



# Comparing Federal Government Surveys That Count the Uninsured: 2020

## INTRODUCTION

Timely and accurate estimates of the number of people who do not have health insurance coverage are important for understanding trends in health insurance coverage and the impacts of policy changes that affect health insurance coverage. This brief provides an annual update to comparisons of uninsurance estimates from four federal surveys:

- The American Community Survey (ACS)
- The Current Population Survey (CPS)
- The Medical Expenditure Panel Survey – Household Component (MEPS-HC)
- The National Health Interview Survey (NHIS)

In this brief, we present current and historical national estimates of uninsurance along with the most recent available state-level estimates from these surveys. We also discuss the main reasons for variation in the estimates across the different surveys.

## National Estimates

Table 1 shows the most recent available estimates of uninsurance from each of the four surveys listed above. Some of the surveys produce estimates of the number of adults who were uninsured for an entire year, while others estimate uninsurance at a specific point in time (i.e., at the time of the survey), and some collect multiple measures of uninsurance.

**Table 1. 2019 National Uninsurance Estimates from Four Federal Surveys: Total Population**

Survey	Time Period	Uninsured for the Entire Year		Uninsured at a Specific Point in Time	
		Number (millions)	Percent of Population	Number (millions)	Percent of Population
ACS	2019	N/A	N/A	29.6	9.2
CPS	2019	26.1	8.0	N/A	N/A
MEPS	2018	21.2	6.5	N/A	N/A
NHIS	2019	20.0*	6.3*	33.2	10.3

\*Because the question used to create the measure of full-year uninsurance was modified in the 2019 NHIS, caution should be used when making comparisons between the 2019 estimate of this measure and estimates of this measure from prior years. See text box on page 3 for additional details about changes to the 2019 NHIS.

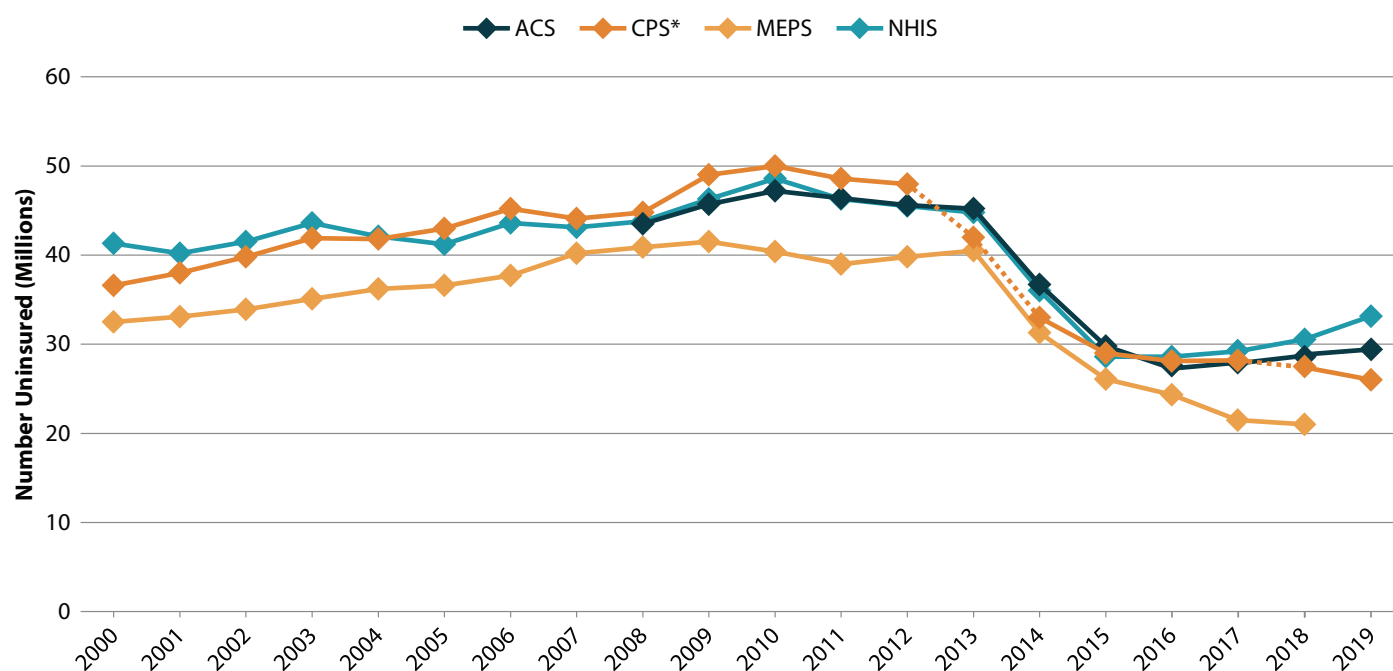
Sources: CPS estimates from U.S. Census Bureau, 2020, "Health Insurance Coverage in the United States: 2019"; ACS estimates for civilian noninstitutionalized population from U.S. Census Bureau, 2020, "Health Insurance Coverage in the United States: 2019"; NHIS estimates from Cohen, Cha, Martinez, & Terlizzi, 2020, "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2019" and from SHADAC analysis of the 2019 NHIS Public Use Files; MEPS estimates from [https://meps.ahrq.gov/mepstrends/hc\\_ins/](https://meps.ahrq.gov/mepstrends/hc_ins/).

