ESTIMATES OF HEALTH INSURANCE COVERAGE, 2013 to 2022

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1. INTRODUCTION

The Current Population Survey Annual Social and Economic Supplement (CPS ASEC) is used to produce official estimates of income and poverty, and it serves as the most widely cited source of estimates on health insurance coverage and the uninsured. Data users look to the CPS ASEC to understand how health insurance coverage has changed over time. Over the last decade, policy changes and current events have significantly impacted health insurance coverage, complicating data users' ability to compare coverage rates across time. For example, the Patient Protection and Affordable Care Act (ACA) introduced changes in how health insurance coverage is provided, with several key provisions taking effect in 2014. As part of continuous improvement, the Census Bureau had been researching methods to collect data on new and emerging methods of coverage which culminated with a redesigned questionnaire and processing system between calendar years 2013 and 2018. Consequently, estimates from 2013 are not directly comparable with earlier years, and the launch of the improved processing system further affected how comparisons over time are made. Other issues affecting comparisons include the COVID-19 pandemic. Data collection faced extraordinary circumstances in 2020. As the United States began to grapple with the implications of the COVID-19 pandemic, the survey stopped in-person data collection to protect the health and safety of Census Bureau staff and respondents. The resulting estimates of health insurance coverage for 2019 (collected in 2020) are not directly comparable to the estimates of other years.

This paper describes the trends in health insurance coverage from 2013 to 2022 while providing guidance on how to interpret the data in the context of the changes that have occurred.[3] In Section 2, the paper describes three changes related to survey methodology that affect comparisons over time. Section 3 provides an overview of changes in the health insurance landscape that may be related to

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[2] This paper is released to inform interested parties of ongoing research and to encourage discussion. Any views expressed are those of the authors and not those of the U.S. Census Bureau. The U.S. Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY23-POP001-0141.

[3] Any opinions and conclusions expressed herein are those of the authors and do not reflect the views of the U.S. Census Bureau. More information on confidentiality protection, methodology, sampling and nonsampling error, and definitions is available at <www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf>.

changes in health insurance coverage estimates produced using the CPS ASEC. Section 4 presents estimates of the percentage uninsured, the percentage with private coverage, and the percentage with public coverage from 2013 to 2022. Finally, Section 5 summarizes the findings.

2. CHANGES IN SURVEY DESIGN AND OPERATION

Survey Redesign

As part of the U.S. Census Bureau's commitment to improvement, the CPS ASEC underwent a two-stage redesign in recent years, including changes to the questionnaire incorporated between calendar years 2013 and 2015, followed by changes to post-survey collection processing methods first officially used for 2018 data.[4] Evidence suggests that the redesign effectively addressed known limitations to CPS ASEC health coverage and improved health insurance coverage measurement.[5]

In consideration of these and previous changes in survey design, researchers should use caution when comparing health coverage estimates over time. Due to the differences in measurement, health insurance estimates for calendar years 2013 through 2017 are not directly comparable to previous years. Estimates for calendar years 2018 and beyond may be compared with each other, as well as with 2017 estimates from the 2018 CPS ASEC Bridge File or 2016 estimates from the 2017 CPS ASEC Research File. Table 1 provides guidance on comparing calendar year estimates. Although it is not appropriate to directly compare 2018 estimates with earlier years processed with the legacy system, it is helpful to examine the estimates in this report in the context of the 2013 to 2022 time period to better understand the changes that occurred in health coverage in 2022.

[4] For more information on the survey redesign, refer to Appendix A in Edward R. Berchick, Jessica C. Barnett, and Rachel D. Upton, "Health Insurance Coverage in the United States: 2018," *Current Population Reports*, P60-267, U.S. Census Bureau, Washington, DC, 2019, <https://www.census.gov/library/publications/2019/demo/p60-267.html>.

[5] Heide Jackson and Edward R. Berchick, "Improvements in Uninsurance Estimates for Fully Imputed Cases in the Current Population Survey Annual Social and Economic Supplement," *Inquiry: The Journal of Health Care Organization, Provision, and Financing*, 2020; and Edward R. Berchick and Heide Jackson, "Data Processing Improvements for Estimates of Health Insurance Coverage in the Current Population Survey Annual Social and Economic Supplement," *Medical Care and Research Review*, 2022.

