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Comparing Federal Government Surveys That Count the Uninsured: 2024

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. Therefore, timely and accurate estimates of the number of people who *do not* have health insurance 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 (like periods of recession) that may in turn affect health insurance coverage nationally and among individual states.

Estimates of uninsurance can be generated from federal surveys that collect data on insurance coverage, access, and utilization. However, each survey's estimate of uninsurance can vary slightly depending on how each survey is fielded, how questions regarding coverage are asked, and more.

In this brief, we present current and historical national estimates of uninsurance along with the most recently available state-level estimates (where applicable) from five federal surveys, listed below in chronological order of annual data release dates[i]:

- The National Health Interview Survey (NHIS)
- The Medical Expenditure Panel Survey – Household Component (MEPS-HC)
- The Behavior Risk Factor Surveillance System (BRFSS)
- The American Community Survey (ACS)
- The Current Population Survey Annual Social and Economic Supplement (CPS ASEC)

Readers can also directly compare estimates at the national level between all surveys and at the state level for all surveys that collect this data. Later sections of the brief also discuss primary reasons for variation in estimates across the different surveys, including how surveys have been singularly affected by external factors such as the recent COVID-19 pandemic and the Medicaid "unwinding," and how factors intrinsic to the surveys themselves, such as question wording and timing of data collection, can impact yearly fluctuation between the estimates. Finally, we include guidance on how data users can take these impacts into account as they consider if and when to use data from any of the surveys, and which survey might be most appropriate for use depending on the research questions being asked.

NATIONAL UNINSURANCE ESTIMATES

Table 1 shows the most recent available estimates of uninsured people (in millions) and uninsured rates of the U.S. population from each of the five surveys listed above. It is important to note that each survey estimates uninsurance slightly differently; 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]

[i] See Appendix A 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 a newer inclusion in this brief. The point-in-time estimates are collected during the ongoing survey year (i.e., 2023 estimates are collected in 2023), but published along with the estimates for the previous data year (i.e., 2023 point-in-time estimates are published with entire-year estimates for the 2022 data year).

Table 1. National Uninsurance Estimates from Five Federal Surveys: Total Population

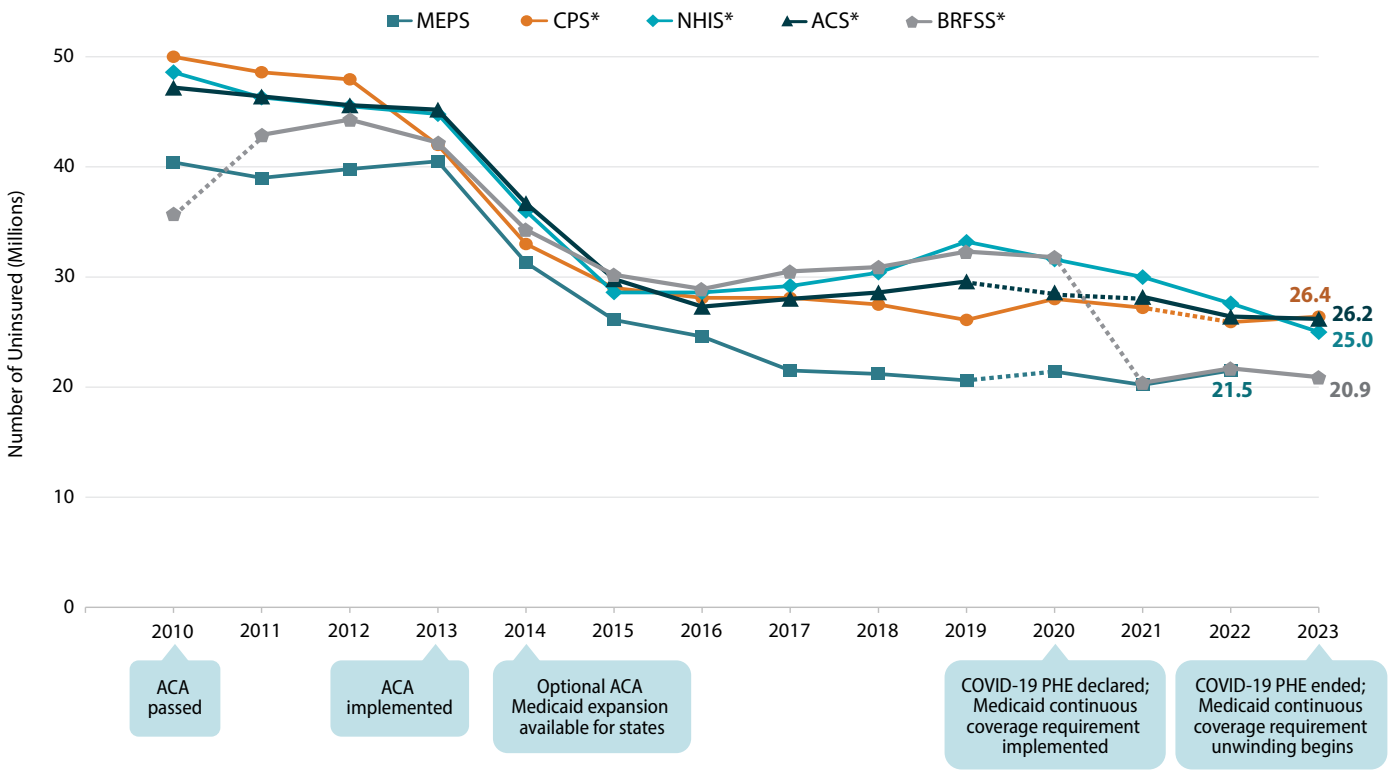
Survey	Time Period	Uninsured for the Entire Year Number (millions)	Uninsured for the Entire Year % of population	Uninsured at a Specific Point in Time Number (millions)	Uninsured at a Specific Point in Time % of population
ACS	2023	N/A	N/A	26.2	7.9
CPS	2023	26.4	8.0	26.5	8.0
BRFSS (Age 18+)	2023	N/A	N/A	20.9	8.8
MEPS	2022	21.5	6.4	N/A	N/A
NHIS	2023	15.8	4.8	25.0	7.6