<sup>1</sup> See Appendix for key information from each of these surveys, such as who is included in the survey, when and how the survey is conducted, response rates, and the availability of state-level insurance estimates.

## National Trends

The uninsured estimates from the four surveys have demonstrated similar national trends over time, as shown in Figure 1. See Appendix for information on historical changes to the CPS that affect trend analyses.

**Figure 1. Trend in National Number of Uninsured, 2000 to 2019: All Ages**  
 ACS and NHIS point-in-time estimates of the uninsured; CPS and MEPS estimates of the full-year uninsured



\* Dashed line “---” indicates a break in series.

Sources: CPS estimates from U.S. Census Bureau, 2020, “Health Insurance Coverage in the United States: 2019”; ACS estimates for civilian noninstitutionalized population from U.S. Census Bureau, 2020, “Health Insurance Coverage in the United States: 2019”; NHIS estimates from Cohen, Cha, Martinez, & Terlizzi, 2020, “Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2019”; MEPS estimates from [https://meps.ahrq.gov/mepstrends/hc\\_ins/](https://meps.ahrq.gov/mepstrends/hc_ins/).

## Due to COVID-19-Related Declines in 2020 CPS ASEC Response Rates, Use Caution When Examining 2018-2019 Coverage Changes in the CPS

Due to the COVID-19 pandemic, the U.S. Census Bureau modified its data collection methods for the 2020 CPS Annual Social and Economic Supplement (ASEC), from which estimates of health insurance coverage for 2019 are generated. Due to the suspension of in-person and computer-assisted telephone interview (CATI) data collection and a complete shift to telephone-based interviewing, the response rate for the ASEC in March 2020 was about 10 percentage points lower than in preceding months and during the same period in 2019, and response rates for households that were normally more likely to be interviewed in person were especially low.

At this point, it is not possible to disentangle real changes in health insurance coverage between 2018 and 2019 from changes due to pandemic-related data collection adaptations. Findings from Census Bureau analyses suggest that estimates of year-over-year changes in coverage from 2018 to 2019 using the CPS should be utilized with caution, and data users should bear in mind the context of the pandemic when interpreting these changes. For example, as shown in Figure 1, 2019 is the first instance in recent years where the CPS has shown a decrease in uninsurance and the ACS and NHIS have shown increases in uninsurance.<sup>1,2</sup>

### State-Level Estimates

The ACS and CPS are designed to produce uninsurance estimates for all 50 states and the District of Columbia. No state-level estimates of uninsurance are currently published from the NHIS or MEPS-HC.

*Until 2019, the NHIS produced partial state-level uninsurance estimates consistently. However, state estimates are no longer available due to reductions in the NHIS sample size.*

Table 2 presents the most recent state-level estimates of uninsurance from the ACS and CPS. As with the national estimates, the estimated level of uninsurance for states varies across the two surveys; however, general patterns are consistent, insofar as states with low uninsurance levels typically have low levels in both surveys, and states with high levels of uninsurance have high levels both surveys, etc.

