## Small Area Health Insurance Estimates: 2016

Small Area Estimates

## Current Population Reports

By Lauren Bowers, Carolyn Gann, and Rachel Upton
P30-03
March 2018

## INTRODUCTION

This report provides a summary of the 2016 release of the U.S. Census Bureau's Small Area Health Insurance Estimates (SAHIE) program. The SAHIE program is partially funded by the Centers for Disease Control and Prevention's (CDC) Division of Cancer Prevention and Control (DCPC). The DCPC's National Breast and Cervical Cancer Early Detection Program and their stakeholders use SAHIE to determine the number of low-income uninsured women who may be eligible for their program at the state and county level.

SAHIE are the only source of data for single-year estimates of health insurance coverage status for all counties in the United States by selected economic and demographic characteristics (see text box "Small Area Health Insurance Estimates (SAHIE)").' The 1 -year American Community Survey (ACS) only provides detailed estimates of health insurance coverage for counties with populations of 65,000 or more. ${ }^{2}$ As a data enhancement to the ACS, the SAHIE modelbased estimates are a vital source of information for measuring year-to-year change in health insurance

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## HIGHLIGHTS

- Among the population under age 65, the estimated uninsured rate decreased between 2015 and 2016 for 629 counties, or 20.0 percent of all U.S counties.
- In 2016, for the population under age 65, the estimated uninsured rate was less than 10 percent in 1,213 counties, or 38.6 percent of all U.S. counties.
- In 2016, working-age adult males had a higher estimated uninsured rate than females in 1,662 counties, or 52.9 percent of all U.S. counties.
coverage at the county level. The data presented in this report show changes in health insurance coverage between 2015 and 2016, as well as changes in health insurance between 2013 and 2016. In addition, it presents results on the differences in coverage among selected demographic groups.


## OVERVIEW OF SAHIE

Each year, the SAHIE program releases timely, reliable estimates of health insurance coverage for both the insured and uninsured populations in the

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU<br>census.gov

Small Area Health Insurance Estimates (SAHIE) are modelbased enhancements of the American Community Survey (ACS) estimates, created by integrating additional information from administrative records, postcensal population estimates, and decennial census data. SAHIE methodology employs statistical modeling techniques to combine this supplemental information with survey data to produce estimates that are more reliable. SAHIE are broadly consistent with the direct ACS survey estimates, but with the help from other data sources, SAHIE program estimates are more precise than the ACS 1-year and 5-year survey estimates for most counties. Detailed ACS 1-year estimates are not available for most of these smaller geographic areas. A 2016 ACS map of unpublished counties is available at <www2.census.gov /programs-surveys/sahie /reference-maps/2016 /ref2-mp-2016.pdf>.

Additional detailed information on the various input data sources used in producing SAHIE is available at <www.census.gov/programs -surveys/sahie/technical -documentation/model-input -data.html>.

SAHIE are subject to several types of uncertainty. Additionally, details on the SAHIE methodology are available at <www.census.gov/programs -surveys/sahie/technical -documentation /methodology.html>.

## NEW IMPROVEMENTS TO SAHIE'S MEDICAID DATA

The SAHIE model utilizes Medicaid enrollment data, among other auxiliary data sources. Major policy changes affected Medicaid in 2014 under the Patient Protection and Affordable Care Act (ACA). For example, ACA provisions gave states the option to expand their Medicaid eligibility criteria. In order to capture any recent changes in the Medicaid enrollment data during this period, the SAHIE program incorporates more up-to-date Medicaid data, starting with the updated 2013 release.

In prior data releases, SAHIE used 2-year lagged Medicaid data from the Medicaid Statistical Information System (MSIS) provided by the Centers for Medicare and Medicaid Services (CMS). For example, the 2013 SAHIE model used 2011 Medicaid data. This 2-year lag is reflected in the 2013 SAHIE data, released in March 2015. In prior years, research supported the 2-year lag because Medicaid enrollment was relatively stable. However, with the implementation of the new ACA provisions in 2014, Medicaid enrollment changed substantially across states. As of December 31, 2016, 32 states, including the District of Columbia, changed their Medicaid enrollment criteria.