Sources: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2024). "2023 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. (2024). "Health Insurance Coverage in the United States: 2023"; CPS point-in-time estimates from U.S. Census Bureau. (2024). "Health Insurance: Tables 2018-forward [Table H-02. Health Insurance Current Coverage Status and Type of Coverage by Selected Characteristics for All People: 2023]"; BRFSS estimates from SHADAC analysis of Centers for Disease Control and Prevention (CDC). (2024). "BRFSS Survey Data: 2023"; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2024). "Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2022]"; NHIS estimates from Cohen, R.A., Briones, E.M., & Martinez, M.E. (June 2024). "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2023" and SHADAC analysis of the 2023 NHIS Public Use Files.

NATIONAL UNINSURANCE TRENDS

Uninsurance estimates from the five federal surveys included in this brief have demonstrated generally similar national trends over time, rising and falling in mirroring patterns. This has generally held true, even when normal yearly differences between survey data could fluctuate due to collection or measurement methods, or during potentially disruptive periods or events, as shown below in Figure 1.

Figure 1. Trend in National Number of Uninsured by Survey, 2010 to 2023: All Ages



Note: ACS, BRFSS, and NHIS point-in-time estimates of the uninsured; CPS ASEC and MEPS estimates of the full-year uninsured.
***Dashed line "- - -" indicates a break in series.**

Sources: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2023). "2022 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. (2023). "Health Insurance Coverage in the United States: 2022"; CPS point-in-time estimates from U.S. Census Bureau. (2023). "Health Insurance: Tables 2018-forward [Table H-02. Health Insurance Current Coverage Status and Type of Coverage by Selected Characteristics for All People: 2022]"; BRFSS estimates from SHADAC analysis of Centers for Disease Control and Prevention (CDC). (2023). "BRFSS Survey Data: 2022"; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2023). "Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2021]"; NHIS estimates from Cohen, R.A. & Cha, A.E. (2023, May 1). "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2022" and SHADAC analysis of the 2022 NHIS Public Use Files.

