

September 2009

An Introduction to the American Community Survey Health Insurance Coverage Estimates

Introduction

The American Community Survey (ACS) is a new source of data for health insurance coverage estimates, with the first year of data (for 2008 calendar year) available in September 2009. The ACS is conducted by the U.S. Census Bureau to provide communities with up-to-date information on key demographics and policy-relevant data. An important feature of the ACS is that it will include a large enough sample for state-level and sub-state health insurance coverage estimates. The ACS will provide alternate state-level insurance coverage estimates currently available only from the Current Population Survey's Annual Social and Economic Supplement (CPS), also conducted by the Census Bureau. Both surveys will produce annual releases of state-level health insurance coverage estimates in the fall of each year, reflecting the prior year's coverage rates.ⁱ

About the American Community Survey

The ACS is an ongoing survey designed by the Census Bureau to replace the decennial census "long form" that sampled one in six U.S. households every 10 years (roughly 16 million in the 2000 census). The long form will no longer be used in the decennial census. The ACS samples about 3 million households each year, collecting responses from nearly 2 million of these households. The ACS sample is 25-30 times larger than the sample size of the CPS.

The ACS contains everything that was on the decennial census long form (income, poverty, marital status, education, occupation, travel to work, and disability, among others), along with additional information such as health insurance coverage, marital history, food stamp participation and military service-related disability support.

The ACS collects sample in all 3,141 counties (or county equivalents) in the U.S. every year, and starting in 2006 has collected data from people living in institutionalized group quarters, which includes nursing homes, mental hospitals, and correctional facilities. These group quarters are not included in the CPS sample. The Census Bureau started testing the ACS in 1999 and became fully operational for residential addresses in 2005 and group quarters in 2006. A health insurance component was added in 2008.

The ACS is a mixed-mode survey with the modes applied sequentially. Each month, sampled households are first mailed a pre-notification letter and then the questionnaire. If the survey is not returned, the household is called for a phone interview. If the household cannot be reached by phone, a field representative is sent to a sample of non-responders to verify the status of the address and, if possible, conduct the interview in person. The response rate in 2006 was 97.5 percent.ⁱⁱ

The health insurance item, like many of the other items in the survey, is collected for each person in the household. The question is a limited range of options with no state-specific program names included.ⁱⁱⁱ The mail questionnaire health insurance item is shown in Exhibit 1.

Exhibit 1. ACS Mail Questionnaire Health Insurance Item

Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans? Mark "Yes" or "No" for EACH type of coverage in items a-h.

| <u>Yes</u> | <u>No</u> | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | a. Insurance through a current or former employer or union (of this person or another family member) |
| <input type="checkbox"/> | <input type="checkbox"/> | b. Insurance purchased directly from an insurance company (of this person or another family member) |
| <input type="checkbox"/> | <input type="checkbox"/> | c. Medicare, for people age 65 and over, or people with certain disabilities |
| <input type="checkbox"/> | <input type="checkbox"/> | d. Medicaid, Medical Assistance, or any kind of government - assistance plan for those with low incomes or a disability |
| <input type="checkbox"/> | <input type="checkbox"/> | e. TRICARE or other military health care |
| <input type="checkbox"/> | <input type="checkbox"/> | f. VA (including those who have ever enrolled for or used VA health care) |
| <input type="checkbox"/> | <input type="checkbox"/> | g. Indian Health Service |
| <input type="checkbox"/> | <input type="checkbox"/> | h. Any other type of health insurance or health coverage plan - specify _____ |

Source: U.S. Census Bureau, 2008 ACS Questionnaire - English. Available at: <http://www.census.gov/acs/www/SBasics/SQuest/SQuest1.htm>

Data Releases

Data from the ACS will be released in two major types of data products each year. The first are single-year and multi-year summary tables for specific geographic areas. The second release will include single-year and multi-year public use microdata sample (PUMS), which is a sample of all the ACS records. The tables and single-year PUMS will be released every year in September for the preceding calendar year. The multi-year PUMS will be released within two to three months after the single-year release.

