



Comparing Federal Government Surveys That Count the Uninsured: 2022

INTRODUCTION

The ability to obtain and keep affordable and comprehensive health insurance coverage is one of the most fundamental steps to improving individual and population health through better access to and utilization of health care services. Timely and accurate estimates of the number of people who do not have health insurance, therefore, are important for understanding trends in coverage and the impacts of actions like policy changes, events like public health emergencies, or shifts in the economic landscape that may in turn affect health insurance coverage across the United States and among individual states. This brief provides an annual update to comparisons of uninsurance estimates from four federal surveysⁱ:

- 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, including how these surveys and their estimates were affected by the ongoing COVID-19 pandemic and how data users should consider these impacts when considering if and when to use these data.

National Estimates

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

Table 1. 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	2021	N/A	N/A	28.2	8.6
CPS	2021	27.2	8.3	29.8	9.1
MEPS	2020	21.4	6.5	N/A	N/A
NHIS	2021	18.6	5.8	30.0	9.2

Sources: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2022). "2021 ACS 1-Year Data Tables [Table S2701. Selected Characteristics of Health Insurance Coverage in the United States]"; CPS entire year estimates from U.S. Census Bureau. (2022). "Health Insurance Coverage in the United States: 2021"; CPS point-in-time estimates from U.S. Census Bureau. (2022). "Health Insurance: Tables 2018-forward [Table H-02. Health Insurance Current Coverage Status and Type of Coverage by Selected Characteristics for All People: 2021]"; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2022). "Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2020]"; NHIS estimates from Cohen, R.A., Cha, A.E., Terlizzi E.P., & Martinez, M.E. (2022, May 11). "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2021" and SHADAC analysis of the 2021 NHIS Public Use Files.

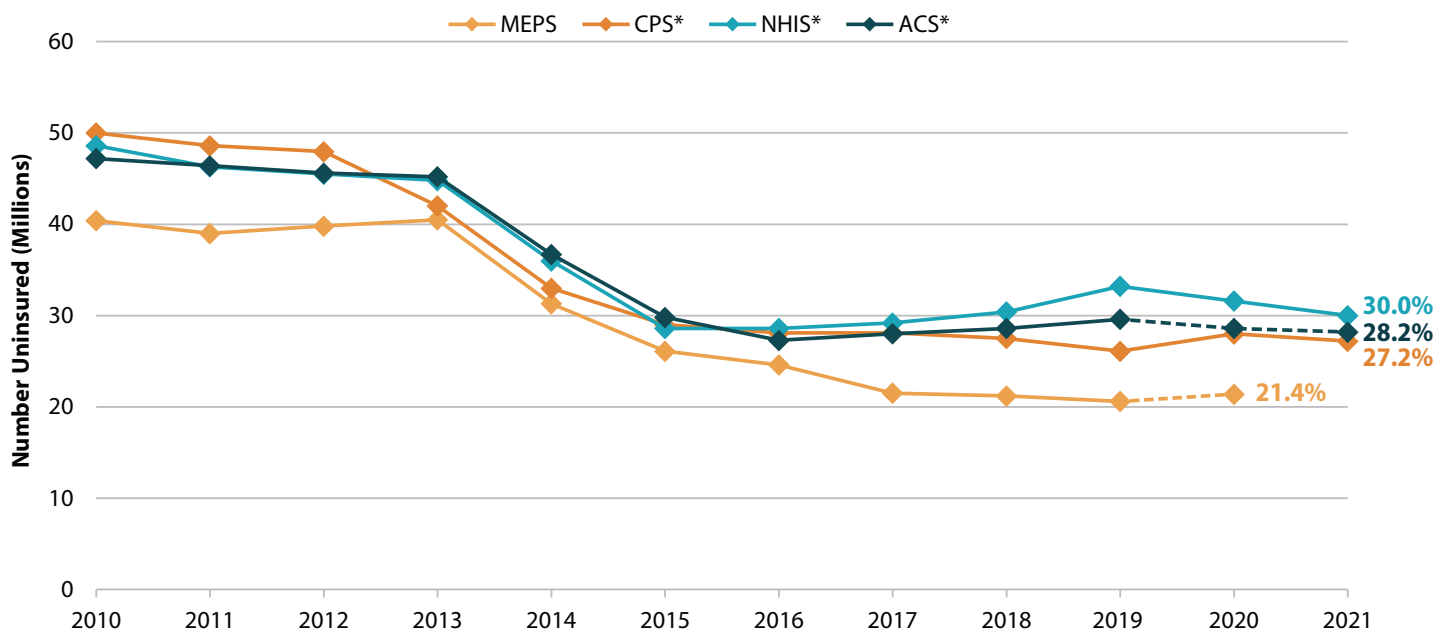
ⁱ See Appendix for key information from each of these surveys, such as who is included in the survey, when and how the survey is conducted, response rates, and the availability of state-level insurance estimates.