Table 1. Comparison Guidance for Calendar Year Estimates of CPS ASEC Health Insurance

	2013 to 2015	2016	2017	2018	2020	2021 and beyond
Pre-2013	No	No	No	No	No	No
2013 to 2015	Yes	Yes[1]	Yes[1]	No	No	No
2016	Yes[1]	Yes	Yes[2]	Yes[3]	Yes[3]	Yes[3]
2017	Yes[1]	Yes[2]	Yes	Yes[3]	Yes[3]	Yes[3]
2018	No	Yes[3]	Yes[3]	Yes	Yes	Yes
2019	No	Use Caution[4]	Use Caution[4]	Use Caution[4]	Use Caution[4]	Use Caution[4]
2020	No	Yes[3]	Yes[3]	Yes	Yes	Yes
2021 and beyond	No	Yes[3]	Yes[3]	Yes	Yes	Yes

[1] Calendar year estimates from 2013 to 2015 can be compared to calendar year estimates from 2016 and 2017 using the original production files.
[2] Calendar year estimates from 2016 and 2017 can be compared to each other using either the 2017 CPS ASEC Research File in conjunction with the 2018 CPS ASEC Bridge File, or by using both the 2017 and 2018 CPS ASEC Production Files. Calendar years 2016 and 2017 can be compared to 2018, 2020, and beyond using the 2017 CPS ASEC Research File and 2018 CPS ASEC Bridge File, respectively.
[3] CPS ASEC Files for calendar years 2018, 2020, and beyond can be compared to each other. They can also be compared to estimates from 2016 using the 2017 CPS ASEC Research File and 2017 using the 2018 CPS ASEC Bridge File.
[4]The Census Bureau recommends users consider the impact of the pandemic on 2020 CPS ASEC data collection when interpreting changes in health insurance coverage between calendar year 2019 and other years. For more information refer to <https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehsd-wp2020-13.pdf >.
Note: All years refer to calendar years.

COVID-19 Pandemic Effect on Survey Operations

The coronavirus pandemic and related stay-at-home orders during the spring of 2020 also affected how the Census Bureau collected data for the CPS ASEC. The report, Health Insurance Coverage in the United States: 2019, P60-271 (released in September 2020) provides an overview of the issues.[6] In addition, the Census Bureau produced several working papers exploring how changes in CPS data collection in 2020 may have affected 2019 estimates. These analyses revealed that the 2020 CPS ASEC sample differed from the previous year with respect to several characteristics that are correlated with health insurance coverage. For example, the 2020 CPS ASEC sample was older, more educated, and more likely to have a disability than the 2019 sample.[7] Researchers should consider the effect of the pandemic on CPS ASEC

[6] For more information, refer to "The Impact of the Coronavirus (COVID-19) Pandemic on the CPS ASEC" text box in "Health Insurance Coverage in the United States: 2019," available at <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-271.pdf>.
[7] Additional information related to the effect of COVID-19 on the 2020 CPS ASEC is available from Edward R. Berchick, Laryssa Mykyta, and Sharon M. Stern, "The Influence of COVID-19- Related Data Collection Changes on Measuring Health Insurance Coverage in the 2020 CPS ASEC," <https://www.census.gov/library/working-papers/2020/demo/SEHSD-WP2020-13.html>; and Jonathan Rothbaum and C. Adam Bee, "Coronavirus Infects

data collection when interpreting changes in health insurance coverage between 2019 and other years using the CPS ASEC. As a result, no direct comparisons between calendar year coverage in 2019 (collected in 2020) and other survey years are reported in this paper.

