



National Uninsured Rate Reaches All-Time Low in Early 2022

The uninsured rate in early 2022 has reached an all-time low of 8.0% among all U.S. residents, indicating that 5.2 million people have gained health insurance coverage since 2020.

Aiden Lee, Joel Ruhter, Christie Peters, Nancy De Lew, Benjamin D. Sommers

KEY POINTS

- The nation's uninsured rate declined significantly in 2021 and early 2022, reaching an all-time low of 8.0 percent for U.S. residents of all ages in the first quarter (January-March) of 2022, based on new data from the National Health Interview Survey.
- Approximately 5.2 million people – including 4.1 million adults ages 18-64 and 1 million children ages 0-17 – have gained health coverage since 2020. These gains in health insurance coverage are concurrent with the implementation of the American Rescue Plan's enhanced Marketplace subsidies, the continuous enrollment provision in Medicaid, several recent state Medicaid expansions, and substantial enrollment outreach by the Biden-Harris Administration in 2021-2022.
- Uninsured rates among adults ages 18-64 declined from 14.5 percent in late 2020 to 11.8 percent in early 2022. The uninsured rate among children ages 0-17, which had increased during 2019 and 2020, fell from 6.4 percent in late 2020 to 3.7 percent in early 2022.
- Approximately 5.4 percent of adults 18-64 reported having Marketplace coverage in early 2022 compared to 4.4 percent in 2020, reflecting approximately 2 million additional adult Marketplace enrollees – roughly half of the 4 million adults who gained health coverage over this period.
- Changes in uninsured rates from 2020 to 2022 were largest among individuals with incomes below 100% of the Federal Poverty Level (FPL) and incomes between 200% and 400% FPL.
- State-specific analyses using the American Community Survey show that the largest changes in the uninsured rate for low-income adults between 2018-2020 generally occurred in states that recently expanded Medicaid. More recent state estimates beyond 2020 are not yet available.
- Overall, these results highlight the significant gains in health insurance coverage that occurred in 2021 and early 2022 associated with the Biden-Harris Administration's policies to support health insurance expansion. These gains build on the large reductions in the uninsured rate that occurred after the implementation of the Affordable Care Act (ACA) in 2014, which research demonstrates produced improved health outcomes, better access to care, and improved financial security for families.

BACKGROUND

Newly-released federal survey data show the uninsured rate reached an all-time low in early 2022 and suggest that the Biden-Harris Administration's efforts to improve access to affordable health insurance coverage have helped reduce the nation's uninsured rate in 2021 and early 2022.¹ Previous reports indicate that health coverage enrollment related to the Affordable Care Act (ACA) – Marketplace, Medicaid expansion, and the Basic Health Program – reached an all-time high of more than 35 million people in late 2021/early 2022.² The 2022 Open Enrollment Period saw an all-time high in Marketplace sign-ups of 14.5 million, following administrative and legislative actions such as an extended 2021 special enrollment period and implementation of expanded Marketplace subsidies under the American Rescue Plan (ARP).³ In addition, recent adoption of the ACA Medicaid expansion in several states has extended Medicaid coverage to low-income adults up to 138% of the Federal Poverty Level (FPL).

This Data Point examines new National Health Interview Survey (NHIS) data for the first quarter of 2022 to assess changes in health insurance coverage. The report also examines data from the American Community Survey (ACS) to analyze state-level uninsured rates for low-income adults, particularly with respect to states that have expanded Medicaid since 2018.

METHODS

We analyzed newly-released NHIS data from the Centers for Disease Control and Prevention's (CDC).⁴ Data are based on household interviews of a sample of the civilian noninstitutionalized population. The NHIS provides a reliable and consistent data source for assessing long-term changes in coverage, as indicated in a 2014 assessment by the White House Council of Economic Advisors.⁵ NHIS results in 2020 may not be as reliable for comparisons to survey results before the pandemic, though response rates in 2021 and 2022 have more closely resembled pre-pandemic levels; more details on NHIS data collection can be found in a previous ASPE report.⁶ We analyzed changes in coverage over time by age group and income group, as well as source of health insurance coverage.