However, analysis of health insurance estimates across years can be affected in several ways. Unanticipated events like the COVID-19 pandemic or the Great Recession can cause disruptions both to people's ability to get insurance coverage (e.g., loss of employment can lead to a resulting loss of employer-sponsored health insurance coverage) as well as the ability to use that coverage (e.g., high demand on health systems during the COVID-19 pandemic caused delays in accessing or receiving care, among other factors).[iii]

Another large-scale event affecting both health coverage and the survey estimates that researchers depend on to understand trends and changes in that coverage began on April 1, 2023: the unwinding of the Medicaid continuous coverage requirement. The continuous coverage requirement paused all state-level termination of individuals' Medicaid coverage during the COVID-19 pandemic, in part by suspending all (re)determination processes as well. States then were given a 14-month period (concluding on June 30, 2024) to navigate returning to standard redetermination procedures while also meeting reporting requirements set by the Centers for Medicare & Medicaid Services (CMS) to publicly share coverage transitions and outcomes data during this time.[iv] The period following the continuous coverage requirement's conclusion is commonly referred to simply as "the Medicaid unwinding" or just "the unwinding."

Due to the mid-year start and end dates of this process, it is important to note that current full-year 2023 estimates and future full-year 2024 estimates from all surveys, including the ACS and CPS, will not be fully reflective of the changes occurring during the Medicaid unwinding process.

For more information on how factors such as the Medicaid unwinding or the COVID-19 public health emergency (PHE) can affect coverage estimates, please see the section entitled "Impacts on Survey Data" further on in the brief. For more information on changes to the surveys themselves (CPS ASEC, BRFSS, and NHIS) that may impact trend analysis, please see Appendix A.

STATE-LEVEL UNINSURANCE ESTIMATES

Each of the surveys examined in this brief vary in their production of state-level estimates of uninsurance. The ACS and CPS are designed to produce state-level uninsurance estimates for all 50 states and the District of Columbia (D.C.). The core component of the BRFSS is similarly designed to produce uninsurance estimates for all 50 states and Washington, D.C.; however, state-level data can vary for the optional modules.

After a survey redesign in 2019, the NHIS no longer regularly publishes state-level estimates as part of their "Early Release" reports due a significant reduction in sample size. A smaller number of state-level uninsured rates have been released on a sporadic basis in specialized *National Health Statistics Reports*. While the MEPS-HC publishes data by region (Northeast, Midwest, South, and West) and specifies which states count in each, no individual state-level estimates of uninsurance are currently published from this survey.

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

[iii] Planalp, C., Alarcon, G., & Blewett, L.A. (2020). *Coronavirus pandemic caused more than 10 million U.S. adults to lose health insurance*. State Health Access Data Assistance Center (SHADAC). https://www.shadac.org/news/coronavirus-pandemic-caused-more-10-million-us-adults-lose-health-insurance

[iv] Lukanen, E., Zylla, E. (2024). *Unwinding Ends, but States' Reporting of Medicaid Renewal Data Continues (SHVS Cross-Post)*. https://www.shadac.org/news/reporting-medicaid-renewal-data-continues-medicaid-unwinding-shvs

Table 1. 2023 State-Level Uninsured Rates from Three Federal Surveys: Total Population