Decennial Census-Based Population Controls

To create estimates for the U.S. population from a sample, the CPS ASEC applies weights to the sample results based on independent estimates of sex, age, race, and Hispanic/non-Hispanic categories.[8] These independent estimates are based on the civilian noninstitutionalized population counts from the decennial census, which are then projected forward each year using administrative data on births, deaths, and net migration. The estimates are updated every decade to reflect new census results.[9] Weighting adjustments mitigate nonresponse bias based on age, sex, race, and Hispanic origin and ensure that the weighted sample is representative of the U.S. population. Updated population controls that use the 2020 Census were employed to weight the official health insurance estimates from the CPS ASEC for calendar years 2021 and going forward. Comparisons between calendar year 2020 CPS ASEC estimates and prior years should use 2010 Census-based population controls, while comparisons between calendar year 2020 and later years should use 2020 Census-based population controls. The figures presented in this paper use 2020 Census-based population controls for calendar years 2020 and going forward. The 2022 annual report, Health Insurance Coverage in the United States: 2021 (P60-278), included an appendix illustrating the effect of the change in population controls.[10] While it is best to compare estimates using the same population controls, the analysis showed that the effect was minimal and comparisons can be made between estimates using 2010 Census-based population controls and estimates using 2020 Census-based population controls.

3. RECENT CHANGES IN THE HEALTH INSURANCE LANDSCAPE

Changes in health insurance coverage over time reflect economic trends, demographic shifts, and changes in federal and state policy. Several such policy changes are related to the Patient Protection and Affordable Care Act (ACA).

Surveys, Too: Nonresponse Bias During the Pandemic in the CPS ASEC," <https://www.census.gov/library/working-papers/2020/demo/SEHSD-WP2020-10.html>.

[8] More information on CPS Survey design is available in Current Population Survey Design and Methodology Technical Paper 77 <https://www2.census.gov/programs-surveys/cps/methodology/CPS-Tech-Paper-77.pdf>.

[9] In recent decades, the decennial census has usually provided all the data necessary to produce the population base used in the population controls. However, changes in disclosure avoidance practices and delays in the 2020 Census necessitated changes to the data sources that produce the base population. The updated population controls use a Blended Base that drew on the 2020 Census, 2020 Demographic Analysis Estimates, and Vintage 2020 Postcensal Population Estimates. More information on this methodology can be found at <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2020-2021/methods-statement-v2021.pdf>.

[10] For more information, refer to Katherine Keisler-Starkey and Lisa N. Bunch, "Health Insurance Coverage in the United States: 2021," *Current Population Reports*, P60-278, U.S. Census Bureau, Washington, DC, 2022, <https://www.census.gov/library/publications/2022/demo/p60-278.html>.

Many of the provisions of the ACA went into effect in 2014, including the optional expansion of Medicaid eligibility by states. The first year, 24 states and the District of Columbia expanded eligibility thresholds for Medicaid. By 2022, all but 12 states had expanded Medicaid eligibility.

As a result, many people, particularly adults aged 19 to 64, may be eligible for more coverage options under the ACA. Based on family income, some people may qualify for subsidies or tax credits to help pay for premiums associated with health insurance plans. In addition, people with lower incomes may be eligible for Medicaid coverage if they resided in one of the states (or the District of Columbia) that expanded Medicaid eligibility.

Notably, some provisions of the ACA no longer apply. For example, as of 2019, the individual mandate requiring individuals to be covered by health insurance or pay a tax penalty was cancelled at the federal level, although several states and the District of Columbia have continued or implemented state health insurance coverage mandates.[11]

The economic shock related to the COVID-19 pandemic in 2020 and recovery in the wake of the continued COVID-19 pandemic also may have affected health insurance coverage in 2022. The Families First Coronavirus Response Act required states, as a condition of receiving increased Medicaid funding, to provide continuous coverage to Medicaid beneficiaries for the duration of the COVID-19 pandemic.[12] The American Rescue Plan Act further increased Medicaid funding to states, expanded the income thresholds for eligibility for Marketplace tax credits, increased premium subsidies for those eligible, waived Marketplace coverage premiums for the unemployed, and introduced additional measures to increase access to care and reduce the cost of coverage.[13]

Data from the Centers for Medicare and Medicaid Services showed that Medicaid and the Children's Health Insurance Program (CHIP) enrollment continued to increase in 2022, following increases in 2020 and 2021 after declines in enrollment from 2017 to 2019. Specifically, Medicaid and CHIP enrollment increased by about 5.4 million individuals between January and December 2022.[14] Further, data on Marketplace enrollment also suggest an increase from 11.4 million people who enrolled or were re-enrolled in Marketplace plans during the 2020 Open Enrollment Period to 12.0 million people who enrolled or re-enrolled in Marketplace plans during the 2021 Open Enrollment Period.[15] An additional

[11] California, Massachusetts, New Jersey, Rhode Island, Vermont, and the District of Columbia have continued or implemented state coverage mandates after the cancellation of the federal individual mandate.