ⁱⁱ The CPS also collects point-in-time estimates, which are included in this brief for the first time. The point-in-time estimates are collected during the ongoing survey year (i.e., 2021 estimates are collected in 2021), but published along with the estimates for the previous data year (i.e., 2021 point-in-time estimates are published with entire year estimates for the 2020 data year).

National Trends

The uninsurance estimates from the four surveys have demonstrated similar national trends over time, even during potentially disruptive periods such as the Great Recession and the COVID-19 pandemic, as shown below in Figure 1. See Appendix for information on historical changes to the CPS ASEC and the NHIS that affect trend analyses and the section “COVID-19 Pandemic-Related Disruptions to Survey Data Collection and Data Quality” for more on the impacts to 2019-2021 data across a number of surveys that affect trend analyses.

Figure 1. Trend in National Number of Uninsured, 2010 to 2021: 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. (2022). “Health Insurance Coverage in the United States: 2021”; ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2022). “2021 ACS 1-Year Data Tables [Table S2701. Selected Characteristics of Health Insurance Coverage in the United States]”; NHIS estimates from Cohen, R.A., Cha, A.E., Terlizzi E.P., & Martinez, M.E. (2022, May 11). “Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2021” and SHADAC analysis of the 2021 NHIS Public Use Files; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2022). “Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2020].”

State-Level Estimates

The ACS and CPS are designed to produce state-level uninsurance estimates for all 50 states and the District of Columbia. No state-level estimates of uninsurance are currently published from the MEPS-HC, and the NHIS no longer publishes state-level estimates as part of their “Early Release” reports (see NHIS information box to the right for more detail).

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 in both surveys, etc.

Until 2019 when the NHIS survey was redesigned and the sample size significantly reduced, a multitude of health insurance coverage breakdowns, including marketplace type, Medicaid expansion and non-expansion states, high-deductible health plan enrollment, expanded regional, and partial state-level uninsurance estimates (among others), were included in full-year “Early Release” estimate reports.

However, a smaller number of state-level estimates of the uninsured have been released for 2019 and 2020 via annual National Health Statistics Reports, which aim to provide specialized analysis of health topics or convey new measurements or methodologies.

Table 2. 2021 State-Level Uninsured Rates from Two Federal Surveys: Total Population

	ACS (Point-in-Time)	CPS (Full Year)		ACS (Point-in-Time)	CPS (Full Year)
United States	8.6	8.3	Missouri	9.4	7.5
Alabama	9.9	7.6	Montana	8.2	6.0
Alaska	11.4	14.0	Nebraska	7.1	5.8
Arizona	10.7	10.0	Nevada	11.6	10.6
Arkansas	9.2	9.1	New Hampshire	5.1	5.3
California	7.0	7.5	New Jersey	7.2	5.4
Colorado	8.0	7.0	New Mexico	10.0	10.3
Connecticut	5.2	5.7	New York	5.2	5.9
Delaware	5.7	6.5	North Carolina	10.4	8.2
Dist. of Columbia	3.7	3.8	North Dakota	7.9	6.1
Florida	12.1	12.7	Ohio	6.5	5.4
Georgia	12.6	12.3	Oklahoma	13.8	13.8
Hawaii	3.9	4.3	Oregon	6.1	6.1
Idaho	8.8	9.5	Pennsylvania	5.5	5.9
Illinois	7.0	6.6	Rhode Island	4.3	3.1
Indiana	7.5	5.2	South Carolina	10.0	8.3
Iowa	4.8	6.8	South Dakota	9.5	5.1
Kansas	9.2	8.1	Tennessee	10.0	10.1
Kentucky	5.7	7.1	Texas	18.0	16.7
Louisiana	7.6	8.5	Utah	9.0	8.9
Maine	5.7	3.7	Vermont	3.7	2.8
Maryland	6.1	6.5	Virginia	6.8	6.2
Massachusetts	2.5	3.0	Washington	6.4	7.2
Michigan	5.0	3.0	West Virginia	6.1	6.7
Minnesota	4.5	3.6	Wisconsin	5.4	5.9
Mississippi	11.9	11.0	Wyoming	12.2	8.5

Sources: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2022). "2021 ACS 1-Year Data Tables [Table S2701. Selected Characteristics of Health Insurance Coverage in the United States]"; CPS estimates for civilian noninstitutionalized population from SHADAC analysis of 2021 CPS ASEC microdata via U.S. Census Bureau Microdata Analysis Tool (MDAT).