**Table 2. 2019 State-Level Uninsured Rates from Three Federal Surveys: Total Population**

	ACS (Point-in-Time)	CPS (Full Year)		ACS (Point-in-Time)	CPS (Full Year)
<b>United States</b>	<b>9.2</b>	<b>8.0</b>	Missouri	10.0	8.5
Alabama	9.7	7.5	Montana	8.3	7.5
Alaska	12.2	12.9	Nebraska	8.3	8.3
Arizona	11.3	10.8	Nevada	11.4	9.9
Arkansas	9.1	6.9	New Hampshire	6.3	4.9
California	7.7	7.0	New Jersey	7.9	6.4
Colorado	8.0	8.6	New Mexico	10.0	8.9
Connecticut	5.9	2.8	New York	5.2	4.8
Delaware	6.6	5.1	North Carolina	11.3	11.1
Dist. of Columbia	3.5	2.9	North Dakota	6.9	5.7
Florida	13.2	13.3	Ohio	6.6	6.0
Georgia	13.4	11.9	Oklahoma	14.3	14.4
Hawaii	4.2	2.4	Oregon	7.2	5.2
Idaho	10.8	9.8	Pennsylvania	5.8	5.3
Illinois	7.4	5.5	Rhode Island	4.1	3.6
Indiana	8.7	5.4	South Carolina	10.8	7.2
Iowa	5.0	5.5	South Dakota	10.2	8.6
Kansas	9.2	7.9	Tennessee	10.1	7.3
Kentucky	6.4	6.4	Texas	18.4	15.7
Louisiana	8.9	7.7	Utah	9.7	9.5
Maine	8.0	4.9	Vermont	4.5	3.3
Maryland	6.0	5.4	Virginia	7.9	6.2
Massachusetts	3.0	2.6	Washington	6.6	6.2
Michigan	5.8	4.2	West Virginia	6.7	4.5
Minnesota	4.9	4.3	Wisconsin	5.7	4.7
Mississippi	13.0	12.0	Wyoming	12.3	8.7

Sources: ACS estimates for civilian noninstitutionalized population from U.S. Census Bureau, 2020, "Health Insurance Coverage in the United States: 2019"; CPS estimates from Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J.R., 2018, *Integrated Public Use Microdata Series, Current Population Survey: Version 6.0* [IPUMS dataset]. Accessed September 29, 2020. Available at <https://doi.org/10.18128/D030.V6.0>.

## Factors Contributing to Differences in Survey Estimates

There are many reasons why health insurance estimates vary across surveys. The surveys are designed to fulfill different goals, and they use different questions, statistical designs, and data collection and processing methods. Each of these factors likely contributes to differences in uninsurance estimates. The following section articulates specific differences between the surveys that are included in this brief.

### *Conceptual differences in measures of uninsurance*

As noted earlier, some surveys collect information about whether a person lacked health insurance coverage for a full year, while others collect information on insurance status at a particular point in time, and some collect multiple measures.

### *Reference period*

Differences in the time period for which coverage is being reported contribute to differences in the survey estimates. Differences in the length of time for which respondents are being asked to recall their insurance coverage status can also result in differences in measurement error across the surveys.<sup>3,4,5,6,7,8</sup>

The CPS Annual Social and Economic Supplement (CPS ASEC), conducted in February through April each year, has historically asked respondents about their health insurance coverage during the entire previous calendar year, with respondents being asked to report their coverage for a time period as long as 16 months prior to the interview. For their measures of coverage during the prior year, NHIS and MEPS have shorter recall periods than the CPS. The ACS collects information about current coverage only.

### *Differences in survey questions*

Differences in the ways that health insurance questions are asked can also lead to differences in uninsurance estimates. For example, when the Census Bureau added a verification question to the CPS in 2000 that asked people who did not report any coverage if they were in fact uninsured for all of 1999, the estimated number of people without health insurance declined by 8 percent, from 42.6 million to 39.3 million.<sup>9</sup> The NHIS and MEPS also verify insurance status for people who do not report any of the specific types of coverage that the survey asks about, but the ACS does not.