[12] For more information, refer to the "Health Care Provisions in the Families First Coronavirus Response Act, P.L. 116-127," March 18, 2020, <https://www.congress.gov/116/plaws/publ127/PLAW-116publ127.pdf>; Congressional Research Service, "Health Care Provisions in the Families First Coronavirus Response Act," P.L. 116-127, R46316, April 17, 2020, <https://crsreports.congress.gov/product/pdf/R/R46316>.

[13] For more information, refer to the "American Rescue Plan Act of 2021," P.L. 117-2, March 11, 2021, <https://www.congress.gov/117/plaws/publ2/PLAW-117publ2.pdf>; Katie Keith, "Final Coverage Provisions In The American Rescue Plan And What Comes Next," Health Affairs Blog, DOI: 10.1377/hblog20210311.725837, March 11, 2021.

[14] December 2022 Medicaid and CHIP Enrollment Trends Snapshot is available at <https://www.medicaid.gov/sites/default/files/2023-03/December-2022-medicaid-chip-enrollment-trend-snapshot.pdf>. For information on changes in Medicaid enrollment between 2017 and 2019, refer to <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>.

[15] For more information, refer to the Centers for Medicare and Medicaid Services 2021 Open Enrollment Report, <https://www.cms.gov/files/document/health-insurance-exchanges-2021-open-enrollment-report-final.pdf> and

2.8 million people enrolled in Marketplace coverage in 2021 during the Special Enrollment Period, a time outside the yearly Open Enrollment Period where users were allowed to sign up for health insurance in response to the COVID-19 health emergency. Over 2.5 million more consumers enrolled in Marketplace coverage during the 2022 Open Enrollment Period than in 2021.[16]

4. ESTIMATES OF HEALTH INSURANCE COVERAGE: 2013 TO 2022

Uninsured rate

Figure 1 shows the percentage of people without health insurance coverage from 2013 to 2017, under the legacy processing system, and 2017 to 2022, using the updated processing system.[17] All comparisons between 2013 and 2020 use 2010 Census-based population controls; all comparisons between 2020 and 2022 use 2020 Census-based population controls.[18] All comparative statements in this paper have undergone statistical testing, and, unless otherwise noted, all comparisons are statistically significant at the 10-percent significance level.

The uninsured rate declined from 2013 to 2014, when many provisions of the Patient Protection and Affordable Care Act (ACA) went into effect and continued to decline through 2016. The uninsured rate in 2017 was not statistically different from the rate in 2016 using the legacy processing system. However, the uninsured rate for 2017 was lower using the updated processing system than under the legacy system. The percentage of uninsured increased between 2017 and 2018 by 0.5 percentage points to 8.5 percent.

At 8.6 percent, the uninsured rate in 2020 was not significantly different than the uninsured rate in 2018.[19] The CPS ASEC considers people to be uninsured if they had no coverage at all during a calendar year. Therefore, people who lost health insurance coverage in 2020 were not considered uninsured in 2020. In 2021, 8.3 percent of people were uninsured for the entire year, representing a 0.4-percentage-point decline in the uninsured rate from 2020 (8.6 percent). The decrease in the uninsured rate was driven in part by an increase in public coverage. The uninsured rate in 2022 was significantly lower than

2021 Final Marketplace Special Enrollment Period Report <https://www.hhs.gov/sites/default/files/2021-sep-final-enrollment-report.pdf>.

[16] For more information, refer to the Centers for Medicare and Medicaid Services 2022 Open Enrollment Report, <https://www.cms.gov/files/document/health-insurance-exchanges-2022-open-enrollment-report-final.pdf>.