We also analyzed ACS Public Use Microdata Sample (PUMS) 1-year data to estimate state-level changes in coverage for low-income adults from 2018 to 2020, as the NHIS does not have samples sizes to allow for state estimates for all states.* Several states have expanded Medicaid in the past few years, and a comparison of low-income adults' uninsured rates from 2018 to 2020 in these states can provide some indication of expansion effects in these states.

FINDINGS

National Results

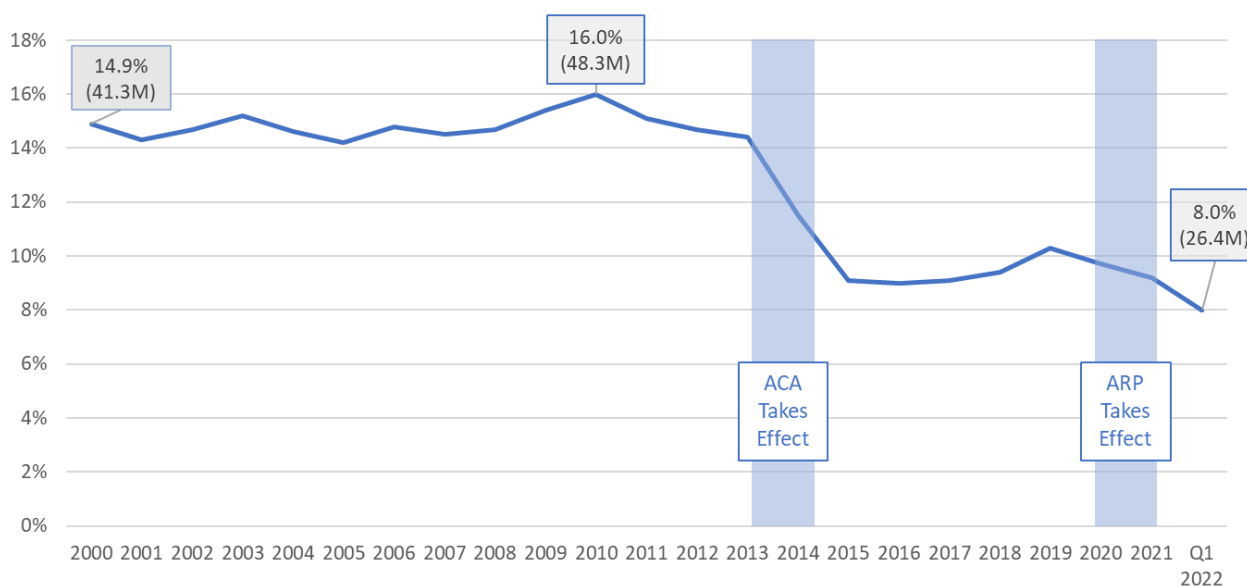
Figure 1 shows the national uninsured rates for the U.S. population (all ages) from 2000 through the most recent data. The uninsured rate for Q1 2022 was 8.0 percent, the lowest uninsured rate ever recorded in the NHIS.⁷ Prior to 2022, the lowest full-year uninsured estimate in the NHIS was 9.0 percent in 2016, and the lowest quarterly estimate was 8.6 percent in Q1 2016 (note that quarterly estimates are somewhat more

* We note that the ACS is not as timely as NHIS, and there are survey quality issues in 2020 due to the COVID-19 pandemic. The 2020 ACS 1-year data products do not meet the Census Bureau's statistical data quality standards, and instead the Census Bureau released experimental estimates from the 1-year 2020 ACS data; we use those experimental data products for our analysis in this report.

volatile than full year estimates, given their smaller sample sizes).^{8†} The new results correspond to 26.4 million uninsured individuals in Q1 2022, compared to an annual estimate of 31.6 million for 2020, indicating that approximately 5.2 million people gained health care coverage during this time period.⁹ This is a conservative estimate of the number of people who gained coverage since 2020, since uninsured rates rose in the second half of 2020; if we compare the Q1 2022 estimate to Q4 2020, the estimated number gaining coverage rises to 7.2 million.