PUMS will be made available on an annual basis for areas (counties and cities) with over 65,000 in population. Summary tables with three-year averages will be produced for smaller places (e.g., counties and cities) with at least 20,000 persons. Summary tables with five-year averages will be made available for most units of geography that the decennial census reports on including census tracts and possibly even block-groups in the U.S.

The single- and multi-year PUMS will be available for download from the Census Bureau and the University of Minnesota.^{iv} The 2007 ACS PUMS contained data for nearly 1.2 million households and more than 81,000 people in group quarters. Exhibit 2 shows household sample counts by state for the 2007 calendar year ACS, the ACS PUMS, and CPS. The lowest level of geographic detail

Exhibit 2. CPS and ACS Household Sample Counts by State, 2007 Calendar Year

| State | CPS 2007 | ACS 2007 | ACS PUMS 2007 | ACS PUMS Sample Increase as a Percent of CPS |
|----------------------|---------------|------------------|------------------|--|
| Alabama | 817 | 32,345 | 19,419 | 2,277% |
| Alaska | 1,030 | 5,908 | 2,274 | 121% |
| Arizona | 1,047 | 34,527 | 23,859 | 2,179% |
| Arkansas | 861 | 19,422 | 11,654 | 1,254% |
| California | 6,461 | 176,508 | 125,881 | 1,848% |
| Colorado | 1,591 | 30,257 | 19,572 | 1,130% |
| Connecticut | 1,610 | 20,762 | 13,671 | 749% |
| Delaware | 1,157 | 6,359 | 3,357 | 190% |
| District of Columbia | 1,214 | 3,601 | 2,629 | 117% |
| Florida | 3,368 | 101,953 | 77,483 | 2,201% |
| Georgia | 1,659 | 49,623 | 36,224 | 2,083% |
| Hawaii | 1,159 | 7,473 | 4,557 | 293% |
| Idaho | 839 | 10,263 | 5,762 | 587% |
| Illinois | 2,244 | 81,653 | 49,637 | 2,112% |
| Indiana | 1,139 | 42,801 | 26,065 | 2,188% |
| Iowa | 1,369 | 28,584 | 12,691 | 827% |
| Kansas | 1,088 | 22,737 | 11,362 | 944% |
| Kentucky | 1,066 | 28,175 | 17,597 | 1,551% |
| Louisiana | 664 | 27,905 | 16,640 | 2,406% |
| Maine | 1,349 | 15,550 | 5,313 | 294% |
| Maryland | 1,731 | 31,886 | 21,795 | 1,159% |
| Massachusetts | 1,095 | 37,141 | 25,481 | 2,227% |
| Michigan | 1,861 | 86,470 | 40,176 | 2,059% |
| Minnesota | 1,706 | 56,694 | 20,825 | 1,121% |
| Mississippi | 724 | 16,369 | 11,440 | 1,480% |
| Missouri | 1,241 | 43,942 | 24,300 | 1,858% |
| Montana | 789 | 9,271 | 3,734 | 373% |
| Nebraska | 1,099 | 17,694 | 7,265 | 561% |
| Nevada | 1,212 | 13,403 | 10,074 | 731% |
| New Hampshire | 1,465 | 10,062 | 5,108 | 249% |
| New Jersey | 1,567 | 49,594 | 32,624 | 1,982% |
| New Mexico | 880 | 12,588 | 7,490 | 751% |
| New York | 3,221 | 118,562 | 72,608 | 2,154% |
| North Carolina | 1,498 | 54,072 | 37,365 | 2,394% |
| North Dakota | 933 | 8,083 | 2,800 | 200% |
| Ohio | 2,106 | 78,439 | 47,565 | 2,159% |
| Oklahoma | 982 | 28,847 | 14,652 | 1,392% |
| Oregon | 1,007 | 23,489 | 15,209 | 1,410% |
| Pennsylvania | 2,184 | 102,116 | 49,965 | 2,188% |
| Rhode Island | 1,187 | 6,005 | 4,190 | 253% |
| South Carolina | 1,037 | 26,606 | 18,153 | 1,651% |
| South Dakota | 1,111 | 8,000 | 3,244 | 192% |
| Tennessee | 1,026 | 37,279 | 25,384 | 2,374% |
| Texas | 4,042 | 127,633 | 86,095 | 2,030% |
| Utah | 865 | 14,854 | 8,624 | 897% |
| Vermont | 1,049 | 7,984 | 2,522 | 140% |
| Virginia | 1,599 | 44,235 | 30,757 | 1,824% |
| Washington | 1,304 | 40,886 | 25,880 | 1,885% |
| West Virginia | 885 | 13,632 | 7,775 | 779% |
| Wisconsin | 1,389 | 61,524 | 23,336 | 1,580% |
| Wyoming | 950 | 3,893 | 2,189 | 130% |
| United States | 75,477 | 1,937,659 | 1,174,272 | 1,456% |