Continuing COVID-19-Related Disruptions to Survey Data Collection and Data Quality

As was seen in other 2020 and 2021 surveys, the 2020 MEPS-HC was subject to data collection disruptions and limitations during the COVID-19 pandemic. The Agency for Healthcare Research and Quality (AHRQ), which conducts the MEPS survey, responded with both short-term and long-term shifts survey methodology: Telephone interviews (or, in certain cases, web-only responses) replaced all in-person data collection for 2020, and AHRQ published an announcement in the Federal Register proposing a future shift toward web-first and paper follow-up data collection methods for the MEPS.

More broadly, while normal operations have resumed for the ACS, CPS, and NHIS, these surveys have continued to experience lower response rates in the second (and third) year of the pandemic and, in the case of the CPS, continued, measurable nonresponse bias. As a result, we advise data users to evaluate how lower response rates could affect data quality and reliability when using pandemic-vintage data for any survey. The SHADAC brief "[Changes in Federal Surveys Due to and During COVID-19](#)" has further details on the disruptions to 2020 data collection and dissemination processes and will be updated to provide perspective on continued changes for each survey into the 2021 data year.

2021 American Community Survey

The ACS experienced a multitude of disruptions to survey operations in 2020 (e.g., suspension of mailing operations and in-person interviews, and telephone-first methods), all of which were able to resume in full by April 2021. Thus far, the Census Bureau has not announced that this had any measurable effect on the 2021 ACS estimates. Additionally, while the 2020 ACS response rate decreased to 71 percent, the 2021 ACS' response rate was back to a more normal (but still historically low) 85 percent. After introducing an experimental weighting methodology in the 2020 ACS, the Census Bureau returned to their standard weighting methodology again in 2021. ACS estimates from 2021 are once again comparable to those from other (non-2020) ACS data years.

2022 Current Population Survey Annual Social and Economic Supplements

The Census Bureau has issued cautions to data users regarding the reliability of CPS ASEC estimates for 2019, 2020, and 2021 and comparisons to estimates from previous years due to the effects of COVID-19 on both interviewing methods and response rates. While other surveys resumed normal, in-person data collection operations by either late 2020 or early 2021, due to safety concerns, in-person interviews for the 2022 CPS ASEC (2021 estimates) were only conducted when telephone interviews could not be done and were not resumed at all in geographic areas that were deemed high risk for exposure to COVID-19.¹

In addition to changes to data collection operations, lower-than-usual response rates persisted in the 2022 CPS ASEC, measuring at 61 percent in March 2022 compared to 65 percent in March 2021. Census Bureau analyses showed the continued presence of measurable nonresponse bias in the 2020 through 2022 surveys, particularly in categories of income statistics and poverty rates. While the CPS standard weighting methodology was able to account for differences in survey estimates and administrative data prior to 2019, neither standard nor alternative weights employed by the Census Bureau have been able to fully adjust for differences between respondents and non-respondents since the 2020 survey.^{2,3}

2020 Medical Expenditure Panel Survey – Household Component (MEPS-HC)

In 2020, the Agency for Healthcare Research and Quality (AHRQ) published several announcements in the Federal Register detailing methodological changes to the MEPS-HC due to COVID-19. For instance, face-to-face interviewing ceased on March 17, 2020, and the survey shifted primarily to telephone data collection for all panels and rounds that were previously in the field. AHRQ also announced intentions to: 1) move toward a dual web and paper data collections methodology for the currently existing questionnaire; 2) add new, computer-assisted personal interviewing (CAPI) questions regarding COVID-19 and telehealth into the existing questionnaire; and 3) add an entirely new, self-administered questionnaire (SAQ) capturing information on delays in care due to COVID-19. Both the new CAPI questions and the new SAQ survey were proposed to be primarily web-based, with a limited set of in-person follow-up interviews planned for spring 2021 and additional face-to-face follow-up as in-person visits were scheduled to resume in full during fall 2021.^{4,5}