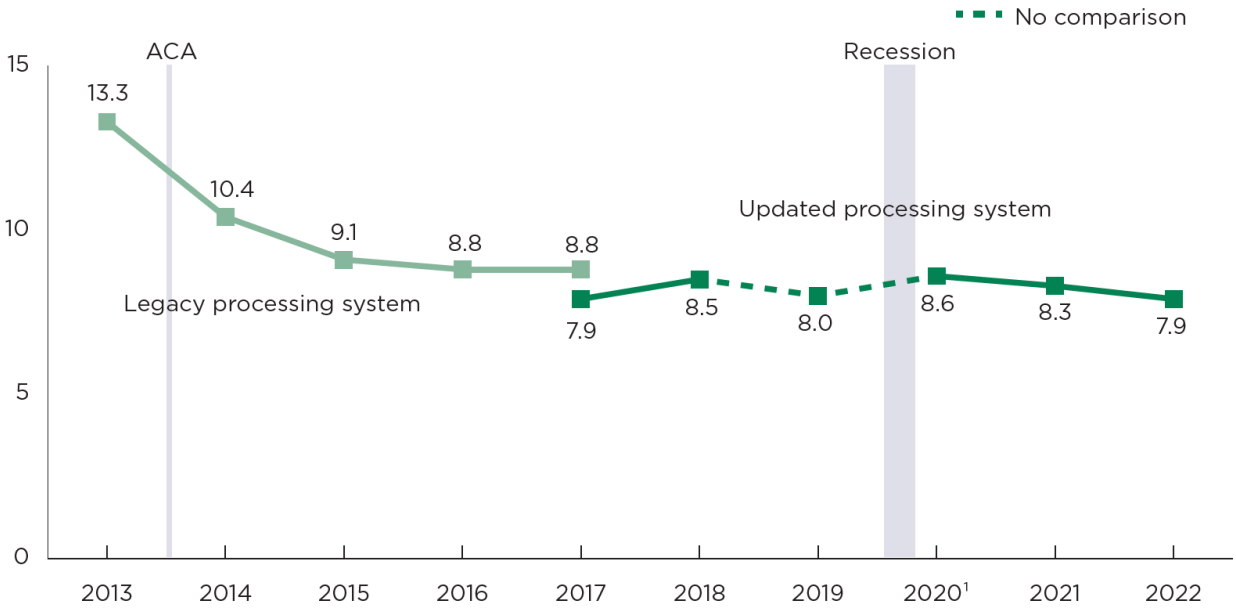
[17] Throughout this working paper, details may not sum to totals because of rounding.

[18] For more information on the difference between 2020 estimates using 2020 Census-based population controls and the previous version using 2010 Census-based population controls, refer to Appendix A in Katherine Keisler-Starkey and Lisa N. Bunch, "Health Insurance Coverage in the United States: 2021," *Current Population Reports*, P60-278, U.S. Census Bureau, Washington, DCC, 2021, <https://www.census.gov/library/publications/2022/demo/p60-278.html>.

[19] Comparisons between 2018 and 2020 estimates use 2010 Census-based population controls.

the uninsured rate in 2021. In 2022, 7.9 percent of people were uninsured for the entire year, a 0.4-percentage-point decline from 2021 (8.3 percent).[20]

Figure 1.
Percentage of People Without Health Insurance Coverage: 2013 to 2022
(Numbers in percent. Population as of March of the following year.)



[1] Beginning in 2020, population controls were based on the 2020 Census.

Note: The Affordable Care Act (ACA) marks when provisions of the ACA went into effect. Information on confidentiality protection, sampling error, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement Bridge File and 2014 to 2023 Annual Social and Economic Supplements (CPS ASEC).

Private health insurance coverage

The percentage of people with private health insurance coverage from 2013 to 2022 is presented in Figure 2.[21]

As shown, there was an increase in private coverage rates between 2013 and 2015, coinciding with the implementation of the ACA, followed by a leveling of private coverage between 2015 and 2017. Using the updated processing system, there was no statistically significant change in the private coverage rate between 2017 and 2018. However, between 2018 and 2020, the percentage of people with private coverage at any point during the year declined from 67.3 percent to 66.5 percent, decreasing another

[20] For more information, refer to Katherine Keisler-Starkey, Lisa N. Bunch, and Rachel A. Lindstrom, "Health Insurance Coverage in the United States: 2022," *Current Population Reports*, P60-281, U.S. Census Bureau, Washington, DC, 2023, <https://www.census.gov/library/publications/2023/demo/p60-281.html>.