Source: U.S. Census Bureau Current Population Survey Annual Social and Economic Supplement, 2008, and American Community Survey, 2008.

Note: Sample counts do not include group quarters or vacant housing units.

available in these files is public use microdata area (PUMA), which are typically portions of metropolitan areas or compilations of contiguous counties in rural areas.^v

Health insurance coverage estimates for calendar year 2008 will be released in September 2009 for the United States, all 50 states, the District of Columbia, Puerto Rico, and every congressional district and all counties, places and metropolitan areas with populations of 65,000 or more. Estimates based on three-year averages will be released in 2011 for all geographic areas with populations of 20,000 to 64,999. Estimates for areas smaller than 20,000 people will be released in 2013 using five-year averages.

Issues with ACS Measurement

A concern among health services researchers is how to use ACS data in a way that complements existing data, in particular the CPS. The ACS should be a better tool for several applications, including evaluating state health reform initiatives, scoring legislative proposals, reporting for federal program allocation formulae, and monitoring local-level insurance coverage.

Issues of concern focus on adjusting to the new survey and methodology. The ACS will require some training among analysts to become familiar with the survey and data. Because it is a new survey the ACS does not have the base of knowledge established to understand the strengths and limitations of this resource. There will be a learning curve as analysts discover and share information.

Furthermore, comparisons between the ACS, CPS, other federal surveys, and state household surveys may create confusion or complications in communicating to policy makers.

There are also some methodology issues that may result in reporting errors. For example, the ACS health insurance question does not include a localized or comprehensive list of public program names, such as that used by the CPS. Starting in 2009, the phone and mail questionnaires include a list of state program names for interviewers to utilize as a prompt if the respondent needs assistance answering the question. Therefore, there is potential for respondents to errantly report their enrollment in public programs, particularly among mail respondents who do not have the opportunity to identify the program by the local name (for example, Medi-Cal in California or BadgerCare in Wisconsin). Exhibit 3 provides a comparison of key features of the CPS and ACS surveys.

Conclusions

The ACS is a great development for health services researchers, but as with all surveys, it will have its problems. In summary, the greatest advantage is that the ACS will be a regular source of health insurance coverage for local areas. The timely releases will fill a significant information void. The biggest limitation is format of the health insurance item is and the ability of respondents to recognize what type of health insurance coverage they have. Some error is always expected in survey research, and we have yet to see how it will compare to other surveys.

The development of the ACS does not imply that the CPS or other surveys will no longer be useful. The CPS has nearly 20 years of historical data and has been used as a basis for policy decisions for states and the federal government. Therefore, CPS estimates should not be abandoned, but should be used in conjunction with the new ACS. There will be a learning curve for analysts, but in time, the base of knowledge will grow and the survey limitations will be understood.

Exhibit 3. Comparison of Census Bureau's Current Population Survey (CPS) to the American Community Survey (ACS)