The current SAHIE process reduces the 2-year lag of the Medicaid data in the SAHIE model by using more timely sources. SAHIE's updated Medicaid data methods combine the 2-year lagged MSIS data with two additional Medicaid sources: the CMS Performance Indicator Project Medicaid and Children's Health Insurance Program (CHIP) data, and Kaiser Family Foundation's (KFF) Medicaid and CHIP data. SAHIE's updated data methods also utilized the most recent Internal Revenue Service (IRS) 1040 tax data and the American Community Survey estimates in order to approximate the latest county-level and demographic detail within the state-level Medicaid and CHIP totals. For more detailed information on recent changes to SAHIE's use of Medicaid data, please refer to <www.census.gov/programs-surveys/sahie/technical -documentation/model-input-data/medicaid.html>.

## UPDATED 2013 SAHIE DATA

Recent data method improvements, which were applied to the 2014, 2015, and 2016 SAHIE, were also used to update the prior 2013 SAHIE, for comparability purposes. The original 2013 SAHIE data, released in March 2015 (as mentioned above) and the updated 2013 SAHIE released in May 2016, are not comparable due to the changes in SAHIE's use of Medicaid data, as explained above. The updated 2013 SAHIE was released simultaneously with the 2014 SAHIE data in May 2016. Both datasets are available to download from the SAHIE Web site. Please refer to the links in the text box "Why Are Small Area Health Insurance Estimates Important?" for more information.

United States by state and county. ${ }^{3}$ Federal agencies and programs use SAHIE data to determine eligibility for public health services (see text box "Why Are Small Area Health Insurance Estimates Important?").

The SAHIE program produces data on health insurance coverage by five income-to-poverty ratio (IPR) categories, as well as for all incomes, for selected age groups, race/ethnicity (state level only), and sex. These IPR categories are defined as the ratio of family income to the federal poverty threshold (see text box "How Is Poverty Status Measured?" for more details). A lower IPR indicates a lower relative income. Living at or below 138 percent of poverty indicates people in families with total income less than or equal to 138 percent of the poverty threshold applicable to that family size and composition. The same reasoning holds for the additional IPRs. As a result, SAHIE data are used to analyze the differences in health insurance status by selected characteristics that reflect the federal poverty thresholds and meet the needs of local, state, and federal assistance programs. For instance, the IPR category 0-138 percent of poverty represents the population that may be eligible for Medicaid coverage if they reside in one of the states that expanded Medicaid eligibility under the Patient Protection and Affordable Care Act (ACA).

County-level SAHIE also allow data users to take a closer look at the distribution and concentration
${ }^{3}$ Please refer to the detailed definition of the insured population at <www.census .gov/programs-surveys/sahie/about/faq .html>.
of the uninsured population within states, regions, and metropolitan areas. ${ }^{4}$

Due to its unique focus on annual, comprehensive geographic coverage, SAHIE data are used to analyze geographic variation in health insurance coverage, as well as changes over time. The purpose of this report is to highlight several key aspects of such analyses. ${ }^{5}$

## HEALTH INSURANCE COVERAGE IN U.S. COUNTIES

In 2016, estimated county uninsured rates for the population under age 65 ranged from 2.1 percent to 33.5 percent. The median county uninsured rate was 10.4 percent. ${ }^{6}$ Figure 1 shows how uninsured rates varied among counties throughout the country. The lightest shade in the map displays counties with the lowest estimated uninsured rates (10.0 percent and below). In 2016, 38.6 percent of counties ( 1,213 counties) had an uninsured rate less than or equal to 10.0 percent. The majority of counties with low uninsured rates were concentrated in
${ }^{4}$ Reference maps on regions and metro/micro area status are available at <www.census.gov/programs-surveys /sahie/reference-maps/2016/ref1-mp-2016 .pdf>.
${ }^{5}$ All data shown are estimates containing uncertainty. Sources of uncertainty include model error, sampling error, and nonsampling error. Unless specifically noted in the text, apparent differences among the estimates may not be statistically significant. All direct comparisons cited in the text have been statistically tested at the 90 percent confidence level. For more information, please see <www.census.gov/programs-surveys /sahie/technical-documentation /source-and-accuracy.html>.
${ }^{6}$ The median estimated county uninsured rate differs from the national uninsured rate. The SAHIE program does not produce a national uninsured rate for the United States. SAHIE data are produced using survey estimates from the ACS. For 2016, the ACS estimates that 10.0 percent (+/- 0.1) of the U.S. population under age 65 was uninsured.
the Northeast and Midwest. ${ }^{7}$ In 2016, only 13.5 percent of counties (425 counties) had uninsured rates greater or equal to 15.0 percent. These counties were primarily located in the South. ${ }^{8}$

