is broken into three sections:

- The first is the number of uninsured children, publicly insured children and privately insured children in the U.S. and by state in 2003-2004, using data from the CPS. These data are compared to the number of uninsured children, publicly insured children and privately insured children in the U.S. and by state in 1997-1998. This comparison provides an opportunity to document coverage patterns before and after the implementation of the State Children's Health Insurance Program (SCHIP).
- The second section is the number of uninsured children in the U.S. in 2003-2004 by race and ethnicity using data from the CPS.
- The third is key findings from the 2003 NSCH that look at the consequences of being without health insurance for all or even a part of the year, compared to full-year insurance coverage.

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## The percent of privately insured children in the United States has declined.

Figure 1: Percentage Point Change in Health Insurance Coverage Status for Privately Insured Children (0-17 years) by State, 1997-98 to 2003-04


Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 1998, 1999, 2004 and 2005. Note: In the CPS, respondents are allowed to report more than one type of health insurance coverage. Those reporting both public and private coverage are considered to have public health insurance coverage. The addition of an insurance verification question to the CPS in 2000 results in more people reporting that they have health insurance coverage compared to earlier years. In order to make the data comparable over time, data from the 1998 and 1999 CPS were imputed to simulate the impact of having a verification question. The hotdeck imputation procedure was implemented in Stata SE 9.1

- Nationally, the proportion of children covered by private health insurance has declined 3.5 percentage points.
- Twenty states experienced a significant decline in private insurance coverage among children.
- The percent of children with private insurance has not increased significantly in any state over this time period.


## Public insurance coverage among children in the United States has increased.

Figure 2: Percentage Point Change in Health Insurance Coverage Status for Publicly Insured Children (0-17 years) by State, 1997-98 to 2003-04


Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 1998, 1999, 2004 and 2005. Note: In the CPS, respondents are allowed to report more than one type of health insurance coverage. Those reporting both public and private coverage are considered to have public health insurance coverage. The addition of an insurance verification question to the CPS in 2000 results in more people reporting that they have health insurance coverage compared to earlier years. In order to make the data comparable over time, data from the 1998 and 1999 CPS were imputed to simulate the impact of having a verification question. The hotdeck imputation procedure was implemented in Stata SE 9.1

- Nationally, public coverage among children has increased 6.4 percentage points.
- Thirty-four states have experienced a significant increase in public coverage among children.
- The percent of children with public health insurance has not decreased significantly in any state over this time period.


## The percent of uninsured children in the United States has declined.

Figure 3: Percentage Point Change in Health Insurance Coverage Status for Uninsured Children (0-17 years) by State, 1997-98 to 2003-04


Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 1998, 1999, 2004 and 2005. Note: In the CPS, respondents are allowed to report more than one type of health insurance coverage. Those reporting both public and private coverage are considered to have public health insurance coverage. The addition of an insurance verification question to the CPS in 2000 results in more people reporting that they have health insurance coverage compared to earlier years. In order to make the data comparable over time, data from the 1998 and 1999 CPS were imputed to simulate the impact of having a verification question. The hotdeck imputation procedure was implemented in Stata SE 9.1.

- Nationally, the proportion of uninsured children declined 2.9 percentage points.
- Thirteen states experienced a significant decline in uninsurance among children.
- The percent of uninsured children has not increased significantly in any state over this time period.



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"Percentage change" is the proportional change from 1997-98 to 2003-04 and represents the amount of change as a percent of the 1997-98 rate.

## Non-white children have higher rates of uninsurance than white children in the United States.

Figure 4: Children (0-17 years) Lacking Health Insurance Coverage by Race/Ethnicity, 1997-1998 and 2003-2004


Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 1998, 1999, 2004 and 2005. "Other" race includes American Indian, Eskimo, Aleut, Asian and Pacific Islander.

- All groups of non-white children have higher rates of uninsurance than white children in both time periods.
- Hispanic children have the highest rate of uninsurance, at 21 percent in 2003-2004.
- African-American children (13.4\%) have a higher incidence of uninsurance than white children (7.5\%) in 2003-2004.