Additionally, to offset the expected and real decrease in the number of cases for 2020 that resulted from switching to a telephone-only methodology, two survey panels were extended to nine rounds (four years) of data collection, as opposed to the historical five rounds (two years). While lengthening these survey panels solved a problem with declining response numbers, the longer recall period for this panel may have introduced a new source of potential bias and underreporting in the data for which AHRQ was unable to fully correct. However, to account for the disruptions to normal data collection and correct for nonresponse bias caused by switching from in-person to telephone interviewing for the 2020 MEPS, AHRQ developed a new weighting methodology. Though these efforts partially reduced issues with nonresponse bias, based on their analysis, AHRQ suggests that users should exercise caution when interpreting 2020 MEPS estimates and when comparing 2020 estimates to those from other years.⁶

2021 National Health Interview Survey (NHIS)

Disruptions to regular data collection procedures due to the COVID-19 pandemic continued to impact NHIS data collection into the first part of 2021. From January through April, contact with household members was attempted first via telephone, with subsequent personal visits allowed only to follow up on nonresponse, deliver recruitment materials, or conduct interviews when telephone numbers were unknown. Beginning in May 2021, interviewers were told to return to regular survey interviewing procedures (first contact attempted in person, with telephone follow-up). However, the frequency of in-person visits varied by Regional Office, as interviewers were able to exercise discretion based on local COVID-19 conditions.

Other modifications to the 2021 NHIS included modest changes to the weighting methodology and the addition of several questions on topics including COVID vaccination, the impact of COVID-19 on health behaviors, and access to and utilization of care.⁷

Factors Contributing to Differences in Survey Estimates

In addition to being affected differently by pandemic-related disruptions, there are many reasons why health insurance estimates typically vary across surveys. The surveys are designed to fulfill different goals, therefore they use different questions, statistical designs, and data collection and processing methods. Each of these factors likely contribute to the variation in uninsurance estimates. The following section outlines more specific distinctions between the surveys that are highlighted in this brief.

Conceptual differences in measures of uninsurance

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

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.^{8,9,10,11,12,13}

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 extending as far back as 16 months prior to the interview. For their measures of coverage during the prior year, the 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.¹⁴ 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 ASEC, about 39 percent of households did not answer any questions in the 2022 survey (2021 data), and this nonresponse was corrected by the Census Bureau using survey weights.¹ Similarly, in the 2021 ACS, about 20 percent of responses had one or more of the health insurance items missing (information not available for 2020); these missing data were also imputed by the Census Bureau.¹⁵ In contrast, the NHIS and MEPS impute little or no health insurance coverage information, as the data for these two surveys are much more complete than the CPS or ACS data. However, the MEPS-HC did report that due to lower response rates in 2020, certain payment data was more heavily imputed than in past years, but this had a minimal overall effect on the data.⁶

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 socio-economic characteristics that are included in the estimates—along with other factors described above—are among key considerations when choosing which estimates to use. For example, those interested in a "first look" at new 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.

The COVID-19 pandemic and the resulting disruptions to the collection and quality of survey data present a new factor to consider when deciding which data sources to use. Ultimately, when examining or evaluating any measure of health insurance coverage during 2020 and 2021, it may be prudent to use more than one of the data sources discussed here to gain additional context on the range of estimates. Analysts should also consider using other sources of information about uninsurance and coverage such as administrative data, state-administered surveys, and other nationally representative government surveys such as the CDC's Behavioral Risk Factor Surveillance System (BRFSS) or the Household Pulse Survey which is also administered by the Census Bureau and is specifically designed to provide near-real-time data about and during the COVID-19 pandemic.

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. Data users should seek to understand how the pandemic affected surveys measuring coverage in 2020 and 2021 and follow guidance from the conducting organizations when using data from surveys collected in these years.