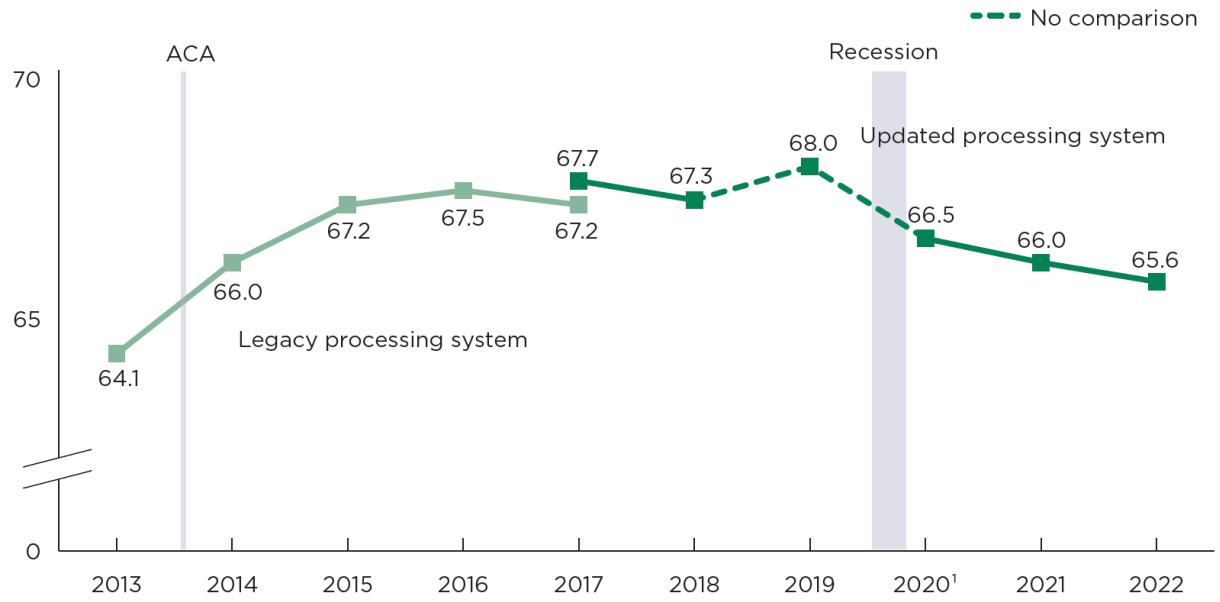
[21] Private coverage includes employer-sponsored insurance and insurance purchased directly by an individual, through a broker, or through the Marketplace (such as healthcare.gov). The updated processing system further includes TRICARE as private coverage.

0.6 percentage points to 66.0 percent from 2020 to 2021. There was no statistically significant change in the private coverage rate between 2021 and 2022.

Figure 2.

Percentage of People With Private Health Insurance Coverage: 2013 to 2022

(Numbers in percent. Population as of March of the following year.)



[1] Beginning in 2020, population controls were based on the 2020 Census.

Note: The Affordable Care Act (ACA) marks when provisions of the ACA went into effect. Information on confidentiality protection, sampling error, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement Bridge File and 2014 to 2023 Annual Social and Economic Supplements (CPS ASEC).

Public health insurance coverage

Figure 3 shows the percentage of people with public coverage and Medicaid coverage in the CPS ASEC from 2013 to 2022. Using the legacy processing system, public coverage increased from 2013 to 2017.[22] Public coverage rates were lower in 2017 using the updated processing system compared to the legacy processing system. TRICARE, however, is defined as private coverage in the updated processing system instead of public coverage as it is in the legacy system. Although public coverage rates declined between 2017 and 2018 using the updated processing system, the percentage of people holding public coverage increased to 34.8 percent between 2018 and 2020.[23] Using 2020 Census-based population controls, the public coverage rate was 34.5 percent in 2020. Between 2020 and 2021, the public coverage rate increased 1.2 percentage points to 35.7 percent, driven by an increase in rates of Medicare and Medicaid coverage. There was no statistically significant change in the public coverage rate between 2021 and 2022.