## FROM 2015 TO 2016, UNINSURED RATES DECREASED IN ONE OUT OF FIVE COUNTIES

Between 2015 and 2016, for the population under age 65, county uninsured rates decreased in 20.0 percent of U.S. counties (629 counties). Only eight counties experienced an increase. The remaining counties did not have a statistically significant change in their uninsured rates.

In 2014, many provisions of the ACA went into effect. From 2013 to 2016, the SAHIE program estimates that 98.1 percent of counties (3,077 counties) experienced a decrease in their uninsured rates for the population under age 65. ${ }^{9}$ However, the year-to-year changes in county uninsured rates varied. Figure 2 displays the number of counties where uninsured rates changed from 2013 to 2016. For the year-long period 2013 to 2014 as well as 2014 to 2015, over 70.0 percent of counties had a

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Figure 2.
Number of Counties With a Change in Their Estimated Uninsured Rates: 2013 to 2016 (Population Under Age 65)


2013 to 2016
1 county
Note: The data provided are indirect estimates produced by statistical model-based methods using sample survey, decennial census, and administrative data sources. The estimates contain error stemming from model error, sampling error, and nonsampling error. Source: U.S. Census Bureau, 2016 Small Area Health Insurance Estimates (SAHIE) Program.
decrease in their uninsured rate. ${ }^{10}$ Between 2015 and 2016, that amount dropped to 20.0 percent of counties ( 629 counties).

Given these trends, estimated uninsured rates have fallen below 10.0 percent in many counties. In 2013, only 130 counties, or 4.1 percent of all counties, had an estimated uninsured rate less than or equal to 10.0 percent. In 2016, the number of counties increased to 1,213 counties, or 38.6 percent of all U.S. counties.

From 2015 to 2016, changes in county-level estimated uninsured rates were more prevalent among the working-age adult population. For working-age adults (aged 18 to 64), the uninsured rate decreased in 513 counties, or 16.3 percent of all counties. In eight

[^2]counties there was an increase, while the remaining counties did not have a statistically significant change. For children under age 19, the uninsured rate decreased in 223 counties, or 7.1 percent of all U.S. counties. The uninsured rate increased in ten counties while the remaining counties did not have a statistically significant change.

One provision of the ACA was for states to have the option to expand Medicaid eligibility to lowincome working-age adults living at or below 138 percent of poverty. Figure 3 displays a two-panel map; the top map displays state Medicaid expansion status as of December 31, 2016. In 2016, two states expanded Medicaid eligibility-Montana and Louisiana-making a total of 32 expansion states. ${ }^{11}$ The bottom map displays the change in estimated uninsured rates that occurred between 2015 and 2016 for low-income working-age adults who may be eligible for
${ }^{11}$ Montana expanded their Medicaid program's eligibility on $1 / 1 / 2016$. Louisiana expanded on 7/1/2016.

Medicaid. During this period, 442 counties had a decrease in their estimated uninsured rate, or 14.1 percent of all U.S. counties. The uninsured rate increased in one county, while the remaining counties did not have a statistically significant change.

In states that expanded Medicaid eligibility, 23.4 percent of counties ( 350 out of 1,498 counties) had a decrease in their estimated uninsured rate compared with 5.6 percent ( 92 out of 1,643 counties) in states that did not expand. In Montana, uninsured rates for low-income working-age adults decreased in all 56 counties. In Louisiana, 37 of its 64 counties had a decrease in their estimated uninsured rate; the remaining counties did not have a statistically significant change.

## CHILDREN HAVE LOWER UNINSURED RATES THAN WORKING-AGE ADULTS

At the state level, SAHIE data show that in 2016, children under age 19 had a lower estimated uninsured rate than working-age


Source: Centers for Medicare and Medicaid Services (CMS), 2016.