State	ACS (Point-in-Time)	CPS (Full Year)	BRFSS (Point-in-Time)
United States	**7.9**	**8.0**	**8.8**
Alabama	8.5	8.0	8.5
Alaska	10.4	13.0	12.0
Arizona	9.9	13.2	10.8
Arkansas	8.9	8.7	10.7
California	6.4	6.4	7.3
Colorado	6.7	8.0	9.2
Connecticut	5.7	5.0	7.2
Delaware	6.5	6.8	6.3
District of Columbia	2.7	3.2	3.6
Florida	10.7	9.3	10.9
Georgia	11.4	12.4	12.7
Hawaii	3.2	3.5	2.4
Idaho	8.9	8.8	8.8
Illinois	6.2	7.2	6.6
Indiana	6.9	6.7	7.6
Iowa	5.0	5.2	5.5
Kansas	8.4	6.7	8.2
Kentucky	5.4	8.6	N/A
Louisiana	6.9	8.8	5.2
Maine	5.9	5.4	5.9
Maryland	6.3	7.0	6.8
Massachusetts	2.6	3.2	2.8
Michigan	4.5	4.0	4.5
Minnesota	4.2	5.3	5.6
Mississippi	10.3	14.0	10.6
Missouri	7.5	8.0	6.6
Montana	8.4	7.5	9.2
Nebraska	6.1	6.0	8.6
Nevada	10.8	8.1	13.4
New Hampshire	4.7	5.2	4.0
New Jersey	7.2	7.7	8.8
New Mexico	9.1	9.6	12.2
New York	4.8	4.7	5.6
North Carolina	9.2	10.0	9.2
North Dakota	4.5	4.8	5.2
Ohio	6.1	5.1	6.0
Oklahoma	11.4	11.0	12.8
Oregon	5.5	4.7	5.9
Pennsylvania	5.4	5.8	N/A
Rhode Island	4.5	3.6	5.4
South Carolina	9.1	8.1	10.1
South Dakota	8.3	5.6	9.6
Tennessee	9.3	7.3	9.3
Texas	16.4	16.3	18.1
Utah	8.0	6.2	8.9
Vermont	3.4	3.5	3.9
Virginia	6.4	5.8	8.0
Washington	6.3	5.2	7.0
West Virginia	5.9	4.5	5.3
Wisconsin	4.9	5.4	6.2
Wyoming	10.7	9.8	11.3

Sources: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2024). "2023 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 2023 CPS ASEC microdata via U.S. Census Bureau Microdata Analysis Tool (MDAT); BRFSS estimates from SHADAC analysis of Centers for Disease Control and Prevention (CDC). (2024). "BRFSS Survey Data: 2023."

IMPACTS ON SURVEY DATA

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

The myriad issues regarding data collection and dissemination in 2020 and 2021 for the ACS, CPS, MEPS, and NHIS due to the COVID-19 pandemic have been well documented in previous versions of this brief.[1,2] For a more detailed discussion of the pandemic's effect on the operations, data collection, and dissemination of the these four federal surveys during 2020, please see SHADAC's "Changes in Federal Surveys Due to and During COVID-19" brief.

In addition to affecting survey operations, COVID-19 also impacted survey response rates – most prominently in 2020, but to a lesser degree in the second and third years of the pandemic (2021 and 2022) as well. Along with lower overall rates of response, surveys also experienced measurable nonresponse bias, particularly in the case of the ACS and CPS.

Each survey countered these challenges in unique ways, whether it be to address overrepresentation of certain respondents by combining data from different sources to produce improved estimates or employing an alternative weighting scheme in the case of the CPS, or by adding additional respondent panels in the case of the MEPS.[3-7] While these and other steps have been taken to address response issues, we do advise data users to evaluate how lower response rates and nonresponse bias could affect data quality and reliability when using pandemic-era data from these surveys, or any others.

Special Note on the BRFSS

BRFSS data were not previously included in the versions of this brief that covered health insurance data during the years of the declared COVID-19 public health emergency (PHE). The BRFSS did also experience disruptions due to the coronavirus pandemic, though these were slightly different than with other surveys. The BRFSS is administered by state agencies instead of a centralized organization at the federal level, the changes to operations were much more varied than for other larger surveys (though as a telephone-based survey, methodologies were not impacted as they were with other surveys that used in-person and mailing operations). While all states experienced interruptions and pauses in data collection, the way states handled these changes varied. Some were able to resume remote data collection very rapidly, some experienced greater delays but were eventually able to restart data collection, and still other states were not able to resume or finish data collection for 2020 at all. Technically, "all states met the minimum requirements to be included in the public-use data set for 2020"; nonetheless, the CDC urges researchers to use caution when considering comparing 2020 estimates to other years or analyzing trends over time.[8]

Current and Future Impacts of the Continuous Coverage Requirement Unwinding on Survey Data

As previously noted, during the COVID-19 pandemic, a provision in the Families First Coronavirus Response Act (FFCRA) mandated continuous Medicaid enrollment for individuals already enrolled in the program through the end of the public health emergency (PHE). This requirement officially ended on March 31, 2023, which triggered the resumption of Medicaid eligibility redeterminations and renewals (and potential disenrollments) - a process commonly referred to as the "Medicaid unwinding," or simply "the unwinding." Each state was given 14 months, or until June 30, 2024, to fully resume normal operations, though some states opted to move more quickly than others.[9]

The shifts in coverage that could potentially occur as a result of the unwinding have the potential to be the largest since the implementation of the Affordable Care Act (ACA). While full-year survey data are as of yet unable to fully reflect the changes of mid-year shifts (the Medicaid unwinding began in April of 2023 and ended in June of 2024), the health insurance coverage data for 2023 still provide valuable insight as to the marketplace conditions of the first few months of 2023 (pre-unwinding), as the 2024 data will offer better understanding of coverage transitions and changes in the latter part of the 2024.