[22] Under the legacy processing system, public coverage increased annually, except for 2015 to 2016, which was not a significant change.

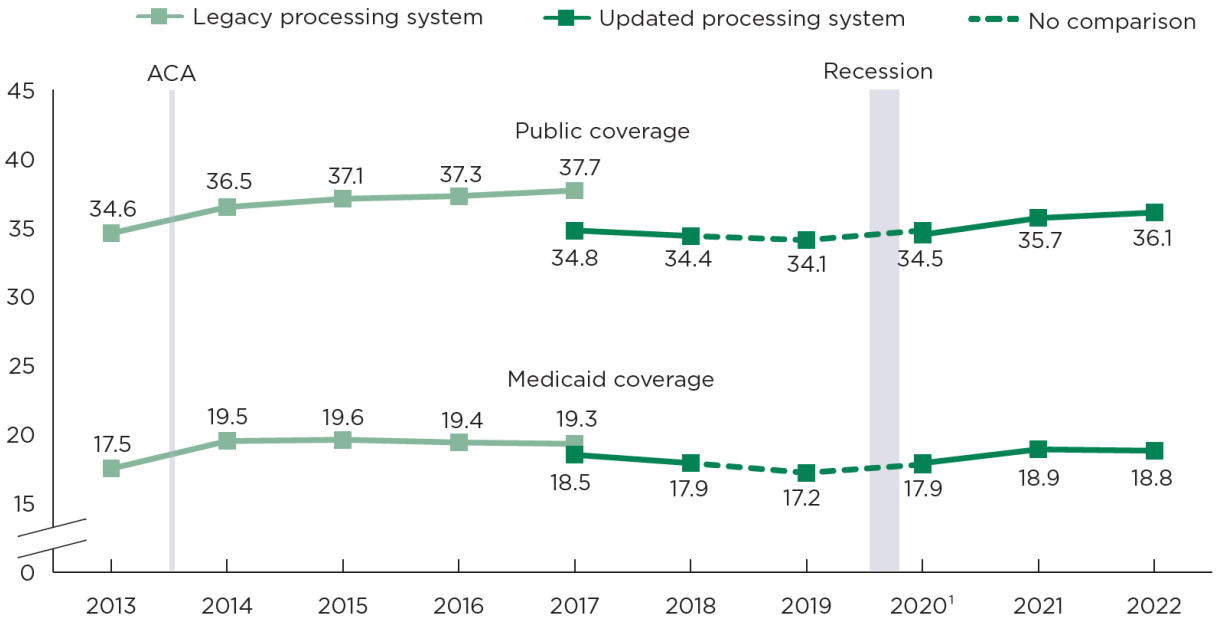
[23] This estimate for calendar year 2020 uses 2010 Census-based population controls.

Although there was no significant difference in Medicaid coverage rates reported in the CPS ASEC between 2018 (17.9 percent) and 2020 (17.8 percent[24]), the lack of apparent change masked a 0.4 percentage-point increase in the percentage of working-age adults aged 19 to 64 covered by Medicaid during this period (Figure 4). Working-age adults may have been vulnerable to losing private coverage during the COVID-19 pandemic due to widespread layoffs during this time. Using 2020 Census-based population controls, Medicaid coverage rates increased between 2020 and 2021 by 0.9 percentage points to 18.9 percent in 2021. A closer look reveals that Medicaid coverage rates increased for all broad age groups between 2020 and 2021, which may reflect the changes in policies to improve access to care. Medicaid coverage did not change significantly for working-age adults (19 to 64 years old) between 2021 and 2022.

Figure 3.

Percentage of People With Public Coverage and Medicaid Coverage: 2013 to 2022

(Numbers in percent. Population as of March of the following year.)



[1] Beginning in 2020, population controls were based on the 2020 Census.

Note: The Affordable Care Act (ACA) marks when provisions of the ACA went into effect. Information on confidentiality protection, sampling error, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf>.