[^3]adults, aged 18 to 64, in 49 states and the District of Columbia. Only in North Dakota was the difference not statistically significant. The difference between the two age groups is even found among U.S. counties, where children had lower uninsured rates than working-age adults in 96.0 percent of all counties. There were only two counties where the child population had a higher uninsured rate; both were in North Dakota. In the remaining 124 counties, the difference was not statistically significant (see Figure 4).

## WORKING-AGE MEN HAVE HIGHER UNINSURED RATES

In every state and the District of Columbia, the 2016 estimated uninsured rate for working-age men, aged 18 to 64 , was higher than for working-age women. Working-age men had a higher uninsured rate than women in 1,662 counties, or 52.9 percent of all U.S. counties; there were no statistically significant differences in the remaining counties (see Figure 5).

## STATE UNINSURED RATES VARIED BY RACE AND ETHNICITY

The SAHIE program provides detailed state health insurance coverage estimates by race and ethnicity. In 2016 for the population under age 65, non-Hispanic Whites had a lower estimated uninsured rate than both Hispanics and non-Hispanic Blacks in every state including the District of Columbia (see Figure 6 and Appendix 1). However, for the low-income population, or the population living at or below 138 percent of poverty, non-Hispanic Blacks had a lower estimated uninsured rate than non-Hispanic

## HOW IS POVERTY STATUS MEASURED?

Poverty status is determined by comparing total annual family before-tax income to a table of federal poverty thresholds that vary by family size, number of related children, and age of householder. If a family's income is less than the dollar value of the appropriate threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual's total income to their threshold. For more general information on poverty, please see <www.census.gov/topics/income-poverty/poverty.html>.

The table of federal poverty thresholds is updated annually by the U.S. Census Bureau to allow for changes in the cost of living using the Consumer Price Index (CPI-U). The thresholds do not vary geographically.

SAHIE's primary data input is the estimates of poverty from the American Community Survey, a monthly survey with people responding throughout the year. Since income is reported for the previous 12 months, the appropriate poverty threshold for each family is determined by multiplying the base-year poverty threshold by the average of the monthly CPI values for the 12 months preceding the survey. For more information, see "How the Census Bureau Measures Poverty" at <www.census.gov/topics/income-poverty /poverty/guidance/poverty-measures.html>.

To determine a family's or an individual's income-to-poverty ratio (IPR), take the family's or individual's before-tax income and divide by the appropriate federal poverty threshold. Then multiply by 100 to determine how far the family or individual earner is below or above poverty (a family with an IPR of 100 percent is living at the federal poverty threshold).

For example, take a family of four, two parents and two children, with a total annual income of $\$ 46,500$. In 2016, a family of this size had a federal poverty threshold of $\$ 24,339$. Their income-topoverty ratio is:

$$
\frac{\text { Total Annual Income }}{\text { Federal Poverty Threshold }}=\frac{\$ 46,500}{\$ 24,339}=1.911=191.1 \% \text { of poverty }
$$

The family of four is living just below 200 percent of poverty. This means their income is just below twice the determined federal poverty threshold.

SAHIE Income-to-Poverty Ratio (IPR) Categories
$0-138 \%, 0-200 \%, 0-250 \%, 0-400 \%, 138-400 \%$ of poverty, and all incomes

Figure 4.


Estimated Uninsured Rates for Working-Age Adults Aged 18 to 64 and Children Under Age 19: 2016

2016 Uninsured Rate for Adults Aged 18 to 64


Note: The data provided are indirect estimates produced by statistical model-based methods using sample survey, decennial census, and administrative data sources. The estimates contain error stemming from model error, sampling error, and nonsampling error. Source: U.S. Census Bureau, 2016 Small Area Health Insurance Estimates (SAHIE) Program.


Note: The data provided are indirect estimates produced by statistical model-based methods using sample survey, decennial census, and administrative data sources. The estimates contain error stemming from model error, sampling error, and nonsampling error. Source: U.S. Census Bureau, 2016 Small Area Health Insurance Estimates (SAHIE) Program

Figure 6.
Change in Estimated Uninsured Rate for the Population Under Age 65 by Race and Ethnicity: 2015 to 2016

*Medicaid expansion state as of December 31, 2016.
Source: U.S. Census Bureau, 2015 and 2016 Small Area Health Insurance Estimates (SAHIE).