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About SHADAC

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References

- 1 U.S. Census Bureau. (2022). *Current Population Survey: 2022 Annual Social and Economic (ASEC) Supplement Technical Documentation*. <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar22.pdf>
- 2 Rothbaum, J., & Bee, A. (2022, September 13). *How Has the Pandemic Continued to Affect Survey Response? Using Administrative Data to Evaluate Nonresponse in the 2022 Current Population Survey Annual Social and Economic Supplement* [Blog post]. U.S. Census Bureau Research Matters. <https://www.census.gov/newsroom/blogs/research-matters/2022/09/how-did-the-pandemic-affect-survey-response.html>
- 3 Rothbaum, J., & Hokayem, C. (2021, September 14). *How Did the Pandemic Affect Survey Response: Using Administrative Data to Evaluate Nonresponse in the 2021 Current Population Survey Annual Social and Economic Supplement* [Blog post]. U.S. Census Bureau Research Matters. <https://www.census.gov/newsroom/blogs/research-matters/2021/09/pandemic-affect-survey-response.html>
- 4 Agency for Healthcare Research and Quality (AHRQ). (2020, August 4). Agency Information Collection Activities: Proposed Collection; Comment Request [2020-16948]. *Federal Register*, 85 FR 47214, 47214-47216. <https://www.federalregister.gov/documents/2020/08/04/2020-16948/agency-information-collection-activities-proposed-collection-comment-request>
- 5 Zuvekas, S.H., & Kashihara, D. (2021, August 30). The impacts of the COVID-19 pandemic on the Medical Expenditure Panel Survey. *Am J Public Health*, 111(12), 2157–2166. <https://doi.org/10.2105/AJPH.2021.306534>
- 6 Center for Financing, Access, and Cost Trends. (2022). *MEPS HC-220C: 2020 Other Medical Expenses*. Agency for Healthcare Research and Quality (AHRQ). https://www.meps.ahrq.gov/data_stats/download_data/pufs/h220c/h220cdoc.shtml
- 7 National Center for Health Statistics. (2022). *National Health Interview Survey: 2021 Survey Description*. Centers for Disease Control and Prevention. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2021/srvydesc-508.pdf
- 8 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
- 9 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
- 10 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

- 11 Sudman, S., Bradburn, N. & Schwarz, S. (1996). *Thinking about answers: The application of cognitive processes to survey methodology*. San Francisco, CA: Jossey-Bass.
- 12 Bhandari, S. (2004). *People with health insurance: A comparison of estimates from two surveys* [SIPP-WP-243]. <https://www.census.gov/content/dam/Census/library/working-papers/2004/demo/SEHSD-2004-02.pdf>
- 13 Lewis, K., Elwood, M.R., & Czajka, J. (1998). *Counting the uninsured: A review of the literature* [Occasional Paper-8]. <https://www.urban.org/sites/default/files/publication/70636/308032-Counting-the-Uninsured.PDF>
- 14 Nelson, C.T. & Mills, R.J. (2001). *The March CPS health insurance verification question and its effect on estimates of the uninsured*. <https://www.census.gov/content/dam/Census/library/working-papers/2012/demo/nelson-01.pdf>
- 15 U.S. Census Bureau. (2022). American Community Survey 1-Year Estimates, Table B992701: *Allocation of Health Insurance Coverage* [Data set]. Accessed October 6, 2022. Available at <https://data.census.gov/cedsci/table?q=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 the 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 2020 sampling frame updated with new construction)	NHIS respondents	Commercial address list
Data Collection Mode	Mail; in-person; phone; internet	In-person; phone	In-person; phone [^]	In-person, phone [†]
Type of Uninsurance Measures	Point-in-time	All of prior calendar year; part 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 past year	Point-in-time; all of prior year; if uninsured, length of time uninsured; uninsured at some point in past year
Coverage: Verification Question for Uninsured	No	Yes	Yes	Yes
State-Specific Names Included for Medicaid/CHIP	No	Yes	Yes	Yes
Response Rate	85.3% (2021)	61.4% (2021)	27.6% (2020)*	52.8% (2021)
Survey Period	Continuous	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	Select number of states published via specialized reports
Years Available	2008 to 2021**	1987 to 2021 (plus limited point-in-time estimates for 2022)	1996 to 2020	1998 to 2021

Sources: U.S. Census Bureau. (2022). American Community Survey Response Rates: United States [Data set]. Available at <https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates>; U.S. Census Bureau. (2022). Current Population Survey: 2022 Annual Social and Economic (ASEC) Supplement. <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar22.pdf>; Agency for Healthcare Research and Quality (AHRQ). (2022). MEPS-HC Response Rates by Panel [Data set]. Available at https://meps.ahrq.gov/survey_comp/hc_response_rate.jsp; National Center for Health Statistics (NCHS). (2020). National Health Interview Survey: 2021 Survey Description. https://ftp.cdc.gov/pub/HealthStatistics/NCHS/Dataset_Documentation/NHIS/2021/srvydesc-508.pdf.

[^] The 2020 MEPS-HC switched to telephone-only data collection due to the COVID-19 pandemic.

[†] The 2020 NHIS added phone data collection due to the COVID-19 pandemic, which continued a few months into 2021 and at the discretion of individual interviewers where COVID rates were high and safety of conducting in-person interviews was a concern.

