

Annual Report 2022

Special Edition | Featuring COVID-era data and insights



Contents

Foreword	2
Introduction	3
National Highlights	6
Findings	
Health Outcomes	7
Social and Economic Factors	15
Physical Environment	19
Clinical Care	20
State Rankings	22
International Comparison	24
COVID-era Disparities Survey	28
Appendix	
National Summary	34
Methodology	35
References	37



Humanizing the Pandemic’s Impact on Our Nation

Patricia L. Lewis, Executive Vice President & Chief Sustainability Officer, UnitedHealth Group

I want to thank you for taking the time to explore this year’s *America’s Health Rankings Annual Report* — one of the most comprehensive editions we have published to date.

It comes at a time unlike any other in the 30-plus year history of *America’s Health Rankings*. Nearly three years into the COVID-19 pandemic, we are just beginning to understand its lasting public health implications.

This year’s edition provides a significant step toward that understanding, particularly the pandemic’s impact on underserved communities. In addition to relying on national and state data, we have included real-time insights and survey data that add a new layer of depth to emerging health trends and bring more clarity to the pandemic’s impact and how it has widened health disparities.

The result is a more holistic understanding of the health trends shaping American society today. For example, more people are dying prematurely, including a notable increase in drug deaths. After declining in 2020, the percentage of people with multiple chronic conditions has increased. Long COVID is an emerging challenge for many Americans, particularly Hispanic adults.

At the same time, more Americans have health insurance coverage. Although shortfalls still remain, there are more mental health providers to meet the growing demand for services. And more people have access to high-speed internet, which is particularly important given the shift toward virtual care and the connectivity needed to address social isolation.

“
The real people behind these numbers are what make the work ahead so critically important.
”

The data you’ll see in the subsequent pages quantify the impact of a global pandemic and the urgent need to continue addressing the deep and persistent health disparities impacting our nation.

I hope you’ll also feel the very real and human impact of this moment. Many of us have watched — often from afar — a family member seriously ill with COVID-19. We have held the hand of a friend struggling through cancer treatments or grappling with drug addiction. We have all felt the mental and physical strain of the last three years.

The real people behind these numbers are what make the work ahead so critically important. Building on the insights in this report, it is up to the collective health system — health care companies, public health authorities, governments, community organizations and more — to partner and take action.

Despite the challenges ahead, I remain optimistic that the health system can rise to the moment to address longstanding disparities and improve the health and well-being of all Americans, for this generation and the next.

Introduction

Since 2020, Americans have experienced the devastating impact of living through a public health emergency. Despite having the highest per capita health spending among Organization for Economic Co-operation and Development (OECD) countries, the United States had the largest decrease in life expectancy during the COVID-19 pandemic.¹

The United Health Foundation, in partnership with the American Public Health Association, is pleased to present the 2022 special edition of the *Annual Report*. This special edition represents the *America’s Health Rankings*® platform’s broadest portrait to date of the COVID-19 pandemic’s impact, analyzing more than 80 measures at national and state levels to understand the impact of the pandemic at its height in 2020 and 2021, with focused analyses on health disparities by race and ethnicity. This year, the report is supplemented with COVID-19 vaccination and death data from the Centers for Disease Control and Prevention (CDC); long COVID data from the U.S. Census Bureau; and new data from the COVID-era Disparities Survey, conducted by Morning Consult in October 2022, which collected direct insights from individuals affected by the pandemic.

This special edition highlights profound disparities by race and ethnicity across nearly all areas of health and well-being. Disparities widened for fourth graders’ reading proficiency and several mortality measures, including premature death, drug deaths and firearm deaths. Meanwhile, high-speed internet access increased among nearly all racial/ethnic groups, narrowing the racial gap. Other findings included an increase in the supply of primary care and mental health providers as well as a decrease in uninsured and food insecurity rates. Overall challenges included a decrease in fourth grade reading proficiency as well as increases in premature death, drug deaths, drug use, frequent mental distress, multiple chronic conditions and firearm deaths.

Since the peak of the pandemic, the nation has made improvements overall as millions of Americans were vaccinated and returned to many pre-pandemic activities. The COVID-era Disparities Survey, an online survey of more than 3,800 adults, found that Americans’ experiences during the pandemic varied for different populations, from the loss of close friends and family and mental health impacts to social isolation.

This year’s *Annual Report* includes overall state rankings once again. Rankings were excluded over the past two years due to the extraordinary and unprecedented health challenges during the pandemic. Community leaders and advocates can use this year’s report to tailor and target public health efforts in their states to address issues caused or exacerbated by the pandemic and, ultimately, build healthier communities.

The *America’s Health Rankings Annual Report* is the longest-running state-by-state analysis of the nation’s health. First published in 1990, *America’s Health Rankings* continues to provide an opportunity to track short- and long-term public health successes as well as identify current and emerging challenges at state and national levels.

This special edition explores COVID-era impacts by race and ethnicity.