Alternative Sources

In the meantime, health insurance coverage data from other sources can give researchers an indicator of coverage trends during the unwinding transition. For instance, according to administrative data from the Centers for Medicare & Medicaid Services, Medicaid and Children's Health Insurance Program (CHIP) enrollment declined by 13.9 million between March 2023 and June 2024. Some of those who were disenrolled from Medicaid and CHIP likely transitioned to other coverage, while others may have become uninsured.

While administrative data are able to show certain types of coverage transitions, such as those from Medicaid/CHIP to Marketplace, provisional data from sources such as the Census Bureau's Household Pulse Survey (now extended and renamed the Household Trends and Outlook Pulse Survey, or HTOPS) provide near-real-time data on transitions to other sources of coverage, such as employer-sponsored insurance or uninsurance. For more detail and an interactive graphic that offers users a way to compare changes in health insurance coverage data from March 2023 (the last month before the unwinding) to any month through September of 2024 (three months after the close of the unwinding period), please see SHADAC's "Tracking Health Insurance Coverage During the Unwinding: Monthly Data from the Household Pulse Survey" resource.

FACTORS CONTRIBUTING TO DIFFERENCES IN SURVEY ESTIMATES

Aside from disruptions such as the ones discussed above, there are many other reasons why health insurance estimates typically vary across surveys. Each survey is 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 sections articulate more 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 of insurance coverage.

Differences in 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.[10-15]

For example, the CPS Annual Social and Economic Supplement (CPS ASEC), conducted from 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. Compared to the CPS, the NHIS and MEPS have shorter recall periods for their measures of coverage during the prior year. The ACS collects information about current coverage only, as does the BRFSS.

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%, from 42.6 million to 39.3 million.[16] 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 discrepancy between survey questions that can lead to different estimates is a common confusion for respondents around the naming of state Medicaid programs. While the ACS and the BRFSS refer to these programs more generally as Medicaid, Medigap, Medical Assistance, or any kind of government-assistance program for those with low incomes or a disability, the CPS, NHIS, and MEPS use state-specific names for Medicaid and Children's Health Insurance. An additionally complicating factor stems from the fact that many states use private insurance companies to run Medicaid managed care programs, leading to further confusion as to whether individuals understand their Medicaid enrollment status, as this recent study pointed out.

Missing Data and Imputation

The CPS and ACS have processes in place to manage missing data and impute missing values. In the CPS ASEC, about 40.7% of households did not answer any questions in the 2024 survey (2023 data), and this nonresponse was corrected by the Census Bureau using survey weights.[4] Similarly, in the 2023 ACS, roughly 21% of responses had one or more of the health insurance items missing (information is not available for 2020); these missing data were imputed by the Census Bureau.[17]

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.

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 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 BRFSS

In 2011, the BRFSS began using a new sampling frame, adding cell phones to the landlines it had historically sampled. The purpose of this revision was to capture the growing segment of the U.S. population that uses cellphones exclusively so that the survey estimates would more closely reflect the overall population.[18] Because of this methodological change, the CDC advises against comparing BRFSS estimates from 2011 onward against those from 2010 and earlier.

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).[19-21] 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.[22,23] 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

As mentioned previously in this brief, the content and structure of the NHIS were both updated in 2019 with the aim 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.[24] 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.[25]

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" overall estimates; rather, the most appropriate estimates for use will depend on the specific policy or research question being examined.

Key considerations (along with other factors previously described) when choosing which survey's estimates and data to use include:

- The timeliness of the estimates
- The geographies for which estimates are available, and
- The demographic or socioeconomic characteristics that are included in the estimates

For example, those interested in a "first look" at new health insurance coverage estimates would likely want to use the NHIS, since the NHIS estimates are released before those from the ACS and CPS. If, on the other hand, sub-state estimates are of interest, the ACS would typically be the best source due to its large sample size, which allows for sub-state analyses.