Another difference in survey questions that can lead to different estimates across surveys is the fact that the CPS, NHIS, and MEPS use state-specific names for Medicaid and Children's Health Insurance Program (CHIP) programs while the ACS does not, instead referring to these programs as Medicaid, Medical Assistance, or any kind of government-assistance program for those with low incomes or a disability.

### *Missing data and imputation*

The CPS and ACS surveys have processes in place to manage missing data and impute missing values. In the CPS supplement that includes the health insurance questions, about 39 percent of households did not answer any questions in the 2020 survey, and this nonresponse was corrected by the Census Bureau using survey weights.<sup>10</sup> Similarly, in the 2019 ACS about 16 percent of responses had one or more of the health insurance items missing; these missing data were imputed by the Census Bureau.<sup>11</sup> In contrast, the NHIS and MEPS impute little or no health insurance coverage information because the data for these two surveys are much more complete than either the CPS or ACS data.

### *Deciding Which Survey Estimates to Use*

Health policy analysts must decide which estimates to use among the multiple options available. No single survey provides the "best" estimates overall; rather, the most appropriate estimates will depend on the specific policy or research question being examined. The timeliness of the estimates, the geographies for which estimates are available, and the demographic or socioeconomic characteristics that are included in the estimates—along with the other factors described above—are among key considerations when choosing which estimates to use. For example, those interested in a "first look" at new health insurance coverage estimates will want to use the NHIS, since the NHIS estimates are released before the ACS and CPS estimates. If, on the other hand, sub-state estimates are of interest, the ACS will be the best source due to its large sample size, which allows for sub-state analyses. Every research question will require a consideration of survey characteristics in relation to analytic requirements.

## CONCLUSION

Federal surveys are essential resources for estimating the number of uninsured. Each survey provides a unique view of the problem of uninsurance, and together the surveys provide a wealth of information about how uninsurance varies by population characteristics and how it is associated with differences in access to and use of health care services and with health status.

## Suggested Citation

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## About SHADAC

SHADAC is a multidisciplinary health policy research center with a focus on state policy. For over 15 years, SHADAC has produced rigorous, policy-driven analyses, translating complex research findings into actionable information that is accessible to a broad audience. SHADAC faculty and staff are nationally recognized experts on collecting and applying health policy data to inform and evaluate policy decisions, with expertise in both federal and state survey data sources. We provide unbiased technical assistance and in-depth analysis to states and other organizations and collaborate with a wide range of partners including foundations, state and federal agencies, academic institutions, other research organizations, and nonprofits. SHADAC is affiliated with the University of Minnesota, School of Public Health. Learn more at [www.shadac.org](http://www.shadac.org) or contact us at [shadac@umn.edu](mailto:shadac@umn.edu).