Whites in 17 states. In one state, non-Hispanic Whites had a lower rate with the remaining states showing no statistical difference. Low-income Hispanics had a higher estimated uninsured rate than low-income non-Hispanic Whites in every state including the District of Columbia.

## STATE ESTIMATED UNINSURED RATES DECREASED ACROSS MOST STATES BY RACE AND ETHNICITY

Figure 6 also displays how estimated uninsured rates changed from 2015 to 2016 by race and ethnicity across states. Each line represents the magnitude of change for each group. Longer lines indicate a larger change in the estimated uninsured rate. From 2015 to 2016, for the population under age 65, estimated uninsured rates for non-Hispanic

Whites decreased in 35 states. Non-Hispanic Blacks saw decreases in 31 states. For both race groups, the remaining states did not have a statistically significant change. For the Hispanic population, 23 states had a decrease in their estimated uninsured rate. One state had an increase, while the remaining states did not have a statistically different uninsured rate (see Appendix 1 for statistically significant changes).

## ACKNOWLEDGMENTS

The Small Area Estimates Branch prepared this document with significant contributions from the Small Area Methods Branch and the Health and Disability Statistics Branch.

## CONTACT

For questions related to the contents of this document, including
estimates and methodology of the Small Area Health Insurance Estimates (SAHIE) program, contact the Small Area Estimates Branch at (301) 7633193 or <sehsd.sahie@census .gov>. For questions related to health insurance, income, and poverty definitions; the American Community Survey; or other Census Bureau surveys, contact the U.S. Census Bureau Call Center at 1-800-923-8282 (toll free) or visit <ask.census.gov> for further information.

## SUGGESTED CITATION

Bowers, L., C. Gann, and R. Upton, "Small Area Health Insurance Estimates: 2016," Current Population Reports, P30-03, U.S. Census Bureau, Washington, DC, 2018.

## WHY ARE SMALL AREA HEALTH INSURANCE ESTIMATES IMPORTANT?

The SAHIE program is partially funded by the Centers for Disease Control and Prevention's (CDC) Division of Cancer Prevention and Control. The CDC have a congressional mandate to provide screening services for breast and cervical cancer to low-income, uninsured, and underserved women through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). SAHIE data are used as an important consideration when planning and evaluating public policy on health insurance programs, the impact of common illnesses, or serious health conditions for states and the 3,141 counties in the United States. For more information about NBCCEDP, visit their Web page at <www.cdc.gov/cancer/nbccedp/>.

Additional information is available by data release year from 2000 to 2016 . For example, annual reports (for 2010-2016 data release years only), datasets, maps, and interactive data tables can be downloaded from the SAHIE Web page at <www.census.gov/programs-surveys/sahie/.html>.

The online SAHIE Interactive Data Tool provides detailed customized data tables of the insured and uninsured populations by selected year(s) from 2006-2016, geography (state and county), income-to-poverty ratio categories, selected age groups (under age 65, aged 18-64, aged 21-64, aged 40-64, aged 50-64, and under age 19), sex, and race/ethnicity (state level only). These custom tables can be downloaded to a PDF or CSV file. The interactive data tool can be accessed online at <www.census.gov/data-tools/demo/sahie/sahie .html>.

Starting in 2008, SAHIE began utilizing the American Community Survey data. For years prior to 2008, the SAHIE program estimates utilized the Annual Social and Economic Supplement to the Current Population Survey. More information is available at <www.census.gov/programs-surveys /sahie/technical-documentation/methodology /methodology-2008-2016.html>.

## Appendix 1.

Change in Estimated Uninsured Rate for the Population Under Age 65 by Race and Ethnicity: 2015 to 2016
(In percentage points. All data shown are estimates containing uncertainty. Sources of uncertainty include model error, sampling error, and nonsampling error. For more information see www.census.gov/programs-surveys/sahie/technical -documentation/source-and-accuracy.htm/)