## Hispanic children in the United States experienced the greatest decrease in uninsurance.

Figure 5: Children (0-17 years) Lacking Health Insurance Coverage by Race/Ethnicity, Change from 1997-1998 to 2003-2004


Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 2004 and 2005. "Other" race includes American Indian, Eskimo, Aleut, Asian and Pacific Islander.
~ "Percentage point change" is the difference between the 2003-04 percent and the 1997-98 percent and represents the actual change in percentage.
$\wedge$ "Percentage change" is the proportional change from 1997-98 to 2003-04 and represents the amount of change as a percent of the 1997-98 rate.

- Nationally, uninsurance rates have declined by 20.5 percent in this time period.
- All groups of non-white children have greater percentage point declines in uninsurance than white children.
- Hispanic and non-Hispanic, African-American children have the greatest percentage point decline in uninsurance.

|  | 1997-1998 |  | 2003-2004 |  | Percentage Point Change~ | Percentage Change^ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate | Count | Rate | Count |  |  |  |
| White | 9.6\% | 4,404,242 | 7.5\% | 3,238,180 | -2.2 | -22.4\% | $\dagger$ |
| African-American (non-Hispanic) | 18.2\% | 2,031,822 | 13.4\% | 1,576,146 | -4.8 | -26.3\% | $\dagger$ |
| Hispanic | 28.7\% | 3,193,854 | 21.0\% | 2,964,527 | -7.6 | -26.7\% | $\dagger$ |
| Other Race | 15.2\% | 574,274 | 12.1\% | 542,187 | -3.1 | -20.6\% | $\dagger$ |
| United States | 14.2\% | 10,204,191 | 11.3\% | 8,321,039 | -2.9 | -20.5\% | $\dagger$ |
| * Indicates statistical difference from white at $p<0.05$. |  |  |  |  |  |  |  |
| $\dagger$ Indicates statistical difference between time periods at $p<0.05$. |  |  |  |  |  |  |  |
| ~ "Percentage point change" is the difference between the 2003-04 percent and the 1997-98 percent and represents the actual change in percentage |  |  |  |  |  |  |  |
| ^ "Percentage change" is the proportional change from 1997-98 to 2003-04 and represents the amount of change as a percent of the 1997-98 rate. |  |  |  |  |  |  |  |
| Source: Compiled by the State Health Access Data Assistance Center (SHADAC), University of Minnesota School of Public Health, using data from the U.S. Census Bureau's Current Population Survey 2004 and 2005. "Other" race includes American Indian, Eskimo, Aleut, Asian and Pacific Islander. |  |  |  |  |  |  |  |

Table 4: Uninsurance Rates Among Children (0-17 years) by Race/Ethnicity, 2003-2004

## Children who are not insured all year in the United States are much less likely to receive any medical care.

Figure 6: Children (0-17 years) Not Receiving Any Medical Care by State, 2003


Source: State and Local Area Integrated Telephone Survey (SLAITS), National Survey of Children's Health (NSCH), 2003.

- Nationally, 25.6 percent of children who are uninsured for all or part of the year do not receive any medical care, compared to 12.3 percent of children who are insured all year.
- Children who are uninsured for all or part of the year are significantly less likely to receive any care in all but nine states.