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## References

- 1 Rothbaum, J. (2020, September 15). How Does the Pandemic Affect Survey Response: Using Administrative Data to Evaluate Nonresponse in the Current Population Survey annual Social and Economic Supplement [Blog post]. *U.S. Census Bureau Research Matters*. Retrieved from <https://www.census.gov/newsroom/blogs/research-matters/2020/09/pandemic-affect-survey-response.html>
- 2 Berchick, E.R., Mykyta, L., Stern, S.M. (2020). *The Influence of COVID-19-Related Data Collection Changes on Measuring Health Insurance Coverage in the 2020 CPS ASEC* [SEHSD Working Paper 2020-13]. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehswp2020-13.pdf>
- 3 Boudreaux, M., Noon, J.M., Fried, B., & Pascale, J. (2019, October 10). Medicaid expansion and the Medicaid undercount in the American Community Survey. *Health Services Research*, 54(6), 1263-1272. doi: 10.1111/1475-6773.13213
- 4 Noon, J.M., Fernandez, L.E., & Porter, S.R. (2019). Response error and the Medicaid undercount in the Current Population Survey. *Health Services Research*, 54(1), 34-43. doi: 10.1111/1475-6773.13058
- 5 Pascale, J., Fertig, A., & Call, K. (2019). Validation of two federal health insurance survey modules after Affordable Care Act implementation. *Journal of Official Statistics*, 35(2), 409-460. doi: 10.2478/jos-2019-0019
- 6 Sudman, S., Bradburn, N. & Schwarz, S. (1996). *Thinking about answers: The application of cognitive processes to survey methodology*. San Francisco, C.A.: Jossey-Bass.
- 7 Bhandari, S. (2004). People with health insurance: A comparison of estimates from two surveys [SIPP-WP-243]. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2004/demo/SEHSD-2004-02.pdf>
- 8 Lewis, K., Elwood, M.R., & Czajka, J. (1998). Counting the uninsured: A review of the literature [Occasional Paper-8]. Retrieved from <https://www.urban.org/sites/default/files/publication/70636/308032-Counting-the-Uninsured.PDF>
- 9 Nelson, C.T. & Mills, R.J. (2001). *The March CPS health insurance verification question and its effect on estimates of the uninsured*. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2001/demo/cps-asec-health-insurance-verification-question.pdf>
- 10 U.S. Census Bureau. (2020). *Current Population Survey: 2020 Annual Social and Economic (ASEC) Supplement*. Retrieved from <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar20.pdf>
- 11 U.S. Census Bureau. (2019). American Community Survey 1-Year Estimates, Table B992701: Allocation of Health Insurance Coverage [Data set]. Accessed September 29, 2020. Available at <https://data.census.gov/cedsci/table?q=ACSDT1Y2019.B992701&tid=ACSDT1Y2019.B992701>

## APPENDIX

**Table A1. Comparison of Federal Surveys Used to Estimate Uninsurance**

	ACS	CPS	MEPS-HC	NHIS
Sponsor(s)	Census Bureau	Bureau of Labor Statistics, U.S. Dept. of Labor (conducted by Census Bureau)	Agency for Healthcare Research & Quality (conducted by Census Bureau)	National Center for Health Statistics, Centers for Disease Control and Prevention
Primary Focus	General household survey; replaced decennial census long form	Labor force participation and unemployment	Health care access, utilization, and cost	Population health
Target Population	Entire population	Civilian non- institutionalized population	Civilian non- institutionalized population	Civilian non- institutionalized population
Sample Frame	Address-based (National Master Address File)	Address-based (Census 2010 sampling frame updated with new construction)	NHIS respondents	Commercial address list
Data Collection Mode	Mail; in-person; phone; internet	In-person; phone	In-person	In-person
Type of Uninsurance Measures	Point-in-time	All of prior calendar year: point-in-time (added in 2014)	Point-in-time; all of prior year; if uninsured, length of time uninsured; uninsured at some point in the past year	Point-in-time; all of prior year; if uninsured, length of time uninsured; uninsured at some point in the past year
Health Insurance Coverage: Verification Question for Uninsured	No	Yes	Yes	Yes
State-Specific Names Included for Medicaid/CHIP	No	Yes	Yes	Yes
Response Rate	86.0% (2019)	61.1% (2019)	46.8% (2018)	61.1% (2019)
Survey Period	Monthly	February through April	Panel over two calendar years	Continuous
State Health Insurance Estimates	50 states and D.C.	50 states and D.C.	Not published	Not published
Years Available	2008 - 2019	1987 - 2019 (and limited point-in-time estimates for 2020)	1996 - 2018	1998 - 2019

Sources: U.S. Census Bureau. (2020). American Community Survey: Response Rates [Data set]. Available at <https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/>; U.S. Census Bureau. (2020). *Current Population Survey: 2020 Annual Social and Economic (ASEC) Supplement*. Retrieved from <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar20.pdf>; Agency for Healthcare Research and Quality (AHRQ). (2020). MEPS-HC Response Rates by Panel [Data set]. Available at [https://meps.ahrq.gov/survey\\_comp/hc\\_response\\_rate.jsp](https://meps.ahrq.gov/survey_comp/hc_response_rate.jsp); National Center for Health Statistics (NCHS). (2020). *National Health Interview Survey: 2019 Survey Description*. Retrieved from [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NHIS/2019/srvydesc-508.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2019/srvydesc-508.pdf)

### Within-survey Changes over Time: Questions & Methodology

In the same way that estimates across different surveys may not be comparable, estimates within the same survey may not always be comparable over time. This incomparability can be due to changes in survey questions and/or changes in survey methodology.