Figure 1 demonstrates that the recent reductions in the uninsured rate built on the large coverage gains that occurred in the first 3 years after implementation of the ACA in 2014 and reversed a temporary increase in the uninsured rate from 2017-2019. Overall, the Q1 2022 uninsured population represents a drop of nearly 22 million from the peak of 48.3 million in 2010.

Figure 1. National Uninsured Rate, All Ages (2000 – Q1 2022)



Source: National Health Interview Survey’s Health Insurance Coverage Reports, 2000-2021.

<https://www.cdc.gov/nchs/nhis/healthinsurancecoverage.htm>; Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022.

https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf

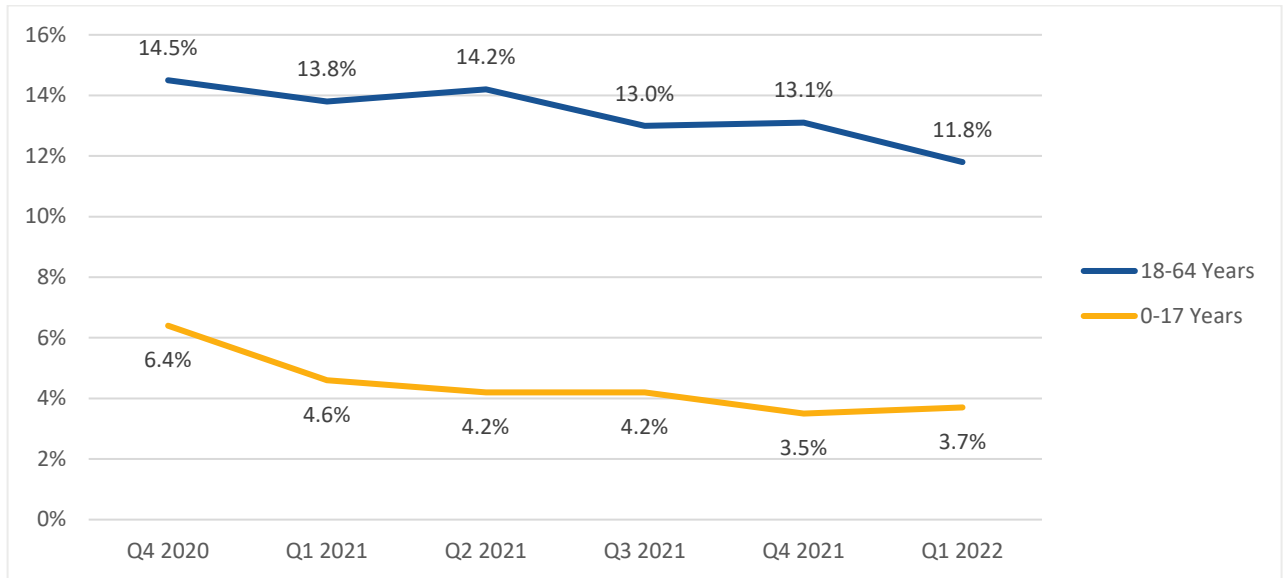
Note: Beginning in the third quarter of 2004, two additional questions were added to the NHIS insurance section to reduce potential errors in reporting Medicare and Medicaid status, resulting in two methods to estimate uninsurance. Beginning in 2005, all estimates were calculated using Method 2. Please see “Technical Notes” for the Early Release of Health Insurance Estimates Based on Data From the 2010 National Health Interview Survey for more information.

Figure 2 shows quarterly changes in health insurance coverage among adults ages 18-64, for whom the uninsured rate was 11.8 percent in Q1 2022, a 2.7 percentage-point decrease from Q4 2020. Children ages 0 to 17 years also experienced a 2.7 percentage-point decrease in their uninsured rates in the same time frame. If we focus on full-year estimates for 2020 vs. Q1 2022, the change for adults ages 18-64 was 2.1 percentage points (from 13.9 percent to 11.8 percent) with approximately 4.1 million adults gaining health coverage, and