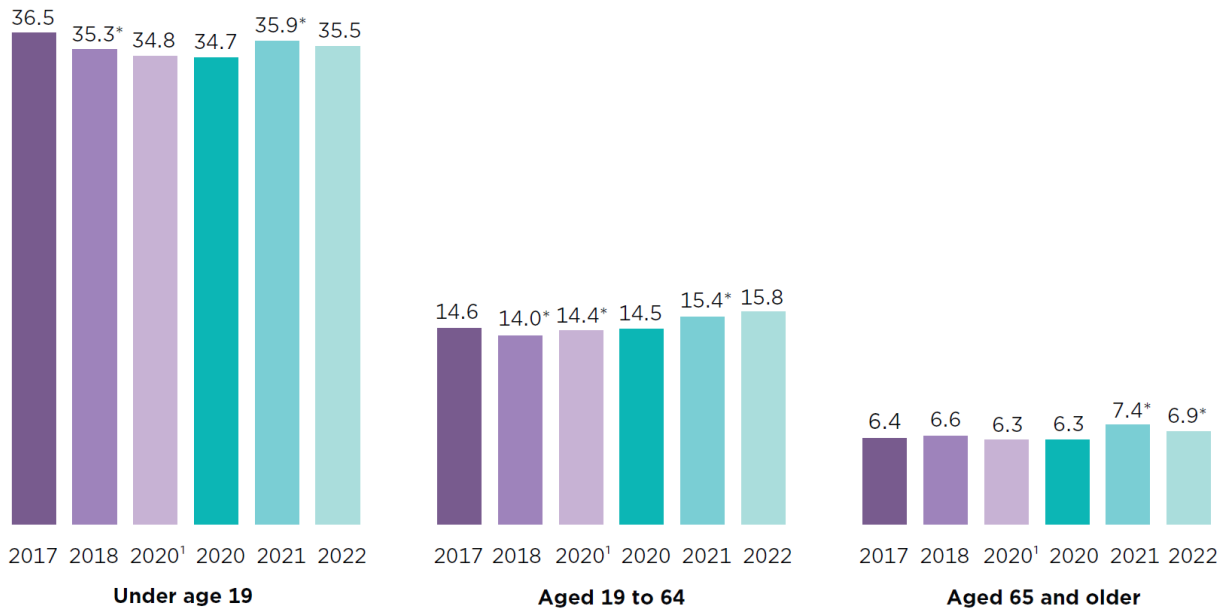
Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement Bridge File and 2014 to 2023 Annual Social and Economic Supplements (CPS ASEC).

[24] The estimate for calendar year 2020 uses 2010 population controls.

Figure 4.

Percentage of People With Medicaid Coverage by Age Group: 2017 to 2022

(Numbers in percent. Population as of March of the following year.)



* Denotes a statistically significant change from the previous year, (e.g., between 2017 and 2018, 2018 and 2020[1], 2020 and 2021, or 2021 and 2022.) Users should consider the effect of the pandemic on 2020 CPS ASEC data collection when interpreting changes in health insurance coverage between 2019 and other years using the CPS ASEC. As a result, no comparisons between calendar year coverage in 2019 (collected in 2020) and other survey years are reported here.

[1] Denotes 2020 estimates using 2010 Census-based population controls.

Note: Information on confidentiality protection, sampling error, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar23.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement Bridge File and 2019, 2021, 2022, and 2023 Annual Social and Economic Supplements (CPS ASEC).

5. SUMMARY

Comparing estimates of health insurance coverage from the CPS ASEC across time can be complex due to questionnaire redesign, policy changes, and current events that have occurred over the last decade. Estimates from 2013 are not directly comparable with earlier years due to a questionnaire redesign in 2014. An improved system for processing data, officially launched for calendar year 2018, requires consideration when comparing data across the last decade. Data users should also exercise caution when making comparisons with calendar year 2019 estimates as the COVID-19 pandemic affected data collection in 2020. Finally, population controls based on the decennial census have also changed in the last several years; estimates up until 2019 use 2010 Census-based population controls, while estimates in 2020 and later years use 2020 Census-based population controls.

Given these complexities, this paper discusses appropriate comparisons of health insurance coverage rates over time. Data show that the uninsured rate declined over time. The rate of private coverage increased with the implementation of the ACA, leveled off, and then decreased over the COVID-19 pandemic, and rates of public coverage and Medicaid coverage also experienced both increases and decreases over the 2013 to 2022 time period.