#### Changes in the CPS

In 2014, the CPS incorporated a revised set of survey questions designed to improve the accuracy of its uninsurance estimates, which researchers have suggested more closely resembled a point-in-time measure than a measure of insurance coverage during the previous year (as was intended).<sup>i,ii,iii</sup> Because of these revisions, CPS data from 2013 and onward are not comparable to data from 2012 and earlier.

Data year 2018 represents another break in series for the CPS, as the CPS file for 2018 is the first official file to feature a new processing system that fully incorporates the information contained in the 2014 survey redesign.<sup>iv,v</sup> The updated data processing system uses a new method of estimating health insurance coverage and refines the ways in which respondents' demographic, income, and health insurance data are cleaned, imputed, and weighted. With these new processing mechanisms in place, CPS data from 2018 and onward are not comparable to previous data years.

**Changes in the NHIS**

In 2019, the content and structure of the NHIS were updated in order to improve the measurement of health topics, reduce respondent burden by shortening the questionnaire, harmonize overlapping content with other federal health surveys, establish a long-term structure of ongoing and periodic topics, and incorporate advances in survey methodology and measurement.<sup>vi</sup> Although the 2019 changes do not constitute an official break in series, the National Center for Health Statistics (NCHS) notes that any differences observed between estimates for 2018 and 2019 may be due either to real change in the population or partly attributable to the 2019 NHIS questionnaire redesign and/or the updated weighting approach.<sup>vii</sup>

**Table A2. National Uninsurance Estimates from Four Federal Surveys: Nonelderly Adults (Age 18-64)**

Survey	Time Period	Uninsured for the Entire Year		Uninsured at a Specific Point in Time	
		Number (millions)	Percent of Population	Number (millions)	Percent of Population
<b>ACS (ages 19-64)</b>	2019	N/A	N/A	24.9	12.9
<b>CPS</b>	2019	21.5	11.1	N/A	N/A
<b>MEPS</b>	2018	19.1	9.7	N/A	N/A
<b>NHIS</b>	2018	18.1	9.3	26.3	13.3

\* Because the question used to create the measure of full-year uninsurance was modified in the 2019 NHIS, caution should be used when making comparisons between the 2019 estimate of this measure and estimates of this measure from prior years. See text box on page 3 for additional details about changes to the 2019 NHIS.

Sources: CPS estimates from Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J.R., 2018, *Integrated Public Use Microdata Series, Current Population Survey: Version 6.0* [IPUMS dataset]. Accessed September 29, 2020. Available at <https://doi.org/10.18128/D030.V6.0>; ACS estimates for civilian noninstitutionalized population from U.S. Census Bureau, 2020, American Community Survey Tables for Health Insurance Coverage: Table HI-05 Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2019; Cohen, Cha, Martinez, & Terlizzi, 2020, "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2019" and from SHADAC analysis of the 2019 NHIS Public Use Files; MEPS estimates from [https://meps.ahrq.gov/mepstrends/hc\\_ins/](https://meps.ahrq.gov/mepstrends/hc_ins/).



Table A3. 2019 State-Level Uninsured Rates from Two Federal Surveys: Nonelderly Adults