[†] The NHIS underwent a survey redesign in 2019. While the questions used to assess health insurance coverage did not change, the questionnaire design and sample weighting were revised. A technical paper conducted by the National Center for Health Statistics concluded that the redesign “may have shifted upward by 0.7 percentage points due to the methodological change” the national estimate for the uninsured rate among adults. This upward shift since 2019 means that the Q1 2022 uninsured estimate of 8.0 percent likely represents a record-low by an even larger margin than the 0.6 percentage points compared to Q1 2016 and 1.1 percentage points compared to full-year 2016. See <https://www.cdc.gov/nchs/data/nhis/earlyrelease/EReval202009-508.pdf> for further details on the NHIS redesign.

the change for children was 1.4 percentage points (from 5.1 percent to 3.7 percent) with approximately 1 million children gaining health coverage.^{10,11}

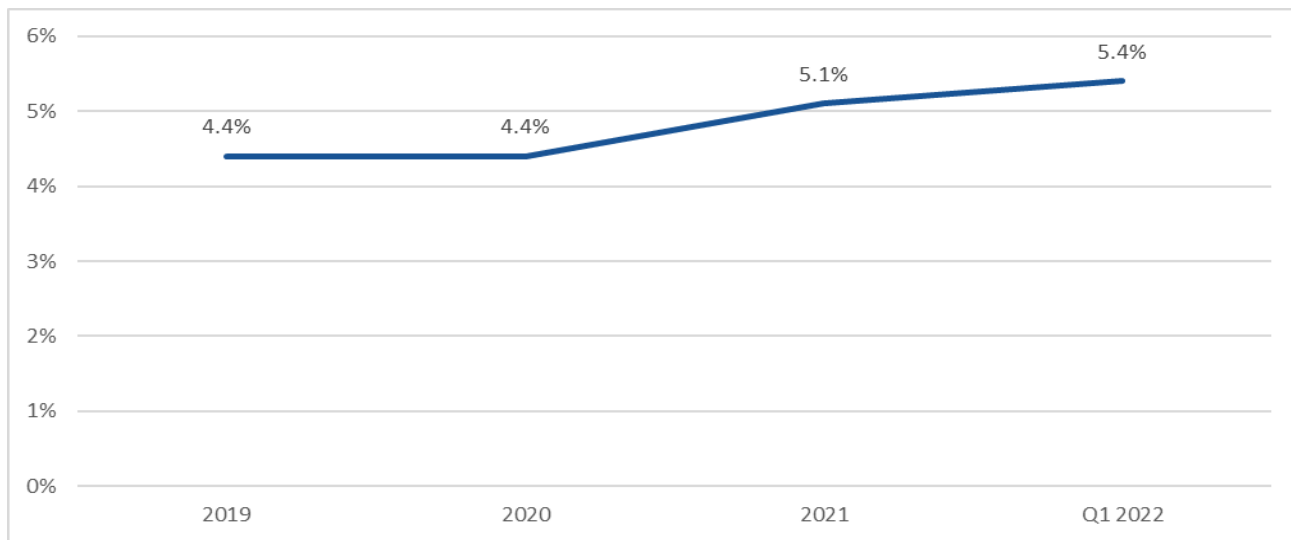
Figure 2. Uninsured Rate by Quarter, Populations Ages 18-64 and Ages 0-17 (Q4 2020 – Q1 2022)



Source: Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, October 2020–December 2021. https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2021_Q14.pdf; Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022. https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf

Figure 3 shows the growth in Marketplace coverage (or “Exchange-based private coverage,” as the NHIS refers to it) among adults 18-64 since 2019. An estimated 5.4 percent of adults ages 18-64 reported having Marketplace coverage in early 2022, compared to 4.4 percent in 2019. This represents an increase of approximately 2 million adults, or roughly half of the estimated reduction in the adult uninsured population during this period. While survey-based information on Marketplace coverage is not as reliable as official administrative enrollment statistics, this result is consistent with the record-breaking Marketplace Open Enrollment Period for 2022¹² and suggests that Marketplace coverage gains in 2021 and early 2022 were a substantial contributor to the reduction in the uninsured rate.