* The point-in-time file (and corresponding response rate) for the MEPS-HC was discontinued in 2020, and only full-year files and response rates will be available moving forward.

** 2020 1-Year ACS data are considered an “experimental” data product and should not be compared with other ACS data. The Census Bureau urges caution when using the 2020 experimental data.

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. In addition to the changes described below, beginning in 2020, the ACS, CPS, MEPS-HC, and NHIS all underwent substantial methodological and content changes in response to the COVID-19 pandemic that may present problems for comparability. See related SHADAC brief “[Changes in Federal Surveys Due to and During COVID-19](#)” for a more thorough discussion of a majority of these modifications.

Changes in the CPS

In 2014, the CPS incorporated a revised set of survey questions designed to improve the accuracy of its uninsured 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).^{iii,iii} 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.^{iv,v} 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.^{vi} 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.^{vii}

Demographic Categories: Nonelderly Adults

In addition to overall estimates of health insurance coverage, federal surveys also provide rates for a variety of demographic categories, such as age, sex, geographic area, income level, etc. When examining or comparing coverage rates by category it is important to understand how each survey defines a particular category; for instance, when looking at health insurance coverage for nonelderly adults, some surveys use age 18 to 64, while others use age 19 to 64.

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
ACS (ages 19-64)	2021	N/A	N/A	23.6	12.2
CPS (Entire year: age 18-64; Specific PIT: age 19-64)	2021	23.0	11.5	24.6	12.7
MEPS	2020	N/A	N/A	N/A	N/A
NHIS	2021	16.7	8.7	26.6	13.5

Source: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2022). "2021 ACS 1-Year Data Tables [Table S2701. Selected Characteristics of Health Insurance Coverage in the United States]"; CPS entire year estimates from U.S. Census Bureau. (2022). "Health Insurance Coverage in the United States: 2021"; CPS point-in-time estimates from U.S. Census Bureau. (2022). "Health Insurance: Tables 2018-forward [Table H-02. Health Insurance Current Coverage Status and Type of Coverage by Selected Characteristics for All People: 2021]"; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2022). "Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2020]"; NHIS estimates from Cohen, R.A., Cha, A.E., Terlizzi E.P., & Martinez, M.E. (2022, May 11). "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2021" and SHADAC analysis of the 2021 NHIS Public Use Files.

Table A3. 2021 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)
United States	12.4	11.9		
Alabama	15.0	12.8	Missouri	14.3
Alaska	15.4	15.1	Montana	12.2
Arizona	15.3	15.3	Nebraska	11.5
Arkansas	12.7	12.1	Nevada	16.4
California	10.0	10.0	New Hampshire	8.9
Colorado	11.5	13.5	New Jersey	10.7
Connecticut	6.4	6.9	New Mexico	14.3
Delaware	9.4	11.3	New York	7.4
Dist. of Columbia	4.6	4.0	North Carolina	15.6
Florida	18.4	17.2	North Dakota	9.3
Georgia	18.4	19.8	Ohio	9.4
Hawaii	5.5	5.5	Oklahoma	22.0
Idaho	13.8	17.0	Oregon	9.5
Illinois	10.4	9.2	Pennsylvania	8.2
Indiana	10.0	8.0	Rhode Island	4.9
Iowa	7.1	8.1	South Carolina	15.6
Kansas	12.7	12.9	South Dakota	14.3
Kentucky	8.0	9.0	Tennessee	14.6
Louisiana	12.0	11.3	Texas	23.7
Maine	10.7	7.7	Utah	10.8
Maryland	7.9	6.0	Vermont	6.6
Massachusetts	3.6	3.5	Virginia	10.1
Michigan	7.8	5.2	Washington	9.0
Minnesota	6.8	7.2	West Virginia	10.4
Mississippi	17.7	16.9	Wisconsin	7.6
			Wyoming	16.2

Source: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2022). "2021 ACS 1-Year Data Tables [Table S2701. Selected Characteristics of Health Insurance Coverage in the United States: Age]"; CPS estimates for civilian noninstitutionalized population from SHADAC analysis of 2021 CPS ASEC microdata via U.S. Census Bureau Microdata Analysis Tool (MDAT).

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]. <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]. <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]. 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]. <https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehdsd-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]. <https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehdsd-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. <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*. <https://www.cdc.gov/nchs/data/nhis/earlyrelease/EReval202009-508.pdf>