	ACS Age 19-64 (Point-in-Time)	CPS Age 18-64 (Full Year)		ACS Age 19-64 (Point-in-Time)	CPS Age 18-64 (Full Year)
<b>United States</b>	<b>12.9</b>	<b>11.1</b>	Missouri	14.2	11.9
Alabama	15.0	11.3	Montana	11.8	10.9
Alaska	15.8	17.7	Nebraska	11.7	11.5
Arizona	15.4	14.3	Nevada	15.5	12.7
Arkansas	13.1	9.6	New Hampshire	8.9	6.7
California	10.9	9.8	New Jersey	11.1	9.0
Colorado	10.7	11.3	New Mexico	14.6	12.8
Connecticut	8.3	4.0	New York	7.5	7.2
Delaware	9.3	6.3	North Carolina	16.4	16.1
Dist. of Columbia	4.4	3.4	North Dakota	8.2	7.2
Florida	19.5	18.4	Ohio	9.1	8.5
Georgia	18.9	16.7	Oklahoma	20.5	21.5
Hawaii	5.9	3.2	Oregon	10.3	8.1
Idaho	16.5	14.2	Pennsylvania	7.9	7.4
Illinois	10.5	7.7	Rhode Island	5.9	4.9
Indiana	11.6	7.6	South Carolina	16.1	10.7
Iowa	7.3	7.3	South Dakota	14.2	11.4
Kansas	13.1	11.2	Tennessee	14.9	10.2
Kentucky	9.1	8.1	Texas	24.5	20.3
Louisiana	13.1	11.0	Utah	12.1	12.1
Maine	11.6	6.9	Vermont	6.7	4.5
Maryland	8.3	6.2	Virginia	11.0	8.6
Massachusetts	4.2	3.8	Washington	9.5	8.6
Michigan	8.3	5.4	West Virginia	10.0	7.4
Minnesota	6.9	5.8	Wisconsin	8.1	5.6
Mississippi	19.5	18.4	Wyoming	16.6	12.8

Sources: ACS estimates for civilian noninstitutionalized population from U.S. Census Bureau, 2020, American Community Survey Tables for Health Insurance Coverage: Table HI-05 Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2019; CPS estimates from Flood, S., King, M., Rodgers, R., Ruggles, S., & Warren, J.R, 2018, Integrated Public Use Microdata Series, Current Population Survey: Version 6.0 [IPUMS dataset]. Accessed September 29, 2020. Available at <https://doi.org/10.18128/D030.V6.0>.



## APPENDIX REFERENCES

- i Turner, J., & Boudreaux, M. (2014). *An introduction to redesigned health insurance coverage questions in the 2014 CPS* [Issue brief #39; PDF file]. Retrieved from <http://www.shadac.org/publications/cpsbrief>
- ii Planalp, C., Sonier, J., & Turner, J. (2014). *Using recent revisions to federal surveys for measuring the effects of the Affordable Care Act* [Issue brief #41; PDF file]. Retrieved from <http://www.shadac.org/publications/using-recent-revisions-federal-surveys-measuring-effects-affordable-care-act>
- iii Davern, M., Davidson, G., Ziegenfuss, J., et al. (2007). *A comparison of the health insurance coverage estimates from four national surveys and six state surveys: A discussion of measurement issues and policy implications* [Final report, Task 7.2]. Retrieved from [https://www.shadac.org/sites/default/files/Old\\_files/shadac/publications/ASPE\\_FinalRpt\\_Dec2007\\_Task7\\_2\\_rev.pdf](https://www.shadac.org/sites/default/files/Old_files/shadac/publications/ASPE_FinalRpt_Dec2007_Task7_2_rev.pdf)
- iv Berchick, E.R., & Jackson, H.M. (2019). *Health insurance coverage in the 2017 CPS ASEC research file* [SEHSD Working Paper 2019-01]. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-01.pdf>
- v Berchick, E.R., & Jackson, H.M. (2019). *Health insurance coverage in the Current Population Survey: Estimates from the 2017 research file* [SEHSD Working Paper 2019-2]. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-02.pdf>
- vi Cohen, R.A., Cha, A.E., Martinez, M., & Terlizzi, E.P. (2020). *Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2019*. National Center for Health Statistics National Health Interview Survey Early Release Program. Retrieved from <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur202009-508.pdf>
- vii National Center for Health Statistics (NCHS). (2020). *Preliminary Evaluation of the Impact of the 2019 NHIS Questionnaire Redesign and Weighting Adjustments on Early Release Program Estimates*. Retrieved from <https://www.cdc.gov/nchs/data/nhis/earlyrelease/EReval202009-508.pdf>



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