Figure 3. Percentage of Adults Ages 18-64 with Marketplace Coverage (2019 – Q1 2022)



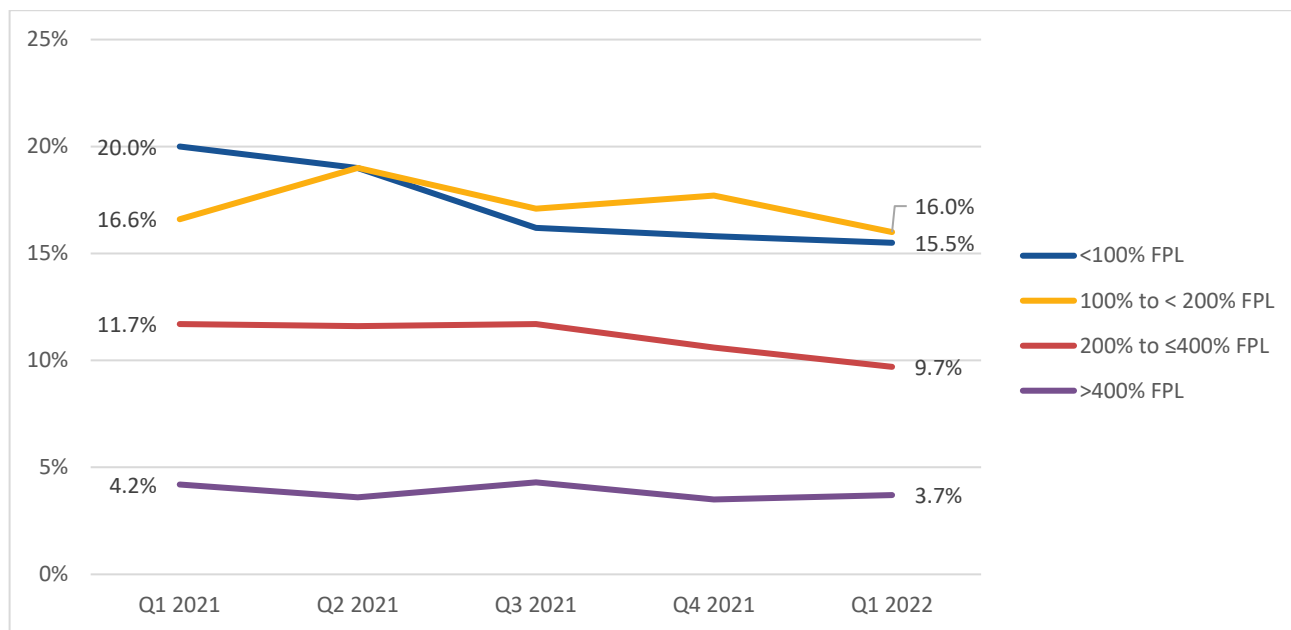
Source: NHIS Interactive Quarterly Early Release Estimates.

https://wwwn.cdc.gov/NHISDataQueryTool/ER_Quarterly/index_quarterly.html

Figure 4 shows that uninsured rates among those under age 65 declined for all income bands since the beginning of 2021. Those with incomes below 100% FPL had the greatest gain in coverage, with uninsured rates decreasing 4.5 percentage points (from 20.0 to 15.5 percent). Uninsured rates for those between 100% and 200% FPL went from 16.6 to 16.0 percent, though when compared to Q2 2021, there was a larger decline from 19.0 to 16.0 percent. Uninsured rates for those with incomes between 200% and 400% FPL decreased 2.0 percentage points (from 11.7 in Q1 2021 to 9.7 percent in Q1 2022). Those with incomes above 400% FPL had the lowest uninsured rate throughout the study period, and it declined modestly from 4.2 to 3.7 percent. In relative terms, these declines represent a 22 percent reduction in the uninsured rate for those below 100% FPL, a 16 percent reduction for those between 100% and 200% FPL (compared to Q2 2021), a 17 percent reduction for those between 200% and 400% FPL, and a 12 percent reduction for those above 400% FPL.