|  |  | red All |  | Uninsure | f | ll or Pa | of Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate | Std. <br> Error | Number |  |  | Std. <br> Error | Number |
| Alabama | 11.5\% | 0.89\% | 109,739 | 24.1\% | * | 3.16\% | 36,249 |
| Alaska | 19.1\% | 1.23\% | 29,498 | 25.5\% |  | 3.07\% | 8,648 |
| Arizona | 14.8\% | 1.13\% | 171,303 | 38.1\% | * | 2.80\% | 134,259 |
| Arkansas | 17.4\% | 1.21\% | 98,948 | 29.9\% | * | 3.30\% | 33,121 |
| California | 18.3\% | 1.18\% | 1,407,849 | 30.4\% | * | 2.85\% | 512,925 |
| Colorado | 11.5\% | 1.02\% | 109,825 | 27.9\% | * | 3.06\% | 53,308 |
| Connecticut | 7.8\% | 0.77\% | 59,702 | 18.2\% | * | 3.65\% | 12,186 |
| Delaware | 9.2\% | 0.82\% | 16,296 | 20.4\% | * | 3.49\% | 4,305 |
| District of Columbia | 10.0\% | 0.96\% | 9,776 | 16.8\% |  | 3.63\% | 1,704 |
| Florida | 11.5\% | 0.97\% | 356,909 | 21.2\% | * | 2.52\% | 168,314 |
| Georgia | 14.1\% | 1.16\% | 271,564 | 28.7\% | * | 3.48\% | 105,345 |
| Hawaii | 14.0\% | 1.00\% | 37,718 | 21.3\% |  | 4.28\% | 5,790 |
| Idaho | 19.8\% | 1.20\% | 60,633 | 30.9\% | * | 2.90\% | 19,801 |
| Illinois | 12.0\% | 0.95\% | 342,048 | 24.7\% | * | 3.43\% | 92,522 |
| Indiana | 11.5\% | 1.02\% | 160,575 | 23.7\% | * | 3.43\% | 47,412 |
| Iowa | 12.1\% | 0.93\% | 74,048 | 17.9\% |  | 3.29\% | 14,302 |
| Kansas | 10.8\% | 0.91\% | 63,476 | 22.2\% | * | 2.97\% | 23,370 |
| Kentucky | 9.4\% | 0.87\% | 81,461 | 16.6\% | * | 2.74\% | 20,383 |
| Louisiana | 16.0\% | 1.09\% | 167,141 | 28.8\% | * | 3.45\% | 37,646 |
| Maine | 10.0\% | 0.88\% | 25,537 | 16.8\% | * | 3.17\% | 5,157 |
| Maryland | 7.9\% | 0.77\% | 99,561 | 16.0\% | * | 3.46\% | 18,666 |
| Massachusetts | 4.6\% | 0.57\% | 61,348 | 14.4\% | * | 3.31\% | 19,450 |
| Michigan | 12.1\% | 0.90\% | 272,930 | 19.3\% | * | 2.98\% | 53,078 |
| Minnesota | 14.8\% | 1.03\% | 162,663 | 22.3\% | * | 3.43\% | 31,541 |
| Mississippi | 18.9\% | 1.25\% | 121,729 | 25.8\% |  | 3.47\% | 29,454 |
| Missouri | 11.9\% | 0.85\% | 149,788 | 28.8\% | * | 4.20\% | 39,811 |
| Montana | 16.2\% | 1.07\% | 27,881 | 25.4\% | * | 2.81\% | 10,587 |
| Nebraska | 12.0\% | 0.92\% | 46,938 | 27.1\% | * | 4.27\% | 12,821 |
| Nevada | 17.4\% | 1.14\% | 76,221 | 37.5\% | * | 2.50\% | 53,308 |
| New Hampshire | 6.7\% | 0.72\% | 18,330 | 18.6\% | * | 3.43\% | 6,006 |
| New Jersey | 6.1\% | 0.65\% | 114,707 | 14.6\% | * | 2.99\% | 37,736 |
| New Mexico | 16.6\% | 1.28\% | 69,050 | 30.4\% | * | 3.28\% | 25,621 |
| New York | 8.0\% | 0.82\% | 316,186 | 13.5\% | * | 2.42\% | 71,638 |
| North Carolina | 12.0\% | 0.98\% | 213,814 | 25.8\% | * | 3.02\% | 78,302 |
| North Dakota | 20.1\% | 1.13\% | 25,794 | 26.3\% |  | 3.71\% | 4,657 |
| Ohio | 10.9\% | 0.89\% | 272,753 | 18.2\% | * | 3.23\% | 53,688 |
| Oklahoma | 13.7\% | 1.05\% | 95,225 | 32.0\% | * | 2.98\% | 57,246 |
| Oregon | 15.3\% | 1.03\% | 105,432 | 27.8\% | * | 2.62\% | 43,413 |
| Pennsylvania | 9.4\% | 0.83\% | 235,160 | 17.2\% | * | 3.17\% | 56,256 |
| Rhode Island | 6.6\% | 0.74\% | 14,379 | 14.0\% | * | 2.94\% | 3,457 |
| South Carolina | 13.8\% | 0.96\% | 123,159 | 25.9\% | * | 3.26\% | 32,146 |
| South Dakota | 16.5\% | 1.11\% | 28,152 | 21.3\% |  | 3.44\% | 4,651 |
| Tennessee | 11.3\% | 0.93\% | 137,991 | 19.6\% | * | 3.45\% | 33,169 |
| Texas | 11.3\% | 0.95\% | 528,859 | 32.0\% | * | 2.48\% | 493,518 |
| Utah | 16.2\% | 1.24\% | 100,958 | 28.4\% | * | 3.58\% | 32,569 |
| Vermont | 11.2\% | 0.88\% | 14,227 | 15.3\% |  | 3.69\% | 1,464 |
| Virginia | 10.0\% | 0.85\% | 157,070 | 27.5\% | * | 3.41\% | 59,732 |
| Washington | 12.7\% | 0.97\% | 166,617 | 25.8\% | * | 3.59\% | 45,094 |
| West Virginia | 9.2\% | 0.79\% | 31,221 | 17.8\% | * | 2.65\% | 8,951 |
| Wisconsin | 15.1\% | 1.08\% | 178,222 | 19.3\% |  | 3.41\% | 28,581 |
| Wyoming | 14.9\% | 0.98\% | 15,195 | 24.0\% | * | 2.82\% | 4,352 |
| United States | 12.3\% | 0.22\% | 7,635,605 | 25.6\% | * | 0.71\% | 2,787,711 |