Every research question will require consideration of survey characteristics in relation to analytic requirements.

Both the COVID-19 pandemic and the Medicaid unwinding (and the resulting disruptions to the collection and quality of survey data) present new factors to consider when deciding which data sources to use. In the case of the pandemic, examining or evaluating any measure of health insurance coverage for data years 2020 through 2022, the declared years of the COVID-19 public health emergency, may call for the use of more than one of the data sources discussed here to gain additional context on the range of estimates. In the case of the unwinding, full-year health insurance data are unable to completely reflect the coverage shifts that occurred during the mid-year beginning and ending of the unwinding. Therefore, the newer point-in-time estimates from the CPS may be more useful in certain research or analytic contexts.

Analysts should also consider whether other sources of information about uninsurance and coverage may be most prudent in certain situations, such as using administrative data, state-administered surveys, and other nationally representative government surveys such as the Household Trend and Outlook Pulse Survey (HTOPS), which has just begun a first round of data collection after being redesigned from the original Household Pulse Survey (HPS), and for which data are anticipated to be available beginning in late spring or early summer of 2025.

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. They can reveal information about how uninsurance varies by population characteristics, how it is associated with differences in access to and use of health care services, and its impact on overall health status.

However, there are also many factors that can impact which uninsurance estimates would be most applicable to specific research questions. Data users should continue to seek understanding of how past events like pandemic affected surveys measuring coverage in 2020 and 2021 and how evolving events like the Medicaid unwinding continue to impact estimates from more recent years. We encourage you to return to this brief for annual updates on SHADAC's guidance to choosing the most appropriate data source for your research.

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APPENDIX A

Table A1. Comparison of Federal Surveys Used to Estimate Uninsurance

Characteristic	ACS	CPS	MEPS-HC	NHIS	BRFSS
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	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	State-level data on health-related risk behaviors, health conditions, and utilization
Target Population	Entire population	Civilian non-institutionalized 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	State-based, random-digit-dialed telephone numbers
Data Collection Mode	Mail; in-person; phone; internet	In-person; phone	In-person; phone^	In-person; phone†	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 the past year	Point-in-time; all of prior year; if uninsured, length of time uninsured; uninsured at some point in the past year	Point-in-time
Health Insurance Coverage: Verification Question for Uninsured	No	Yes	Yes	Yes	No
State-Specific Names Included for Medicaid/CHIP	No	Yes	Yes	Yes	No
Response Rate	84.7% (2023)	68.9% (2023)	44.7% (2023)	23.4% (2022)	48.8% (2023)
Survey Period	Continuous	February through April	Panel over two calendar years	Continuous	Continuous
State Health Insurance Estimates	50 states and Washington, D.C.	50 states and Washington, D.C.	Not published	Select number of states published via specialized reports	50 states and Washington, D.C.
Years Available	2008 to 2023	1987 to 2023 (plus limited point-in-time estimates for 2024)	1988 to 2023	1996 to 2022	1988 to 2023

Sources: U.S. Census Bureau. (2024). 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. (2024). *Current Population Survey: 2023 Annual Social and Economic (ASEC) Supplement*. https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf; Centers for Disease Control and Prevalence (CDC). (2024). *2023 BRFSS Overview*. Available at https://www.cdc.gov/brfss/annual_data/2023/pdf/2023-DQR-508.pdf; Agency for Healthcare Research and Quality (AHRQ). (2024). 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). (2024). *National Health Interview Survey: 2023 Survey Description*. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2023/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.