These declines in uninsured rates coincide with the implementation of the ARP subsidies, which were retroactive to January 1, 2021, and boosted the size of premium tax credits for those with incomes between 100% and 400% FPL and extended tax credits to those with incomes above 400% FPL for the first time. Previous ASPE analyses have shown the impacts of the ARP in lowering Marketplace premiums and improving plan affordability through increased access to zero- and low-premium plans on the HealthCare.gov platform.^{13,14}

Figure 4. Uninsured Rate Among U.S. Residents Under Age 65, by Income (Q1 2021 – Q1 2022)



Note: FPL = Federal Poverty Level.

Source: Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022. https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf

State Results

Turning to state-specific analyses using the ACS, Table 1 shows state-level changes in uninsured rates for low-income adults ages 18-64 from 2018 to 2020. 18 states saw uninsured rates for this population decrease over this period, with decreases ranging from -0.1 percentage points to -8.4 percentage points. Fifteen of the 18 states experiencing declining uninsured rates have expanded Medicaid. Uninsured rates declined in all 5 states that expanded Medicaid in 2019-2020, with decreases ranging from -1.4 percentage points (Utah) to -8.4 percentage points (Idaho). Future analyses of the 2 states that expanded Medicaid in 2021 (Missouri and Oklahoma) are needed to continue monitoring the coverage impacts of expansion.

Table 1. Uninsured Rates by State Among Adults Ages 19-64, with Incomes Under 138% FPL, 2018 vs. 2020

	Medicaid Expansion Year	Sample Size for 2020	2018	2020*	Percentage Point Change, 2018 vs. 2020
Alabama	n/a	6,734	31.9%	32.2%	0.3%
Alaska	2015	1,078	24.7%	25.2%	0.5%
Arizona	2014	7,844	25.2%	26.5%	1.4%
Arkansas	2014	4,430	22.0%	22.8%	0.9%
California	2014	45,611	17.0%	17.4%	0.4%
Colorado	2014	5,362	18.1%	21.2%	3.1%
Connecticut	2014	3,400	12.7%	11.5%	-1.2%
Delaware	2014	961	11.8%	17.7%	5.9%
District of Columbia	2014	980	8.6%	4.5%	-4.1%
Florida	n/a	19,862	34.1%	34.0%	-0.1%
Georgia	n/a	10,803	37.8%	36.9%	-0.9%
Hawaii	2014	2,108	13.3%	10.3%	-3.0%
Idaho	2020	2,023	28.2%	19.7%	-8.4%
Illinois	2014	15,190	18.8%	19.2%	0.4%
Indiana	2015	8,207	20.6%	17.3%	-3.3%
Iowa	2014	3,884	13.5%	15.3%	1.7%
Kansas	n/a	3,605	28.2%	29.6%	1.3%
Kentucky	2014	6,387	13.1%	13.1%	0.0%
Louisiana	2016	6,017	19.0%	19.5%	0.5%
Maine	2019	1,610	21.3%	16.5%	-4.9%
Maryland	2014	5,942	16.7%	15.7%	-1.1%
Massachusetts	2014	7,514	6.7%	7.4%	0.6%
Michigan	2014	13,189	13.9%	14.1%	0.2%
Minnesota	2014	5,051	11.9%	13.6%	1.6%
Mississippi	n/a	4,220	36.4%	32.2%	-4.3%
Missouri	2021	8,164	27.7%	29.4%	1.7%
Montana	2016	1,374	17.1%	16.5%	-0.6%
Nebraska	2020	2,122	27.9%	25.2%	-2.8%
Nevada	2014	3,321	25.7%	28.5%	2.8%
New Hampshire	2014	1,231	15.9%	15.9%	0.0%
New Jersey	2014	8,156	21.0%	21.1%	0.0%
New Mexico	2014	2,962	19.4%	17.4%	-2.0%
New York	2014	25,769	12.0%	11.9%	-0.2%
North Carolina	n/a	11,696	30.3%	31.2%	0.9%
North Dakota	2014	755	19.8%	20.4%	0.6%
Ohio	2014	14,187	16.2%	15.5%	-0.7%
Oklahoma	2021	6,632	37.5%	40.3%	2.9%
Oregon	2014	4,416	16.8%	16.8%	0.0%
Pennsylvania	2015	16,687	15.2%	15.9%	0.7%
Rhode Island	2014	1,101	8.6%	9.5%	0.9%
South Carolina	n/a	6,161	30.0%	30.0%	0.0%
South Dakota	n/a	1,006	31.3%	35.4%	4.1%
Tennessee	n/a	8,075	29.1%	29.6%	0.5%
Texas	n/a	28,235	44.6%	45.0%	0.4%
Utah	2020	3,484	25.0%	23.6%	-1.4%
Vermont	2014	808	6.1%	9.0%	2.8%
Virginia	2019	8,626	27.4%	20.1%	-7.2%
Washington	2014	7,229	16.8%	15.8%	-1.0%
West Virginia	2014	2,508	15.7%	16.8%	1.1%
Wisconsin	n/a	6,373	15.4%	16.7%	1.3%
Wyoming	n/a	569	27.3%	38.4%	11.1%