## Uninsured children in the United States are less likely to have a "medical home."

Figure 7: Percent of Children (0-17 years) Without a Personal Doctor or Nurse, 2003


Source: State and Local Area Integrated Telephone Survey (SLAITS), National Survey of Children's Health (NSCH), 2003.

- Among children uninsured for all or part of the year, 35 percent do not have a personal doctor or nurse. This is significantly higher than among children insured all year, at 13.5 percent.
- Children who are uninsured for all or part of the year are significantly less likely to have a personal doctor or nurse in all but one state (Virginia).

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## Methods \& Resources

All analysis for this report was done using the Current Population Survey (CPS) and the National Center for Health Statistics (NCHS) 2003 National Survey of Children's Health (NSCH).

The CPS is a monthly survey that the Census Bureau conducts for the Bureau of Labor Statistics to provide data on labor force participation and unemployment. As the official source of government statistics on employment status and income, data on health insurance coverage is collected through the Annual Social and Economic Supplement (ASEC), which was initially added to the CPS in March of each year and was expanded to February through April beginning in 2001. The CPS ASEC is both nationally and state representative and has included approximately 78,000 households per year since 2000 (U.S. Census Bureau 2002; Davern et al. 2003). The reference period for insurance coverage in the ASEC is the previous calendar year. The 2003 ASEC response rate was 85 percent, and the data were collected through a combination of telephone and in-person modes using computer-assisted instruments (U.S. Census Bureau 2002). The 1998, 1999, 2004 and 2005 ASEC data are used in these analyses. All rates cited in this report are based on weighted estimates. The complex survey design is corrected for using StataSE version 9.1 software. The sample for our analysis is limited to children aged 0-17. Data for which there are 50 or less unweighted observations within a state are not reported, as such a small number of respondents can generate imprecise and misleading estimates. All reported differences are significant at $\mathrm{p}<0.05$.

The NSCH is a national survey that examines the physical and emotional health of children aged 0-17. The survey is administered by telephone to parents or guardians of children 17 years of age and younger in all states and the District of Columbia (Blumberg et al. 2005). This report only includes responses from the 50 states and the District of Columbia for children age 17 and younger. The NSCH survey employs the sample design of the National Immunization Survey, a random sample of telephone numbers within 78 Immunization Action Plan areas. All rates cited in this report are based on weighted estimates. The complex survey design is corrected for using StataSE version 9.1 software. The overall (median) response rate for the 2003 NSCH Survey was 55.3 percent (Blumberg et al. 2005). The sample size for our analysis is 102,353 observations (weighted count of $72,736,965$ ). Missing values were imputed using the hotdeck methodology in StataSE 9.1. Data for which there are 50 or less unweighted observations within a state are not reported, as such a small number of respondents can generate imprecise and misleading estimates. All reported differences are significant at $p<0.05$. Additional information about the NSCH is available at: http://www.cdc.gov/nchs/slaits.htm.