| State | Medicad expansion? | Non-Hispanic White |  | Non-Hispanic Black |  | Hispanic |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2016 | Change | 2016 | Change | 2016 | Change |
| Alabama | no | 8.9 | *-1.0 | 12.4 | *-1.3 | 26.3 | -1.6 |
| Alaska | yes | 10.7 | -0.8 | 16.5 | -2.4 | 25.9 | 0.1 |
| Arizona | yes | 7.5 | -0.4 | 9.9 | -0.8 | 18.5 | *-1.4 |
| Arkansas | yes | 7.9 | *-1.4 | 8.9 | *-2.4 | 22.7 | *-2.5 |
| California. | yes | 4.7 | *-0.9 | 6.2 | *-0.9 | 12.9 | *-2.1 |
| Colorado. | yes | 5.8 | *-0.5 | 7.3 | *-1.3 | 17.3 | -0.8 |
| Connecticut | yes | 3.7 | *-0.5 | 6.2 | *-1.9 | 13.3 | *-2.8 |
| Delaware. | yes | 5.0 | -0.3 | 6.9 | -0.1 | 15.9 | -0.6 |
| District of Columbia | yes | 2.2 | -0.2 | 4.2 | -0.1 | 9.8 | -0.6 |
| Florida. | no | 12.1 | *-0.6 | 15.2 | *-2.1 | 21.8 | *-1.2 |
| Georgia | no | 11.8 | -0.3 | 14.5 | *-1.5 | 32.8 | -1.3 |
| Hawaii . | yes | 3.3 | -0.6 | 5.0 | -0.9 | 7.5 | -0.8 |
| Idaho | no | 9.7 | *-0.8 | 12.8 | -1.7 | 23.3 | -2.3 |
| Illinois. | yes | 4.7 | *-0.2 | 7.7 | *-1.3 | 16.5 | *-1.9 |
| Indiana. | yes | 8.4 | *-1.4 | 10.0 | *-3.0 | 20.4 | *-4.2 |
| Iowa. | yes | 4.1 | *-0.6 | 6.7 | *-2.5 | 14.3 | *-2.6 |
| Kansas | no | 7.7 | -0.1 | 12.8 | -0.6 | 21.3 | *-2.3 |
| Kentucky. | yes | 5.4 | *-0.9 | 6.6 | *-1.3 | 18.3 | *-2.6 |
| Louisiana. | yes | 9.6 | *-1.4 | 12.6 | *-3.5 | 29.4 | 0.9 |
| Maine | no | 9.7 | -0.2 | 11.9 | -0.9 | 22.8 | -0.6 |
| Maryland | yes | 4.3 | 0.1 | 6.7 | *-0.8 | 21.0 | -1.4 |
| Massachusetts. | yes | 2.3 | *-0.3 | 3.6 | -0.3 | 6.4 | -0.2 |
| Michigan . | yes | 5.6 | *-0.8 | 7.4 | *-1.1 | 14.0 | -0.9 |
| Minnesota. | yes | 3.6 | *-0.2 | 6.8 | -0.7 | 16.6 | -1.4 |
| Mississippi. | no | 12.1 | *-1.1 | 15.2 | -0.3 | 29.1 | *-3.7 |
| Missouri. | no | 9.5 | *-0.9 | 12.7 | *-1.4 | 22.9 | -1.0 |
| Montana | yes | 8.7 | *-3.5 | 13.7 | *-7.5 | 22.4 | *-6.7 |
| Nebraska. | no | 7.3 | 0.1 | 12.5 | 0.3 | 23.3 | 1.1 |
| Nevada | yes | 8.3 | *-0.7 | 10.5 | *-1.7 | 22.3 | -1.1 |
| New Hampshire. | yes | 6.7 | -0.5 | 9.4 | -1.1 | 17.2 | -1.5 |
| New Jersey. | yes | 4.8 | *-0.8 | 9.0 | *-1.4 | 20.7 | -0.5 |
| New Mexico | yes | 6.2 | *-2.3 | 9.4 | *-2.4 | 13.6 | *-1.9 |
| New York. | yes | 4.5 | *-0.7 | 7.4 | *-1.4 | 13.2 | *-2.3 |
| North Carolina. | no | 9.3 | *-0.5 | 12.6 | -0.7 | 29.1 | *-2.3 |
| North Dakota . | yes | 6.2 | *-1.0 | 12.2 | -0.9 | 20.6 | -1.7 |
| Ohio. | yes | 6.0 | *-1.0 | 7.8 | *-1.5 | 15.4 | *-1.7 |
| Oklahoma | no | 12.0 | -0.1 | 16.8 | -1.4 | 28.3 | -0.9 |
| Oregon | yes | 5.9 | *-0.8 | 7.1 | *-1.6 | 15.6 | *-1.7 |
| Pennsylvania | yes | 5.7 | *-0.7 | 7.9 | *-2.2 | 14.8 | -1.1 |
| Rhode Island | yes | 3.5 | *-1.1 | 5.4 | *-2.1 | 11.5 | *-3.5 |
| South Carolina. | no | 10.2 | *-0.8 | 12.4 | *-1.2 | 29.1 | -0.8 |
| South Dakota. | no | 8.0 | *-1.0 | 14.7 | *-3.4 | 24.8 | *-3.9 |
| Tennessee. | no | 8.9 | *-1.2 | 11.6 | *-2.2 | 28.3 | *-2.1 |
| Texas | no | 11.1 | -0.1 | 15.0 | *-1.2 | 27.9 | *-1.0 |
| Utah. | no | 7.1 | *-1.3 | 11.0 | *-3.1 | 22.6 | *-4.2 |
| Vermont | yes | 4.4 | 0.0 | 6.2 | 0.2 | 13.7 | 0.5 |
| Virginia | no | 7.3 | *-0.4 | 11.0 | *-1.2 | 24.5 | *1.6 |
| Washington | yes | 4.9 | *-0.6 | 7.0 | *-1.2 | 16.6 | *-1.9 |
| West Virginia | yes | 6.2 | *-0.8 | 8.4 | -1.0 | 17.0 | -0.3 |
| Wisconsin. | no | 5.0 | -0.2 | 8.2 | -0.8 | 17.0 | -1.0 |
| Wyoming. . . . . . . | no | 11.4 | 0.1 | 17.4 | -0.7 | 26.6 | -0.3 |