Notes: States in bold expanded Medicaid between 2018 and 2020.

*The 2020 ACS 1-year data products do not meet the Census Bureau’s statistical data quality standards. The Census Bureau released experimental estimates from the 1-year 2020 ACS data, which were used for this analysis; results from the experimental estimates

should be interpreted with caution. For more information, see: <https://www.census.gov/newsroom/press-releases/2021/experimental-2020-acs-1-year-data.html>

Source: ASPE analysis of 2018 and 2020 American Community Survey (ACS) Public Use Microdata Sample (PUMS) 1-year data.

CONCLUSION

The Biden-Harris Administration took administrative and legislative actions in 2021 that have helped individuals gain and maintain health coverage, including robust outreach efforts and expanded Marketplace subsidies under the ARP. These health coverage gains build on the large reductions in the uninsured rate that occurred after the implementation of the Affordable Care Act (ACA) in 2014. Medicaid enrollment has grown under the continuous enrollment provision passed by Congress as part of the COVID-19 pandemic response, as well as several states' recent Medicaid expansions. With these policies in effect, the U.S. uninsured rate declined throughout 2021 and early 2022, reaching an all-time low of 8.0 percent by the first quarter of 2022. States that expanded Medicaid since 2019 have experienced a decrease in the uninsured rates among low-income adults. Additional information on state-level changes will be available later this year after release of the 2021 ACS.

Research over the past decade demonstrates that the ACA has produced improved health outcomes, better access to care, and improved financial security for families.^{15,16,17} Understanding the full nature of these historic gains in health insurance coverage as a result of the ACA and the ARP will be critical to maintaining high health coverage rates, assessing their impact on population health, and building on recent progress to make health insurance affordable and available to all Americans. Future analyses will explore state-level impacts as well as coverage changes by race and ethnicity and other demographic factors.