## Additional Information on Source Data

To select a single source of data for the state-by-state analyses conducted for the Back-to-School analysis, SHADAC considered the availability of the following:

- Consistent and timely data from all 50 states and Washington, DC
- Large annual sample sizes in all states
- Health insurance coverage measures
- Large state samples of minority group members
- Data on children

The two surveys that scored the highest on those criteria were the National Center of Health Statistics National Survey of Children's Health (NSCH) survey and the Census Bureau's Current Population Survey Annual Social and Economic Supplement (CPS ASEC). These surveys produce estimates of health insurance coverage for all 50 states and Washington, DC. Our choice of survey impacts our point estimates of the percent and number of children with particular characteristics such as health insurance coverage and race/ethnicity.

Survey data are known to undercount the number of people enrolled in public health insurance coverage (Call et al. 2002). The estimates of public health insurance coverage from the CPS ASEC are therefore lower than enrollment counts from administrative data for each of the states and the nation as a whole. Therefore the estimate of the number of children enrolled in public health insurance (e.g., Medicaid or SCHIP) from the CPS ASEC is likely an undercount. These data, however, are the only source of state by state information on the uninsured and those with private coverage. Also the evidence to date demonstrates little bias from the public health insurance program undercount in surveys on the estimate of the uninsured (Call et al, 2002). Furthermore, since the conclusions in this report are drawn from survey data in both periods they would both likely be biased downward in a similar fashion.

For more information regarding these tabulations, please contact the State Health Access Data Assistance Center:

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## Methods

The literature has explored the specific differences among surveys that measure health insurance coverage (Nelson et al. 2003; Congressional Budget Office 2003; Fronstin 2000; Lewis, Elwood and Czajka 1998; Farley-Short 2001). The NSCH and the CPS
ASEC surveys differ in:

- Sample design and sample frame
- Population coverage
- Survey non-response
- Mode of survey administration
- Operationalization of the concept of uninsurance
- Data processing procedures (e.g., editing and imputation)


## Sample selection, sample frame and population coverage:

NSCH and CPS ASEC use different sampling strategies - NSCH samples telephone numbers using random-digit dialing (RDD), and CPS ASEC samples households from an address-listing file (updated continuously by the Census Bureau). Thus, population coverage varies by survey as households without telephones are included in the CPS ASEC, but not in the NSCH. Also, people in phoneless households are more likely to be uninsured than those with telephones (Davern, Lepkowski et al. 2004).
Furthermore, population coverage problems in RDD-only surveys affect concepts other than health insurance, because people in households with telephones have different characteristics than those in households without telephones (Groves 1990; Keeter 1995).

## Mode of survey administration and survey non-response:

CPS ASEC is a mixed mode survey using both telephone and in-person interviews. In-person interviews are used for the first month a household and/or family is included in the sample, and primarily by telephone thereafter. The 2003 NSCH was a telephone-only survey, which tends to have lower response rates than mixed-mode government surveys like the CPS ASEC. The median response rate for the 2003 NSCH was 55.3 percent, compared to the CPS ASEC's 84 percent.

Furthermore, evidence indicates some differences in sample demographic representation in telephone-only surveys compared to mixed-mode or in-person only surveys (Groves 1990; Groves and Kahn 1979; Thornberry and Massey 1988). For example, telephone surveys tend to have a smaller percentage of people in lower income categories, and a smaller percentage of people with less than a high school education.

## Methods

## Operationalization of the concept of uninsurance:

The manner in which surveys operationalize the concept of uninsurance includes both the reference period (or the timeframe addressed by the survey questions) and the timing of data collection activities.