[^4]
[^0]:    ${ }^{1}$ There are 3,142 counties in the United States. SAHIE do not include Kalawao County, HI, due to insufficient data.
    ${ }^{2}$ Approximately 74.0 percent, or 2,322 , of U.S. counties do not have detailed 1-year estimates of health insurance coverage. However, the ACS 1-year county-level estimates cover about 85.0 percent of the total U.S. population. It should be noted that the ACS releases 1 -year supplemental tables of health insurance coverage estimates for geographic areas with populations greater than 20,000; however, these tables do not provide the same economic and demographic detail as SAHIE.

[^1]:    ${ }^{7}$ The proportion of counties with uninsured rates at or below 10.0 percent by region: Northeast-189 out of 217 counties, or 87.1 percent; Midwest-622 out of 1,055 counties, or 59.0 percent; South-260 out of 1,422 counties, or 18.3 percent; West-142 out of 447 counties, or 31.7 percent.
    ${ }^{8}$ Among the 425 counties with uninsured rates at or above 15.0 percent, 84.5 percent ( 359 counties) were located in the South. The remaining were located in the Midwest ( 28 counties) and West ( 38 counties). No counties in the Northeast fell into this category.
    ${ }^{9}$ When analyzing changes between 2013 and later years, four counties are not included. Bedford County, VA, and three counties in Alaska experienced changes in geographic boundaries in 2014. The data for these counties are not comparable to 2013.

[^2]:    ${ }^{10}$ Between 2013 and 2014, estimated uninsured rates for the population under age 65 decreased in 74.1 percent of counties ( 2,325 counties). Only one county had an increase. From 2014 to 2015, 71.3 percent ( 2,239 counties) experienced a rate decrease. In four counties, the uninsured rate increased. For both periods, the remaining counties had no statistically significant change.

[^3]:    Note: The data provided are indirect estimates produced by statistical model-based methods using sample survey, decennial census, and administrative data sources. The estimates contain error stemming from model error, sampling error, and nonsampling error. Source: U.S. Census Bureau, 2015 and 2016 Small Area Health Insurance Estimates (SAHIE) Program.

[^4]:    *Changes between the estimates are statistically different from zero at the 90 percent confidence level.
    'States that expanded Medicaid elgiblity as of December 31, 2016.
    Source: U.S. Census Bureau, 2016 Small Area Health Insurance Estimates (SAHIE).