REFERENCES

- ¹ Cohen RA, Cha AE. Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf
- ² Lee A, Chu RC, Peters C, and Sommers BD. Health Coverage Changes Under the Affordable Care Act: End of 2021 Update. (Issue Brief No. HP-2022-17). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 2022. Accessed at: <https://www.aspe.hhs.gov/reports/health-coverage-changes-2021-update>
- ³ Lee A, Chu RC, Peters C, and Sommers BD. Health Coverage Changes Under the Affordable Care Act: End of 2021 Update. (Issue Brief No. HP-2022-17). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 2022. Accessed at: <https://www.aspe.hhs.gov/reports/health-coverage-changes-2021-update>
- ⁴ Cohen RA, Cha AE. Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf
- ⁵ White House Council of Economic Advisors. Methodological Appendix: Methods Used to Construct a Consistent Historical Time Series of Health Insurance Coverage. 2014. <https://obamawhitehouse.archives.gov/sites/default/files/docs/longtermhealthinsuranceseriesmethodologyfinal.pdf>
- ⁶ Lee A, Chu RC, Peters C, and Sommers BD. Health Coverage Changes Under the Affordable Care Act: End of 2021 Update. (Issue Brief No. HP-2022-17). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 2022. Accessed at: <https://www.aspe.hhs.gov/reports/health-coverage-changes-2021-update>
- ⁷ Executive Office of the President of the United States. 2016. The Economic Record of the Obama Administration: Reforming the Health Care System. https://obamawhitehouse.archives.gov/sites/default/files/page/files/20161213_cea_record_health_care_reform.pdf
- ⁸ Cohen R, Martinez M, and Zammitti E. Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, January–March 2016. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf>
- ⁹ Cohen RA, Terlizzi EP, Cha AE, Martinez ME. Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2020. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur202108-508.pdf>
- ¹⁰ Cohen RA, Terlizzi EP, Cha AE, Martinez ME. Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2020. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur202108-508.pdf>
- ¹¹ Cohen RA, Cha AE. Health Insurance Coverage: Early Release of Quarterly Estimates From the National Health Interview Survey, January 2021–March 2022. Centers for Disease Control and Prevention. National Health Interview Survey. Accessed at: https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2022_Q11.pdf
- ¹² <https://www.cms.gov/newsroom/fact-sheets/marketplace-2022-open-enrollment-period-report-final-national-snapshot>
- ¹³ Branham DK, Conmy AB, DeLeire T, Musen J, Xiao X, Chu RC, Peters C, and Sommers BD. Access to Marketplace Plans with Low Premiums on the Federal Platform, Part II: Availability Among Uninsured Non-Elderly Adults Under the American Rescue Plan (Issue Brief No. HP-2021-08). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 1, 2021. Available at: <https://aspe.hhs.gov/reports/accessmarketplace-plans-low-premiums-uninsured-american-rescue-plan>
- ¹⁴ Branham DK, Conmy AB, DeLeire T, Musen J, Xiao X, Chu RC, Peters C, and Sommers BD. Access to Marketplace Plans with Low Premiums on the Federal Platform, Part III: Availability Among Current HealthCare.gov Enrollees Under the American Rescue Plan (Issue Brief No. HP-2021-09). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. April 13, 2021. Available at: <https://aspe.hhs.gov/reports/access-marketplace-plans-low-premiums-federal-platform>
- ¹⁵ Gruber J, Sommers BD. The Affordable Care Act’s Effects on Patients, Providers, and the Economy: What We Know So Far. *Journal of Policy Analysis and Management*. 2019; 38(4): 1028-1052.
- ¹⁶ Mazurenko O, Balio CP, Agarwal R, Carroll AE, Menachemi N. The Effects Of Medicaid Expansion Under The ACA: A Systematic Review. *Health Aff (Millwood)*. 2018 Jun;37(6):944-950. doi: 10.1377/hlthaff.2017.1491. PMID: 29863941.

¹⁷ Creedon TB, Zuvekas SH, Hill SC, Ali MM, McClellan C, Dey JG. Effects of Medicaid expansion on insurance coverage and health services use among adults with disabilities newly eligible for Medicaid. *Health Serv Res.* 2022 Jul 10. doi: 10.1111/1475-6773.14034. Epub ahead of print. PMID: 35811358.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Assistant Secretary for Planning and Evaluation

200 Independence Avenue SW, Mailstop 447D
Washington, D.C. 20201

For more ASPE briefs and other publications, visit:
aspe.hhs.gov/reports



ABOUT THE AUTHORS

Aiden Lee is a Public Health Analyst in the Office of Health Policy in ASPE.

Joel Ruhter is an Analyst in the Office of Health Policy in ASPE.

Christie Peters is the Director of the Division of Health Care Access and Coverage for the Office of Health Policy in ASPE.

Nancy De Lew is the Associate Deputy Assistant Secretary of the Office of Health Policy in ASPE.

Benjamin D. Sommers is the Deputy Assistant Secretary of the Office of Health Policy in ASPE.

SUGGESTED CITATION

Lee A, Ruhter J, Peters C, De Lew N, Sommers BD. National Uninsured Rate Reaches All-Time Low in Early 2022. (Issue Brief No. HP-2022-23). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. August 2022.

COPYRIGHT INFORMATION

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

DISCLOSURE

This communication was printed, published, or produced and disseminated at U.S. taxpayer expense.

Subscribe to ASPE mailing list to receive email updates on new publications:

<https://list.nih.gov/cgi-bin/wa.exe?SUBED1=ASPE-HEALTH-POLICY&A=1>

For general questions or general information about ASPE:

aspe.hhs.gov/about