| Survey Features | CPS | ACS |
|---|--|--|
| Geography for which Estimates are Produced | | |
| Nation | Yes | Yes |
| States (and Washington, DC) | All | All |
| Metro Areas | Largest 250 in Population | All |
| Counties | Most Over 100,000 in Population | All |
| Cities and Places of 20,000 in Population | None | All |
| Congressional Districts | None | All |
| Census Tracts | None | All |
| Health Insurance Items | | |
| Reference Period for Health Insurance Coverage | Any Coverage During the Last Calendar Year | Coverage at the Point in Time of the Interview |
| Uninsured Measure | All Year Uninsured | Point in Time |
| Specific State Names for SCHIP and Medicaid | Yes | No |
| Specific State Program Names | Yes | No |
| Number of Basic Health Insurance Items on Survey | 8 | 1 |
| Information Collected for Everyone in a Household | Yes | Yes |
| Other Key Content | | |
| Demographics (e.g., age, sex, marital) | Yes | Yes |
| Income (including poverty level) | Yes | Yes |
| Public Program Participation (e.g. TANF/SSI) | Yes | Yes |
| Employment | Yes | Yes |
| Activities of Daily Living (ADL) | No | Yes |
| Self Reported Health Status | Yes | No |
| Housing Values (and Rent and Mortgage Payment) | No | Yes |
| Survey Methods | | |
| Annual Sample Size (Number of Households Sampled) | 100,000 | 3,000,000 |
| Population Studied | Non-Institutionalized (Nursing Homes Excluded) | U.S. Population (Including Nursing Homes) |
| Data Collected | February-April | All Year |
| Mode of Data Collection | Phone and Face-to-Face | Mail, Phone and Face-to-Face |
| Response Rate | 84% | 96% |
| Uninsured Estimates | | |
| 2006 Uninsured Estimate | 15.8 | 13.9* |
| 2006 Uninsured Estimate in Millions | 44.8 | 40.7 |

*Taken from 2006 ACS Content Test (for additional comparison the National Health Interview Survey's 2006 point-in-time estimate is 14.8%, or 43.3 million).

Source: Davern, M., B. Quinn, G. Kenney, and L.A. Blewett. 2009. "The American Community Survey and Health Insurance Coverage Estimates: Possibilities and Challenges for Health Policy Researchers." *Health Services Research*, 44(2): 593-605.

The ACS health insurance coverage estimates may vary from the CPS and other health insurance surveys, such as the National Health Interview Survey and Medical Expenditure Panel Survey.^{vi} SHADAC will monitor the estimates of these surveys and share this information with analysts by providing technical assistance, analysis and commentary. SHADAC is also developing a new online table generator tool that will provide key estimates for the CPS and ACS; look for this release in early fall of 2009.

For further information on the ACS, please see Davern, M., B.C. Quinn, G.M. Kenney, and L.A. Blewett. 2009. "The American Community Survey and Health Insurance Coverage Estimates: Possibilities and Challenges for Health Policy Researchers." *Health Service Research* 44(2 Pt 1): 593-605.

Suggested Citation

State Health Access Data Assistance Center. 2009. "An Introduction to the American Community Survey Health Insurance Coverage Estimates." Issue Brief #18. Minneapolis, MN: University of Minnesota.

Endnotes

ⁱ Blewett, L.B., M.B. Good, K.T. Call, and M. Davern. 2004. "Monitoring the Uninsured: A State Policy Perspective." *Journal of Health Politics, Policy and Law* 29(1): 107-45.

ⁱⁱ More information on the survey methodology is available at the ACS web site, <http://www.census.gov/acs/www/>.

ⁱⁱⁱ Starting in 2009 the phone and in-person versions of the questionnaire include state-specific program names as an interviewer prompt to use if respondents need assistance answering the question.

^{iv} American FactFinder's page for the American Community Survey is available at: http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuid=&_lang=en&_ts=; The Integrated Public Use Microdata Series (IPUMS) web site for harmonized CPS and ACS data downloads is available at <http://www.ipums.org/>.

^v For information on the number of PUMAs in your state visit the Census Bureau's PUMS web page, <http://www.census.gov/geo/www/maps/puma5pct.htm>

^{vi} State Health Access Data Assistance Center, 2008. "Comparing Federal Government Surveys that Count Uninsured People in America." Minneapolis, MN: University of Minnesota. Available at: http://www.shadac.org/files/RWJF_CompareSurveysIB_Aug2008.pdf

About SHADAC

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 uninsurance. 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. SHADAC's work is funded by the Robert Wood Johnson Foundation. Information is available at www.shadac.org.

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