Reference period: CPS ASEC employs a list of specific possible types of health insurance coverage and elicits responses regarding coverage at any time during the previous calendar year.

Specifically, the CPS ASEC question stem asks the respondent if s/he or anyone else in the household had the following types of insurance coverage at any point during the last year:

- Employer-based
- Private insurance (self-purchased insurance)
- Medicaid
- Medicare
- State-specific health insurance programs (including SCHIP)
- CHAMPUS/VA/Military Health Care

Respondents are classified as uninsured if they do not answer "yes" to any of the above options. Beginning in 2000, if no coverage is reported, an uninsurance verification question is asked:

- I have recorded that (READ NAMES) were not covered by a health plan at any time in YEAR. Is that correct?
- (IF NO) Who should be marked as covered?
- (FOR EACH PERSON) What type of insurance was (NAME) covered by in YEAR? (READ LIST)


## Methods

The addition of the verification question results in more people reporting that they have health insurance coverage compared to earlier years of the CPS. In order to make the data comparable over time, data from the 1998 and 1999 CPS were manipulated as to impute what individuals would have said had they been asked the same verification question. The hotdeck procedure was implemented in Stata SE 9.1 to impute values to this question.

In the CPS respondents are allowed to report up to six different types of insurance from the list. If a respondent does not report any type of health insurance coverage, they are considered uninsured. The NSCH, by contrast, asks two general questions about the respondent's health insurance coverage at the point in time s/he is interviewed:

Does [CHILD] have any kind of health care coverage, including health insurance, prepaid plans such as HMOs or government plans such as Medicaid?
[Is that coverage,IIs [he/she] insured by] Medicaid or the State Children's Health Insurance Program, SCHIP? In this state, the program is sometimes called [FILL MEDICAID NAME, SCHIP NAME].

Despite the fact that the CPS ASEC health insurance items use the entire last year as the reference period for the health insurance coverage survey items, there is considerable debate about what these estimates actually measure. Officially, the Census Bureau refers to the 2005 CPS ASEC health insurance estimates as representing those people who lacked insurance for the entire calendar year 2004. Some researchers, however, feel that the estimates actually reflect a point-in-time estimate as of the interview (Congressional Budget Office 2003; Swartz 1994; Nelson and Short 1990). This assertion is based on comparing the CPS estimates derived from other surveys such as the National Health Interview Survey (NHIS) and the Medical Expenditure Panel Survey (MEPS).

## Methods

## Timing of data collection:

The NSCH was conducted from January 2003 - July 2004, while the CPS ASEC is conducted in February through April of each year (Blumberg et al. 2005; US Census Bureau 2002).

## Data processing procedures:

SHADAC imputed the NSCH missing data items, while the Census Bureau fully imputes and edits the CPS ASEC data file. Both SHADAC's and the Census Bureau's method of imputing data employ hotdeck methodology. However, the specific hotdeck methods used to impute the data differed significantly, and these differences can introduce bias into the estimates (Davern, Blewett et al. 2004; Little and Rubin 1987). Data editing procedures can introduce differences in survey estimates as well. For example, the CPS ASEC edits children to have Medicaid if one of the primary family members reports TANF income, regardless of whether Medicaid coverage was reported (Lewis et al. 1998).

## Comparing survey estimates from different surveys:

Though the CPS ASEC and other health insurance coverage surveys offer different point estimates of insurance coverage rates, the major findings from these surveys are similar. Namely, that there are many children in every state without health insurance, and minority populations are less like to be insured.

## Conclusions:

The NSCH, NHIS and CPS ASEC have advantages and disadvantages, depending on one's analysis design and criteria. The criteria used by the SHADAC researchers led them to choose the NSCH for the Back-to-School state-by-state analysis. Many states collect extremely high-quality data on health insurance coverage, and its relationship to the factors examined in the Back-to-School report. However, when the objective is comparing all the states to each other, the options are narrowed to either the CPS ASEC or the NSCH.

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[^0]:     obtain the 2003-2004 two-year average, and the 1998 and 1999 Current Population Surveys are used to obtain the 1997-1998 two-year average.