^^ The median survey response rate for all states, territories and Washington, D.C., in 2023 was 44.7% and ranged from 21.7% to 63.1%. https://www.cdc.gov/brfss/annual_data/2023/pdf/2023-DQR-508.pdf

APPENDIX B

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 B1. National Uninsurance Estimates from Five Federal Surveys: Nonelderly Adults

Survey	Time Period	Uninsured for the Entire Year Number (millions)	Uninsured for the Entire Year % of population	Uninsured at a Specific Point in Time Number (millions)	Uninsured at a Specific Point in Time % of population
ACS (Age 19-64)	2023	N/A	N/A	21.5	11.0
CPS (Entire year: age 18-64; Specific PIT: age 19-64)	2023	21.8	10.9	21.7	11.1
BRFSS	2023	N/A	N/A	20.3	11.2
MEPS	2022	21.2	7.8	N/A	N/A
NHIS	2023	14.1	7.2	21.8	10.9

Source: ACS estimates for civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2024). "2023 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. (2024). "Health Insurance Coverage in the United States: 2023"; CPS point-in-time estimates from U.S. Census Bureau. (2024). "Health Insurance: Tables 2018-forward [Table H-02. Health Insurance Current Coverage Status and Type of Coverage by Selected Characteristics for All People: 2023]"; BRFSS estimates from SHADAC analysis of Centers for Disease Control and Prevention (CDC). (2024). "BRFSS Survey Data: 2023"; MEPS estimates from Agency for Healthcare Research and Quality (AHRQ). (2024). "Medical Expenditure Panel Survey: Number of people in thousands by insurance coverage, all ages, United States [1996 to 2022]"; NHIS estimates from Cohen, R.A., Briones, E.M., & Martinez, M.E. (June 2024). "Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2023" and SHADAC analysis of the 2023 NHIS Public Use Files.

Table B2. 2023 State-Level Uninsured Rates from Three Federal Surveys: Nonelderly Adults

State	ACS (Age 19-64, Point- in-Time)	CPS (Age 18-64, Full Year)	BRFSS (Age 18-64, Point-in-Time)
United States	**11.0**	**10.9**	**11.2**
Alabama	12.9	11.4	11.1
Alaska	14.1	15.6	14.2
Arizona	13.5	17.4	14.3
Arkansas	12.4	11.5	13.9
California	9.0	8.7	9.0
Colorado	9.2	11.2	11.5
Connecticut	8.1	7.3	9.5
Delaware	9.3	9.6	8.5
District of Columbia	3.5	4.0	4.1
Florida	15.5	12.7	15.9
Georgia	16.1	17.7	15.9
Hawaii	4.4	4.8	3.1
Idaho	12.4	12.1	11.7
Illinois	8.8	10.2	8.4
Indiana	9.1	10.0	9.7
Iowa	7.1	7.8	7.3
Kansas	11.9	10.2	10.6
Kentucky	7.7	12.3	
Louisiana	10.0	12.4	6.6
Maine	8.6	7.9	8.2
Maryland	8.5	9.8	8.6
Massachusetts	3.5	4.4	3.5
Michigan	6.4	5.5	6.0
Minnesota	5.7	6.9	7.0
Mississippi	15.2	18.8	13.7
Missouri	10.6	11.2	8.6
Montana	11.9	10.9	12.3
Nebraska	8.8	7.9	11.1
Nevada	14.6	11.0	17.1
New Hampshire	6.7	8.1	5.3
New Jersey	10.2	10.2	11.2
New Mexico	13.3	14.4	12.0
New York	6.8	6.5	7.0
North Carolina	13.3	14.4	12.0
North Dakota	6.1	7.3	6.5
Ohio	8.4	6.8	7.8
Oklahoma	16.1	14.9	16.3
Oregon	8.0	6.9	7.7
Pennsylvania	7.1	7.3	
Rhode Island	6.1	5.1	7.0
South Carolina	13.2	11.0	13.5
South Dakota	11.3	6.9	12.4
Tennessee	13.3	10.9	11.7
Texas	21.7	21.6	21.8
Utah	10.1	7.9	10.5
Vermont	5.0	5.2	5.1
Virginia	8.7	8.1	10.2
Washington	8.9	7.4	8.9
West Virginia	9.1	6.6	7.3
Wisconsin	6.6	5.4	8.1
Wyoming	15.6	14.0	14.9

Source: Civilian noninstitutionalized population from SHADAC analysis of U.S. Census Bureau. (2024). "2023 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 2023 CPS ASEC microdata via U.S. Census Bureau Microdata Analysis Tool (MDAT BRFSS estimates from SHADAC analysis of Centers for Disease Control and Prevention (CDC). (2024). "BRFSS Survey Data: 2023."