Objective

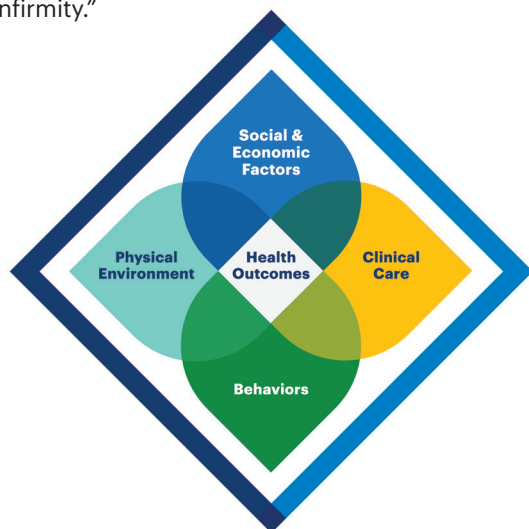
America's Health Rankings aims to inform and drive action to build healthier communities by offering credible, trusted data that can guide efforts to improve health and health care. To achieve this, a comprehensive set of measures are analyzed to assess the health of populations across the nation. The report uses a wealth of reputable data sources to produce a combination of key health-related measures across categories of health determinants and health outcomes, including:

- **Eighty-three measures.** These include 51 measures used in the scoring of states plus 32 additional measures used to track current and emerging health issues at state and national levels. The *Annual Report* leverages the most recent data available for each measure.
 - **Five categories of health.** These consist of health outcomes and four categories that are determinants of health: social and economic factors, physical environment, behaviors and clinical care.
 - **Twenty-nine sources.** Data in this report come from many different sources, including the CDC's Behavioral Risk Factor Surveillance System, the U.S. Department of Agriculture's *Household Food Security in the United States* report and the U.S. Census Bureau's Current Population Survey.
 - **International comparison.** This report features a look at the health of the U.S. compared to other OECD countries in measures of infant mortality, total health spending and life expectancy, the last of which has dropped across the world due to COVID-19.
 - **Supplemental sources.** For this special edition, additional COVID-19 data were drawn from the platform as well as from the COVID-era Disparities Survey collected online by Morning Consult in October 2022. Data were analyzed to better understand the impact of the COVID-19 pandemic on health thus far.
- The *America's Health Rankings Annual Report* seeks to improve population health by:
- **Presenting a holistic view of health.** This report goes beyond measures of clinical care and health behaviors by considering social, economic and physical environment measures to reflect the growing understanding of the impact of social determinants on health.

- **Providing a benchmark for states.** Each year the report presents trends, strengths, challenges and highlights for every state. With the *America's Health Rankings Annual Report's* 33 years of data, public health advocates can monitor health trends over time and compare their state with neighboring states and the nation. Every state has its strengths and challenges. It is important to consider the measures collectively, as each measure does not stand alone but rather influences and is influenced by other measures of health and everyday life.
- **Stimulating action.** The report is intended to drive change and improve health by promoting data-driven discussions among individuals, community leaders, public health workers, policymakers and the media. States can incorporate the report into their annual review of programs, and many organizations use the report as a reference when assigning goals for health-improvement plans.
- **Highlighting disparities.** The report shows differences in health between states and among population groups at state and national levels, with groupings based on age, gender, race and ethnicity, educational attainment, income and metropolitan status. These analyses often reveal differences among groups that national or state aggregate data mask.

Model for Measuring America's Health

America's Health Rankings is built upon the World Health Organization's definition of health: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."



Our nation's health debt came due during COVID. Let the data show us how to repay it.

Dr. Georges C. Benjamin, Executive Director, American Public Health Association

At the American Public Health Association (APHA), our goal is to make the United States the healthiest nation in the world. We hoped to accomplish this in the span of one generation. However, we have experienced an enormous setback in the form of a pandemic that has knocked us on our heels, as this report demonstrates.

This societal event dramatically impacted Americans, especially our most vulnerable communities, due to a variety of factors. The disease itself directly harmed people, but the pandemic also caused many to delay treatments for other pressing health issues, resulted in lost jobs and income and disrupted social connections. The COVID-era Disparities Survey presented in this report found, for example, that more than half of Hispanic adults reported that social isolation impacted their mental health, adding to the already-heavy toll on mental health in the U.S.

Additionally, many Americans put off routine wellness appointments and screenings for cancer and high blood pressure. The impact of this is often invisible until something catastrophic happens — much like the devastation brought by the pandemic following a years-long lack of investment in our public health systems that stymied our efforts to respond successfully as one million Americans lost their lives.

As we examine the latest data in the 2022 *Annual Report*, we hope to see a degree of recovery. But it's clear that we as a nation have a health debt to pay — one that has accumulated over years. For too long, we have underinvested in our public health infrastructure and in the health of underserved

communities of color where rates of chronic conditions and other health challenges are highest. We paid this debt during the pandemic, losing a million people, and we will continue to pay it over the coming years as we work to address the underlying racial and ethnic and other inequities that COVID-19 highlighted and exacerbated.

“
We see this as an opportunity to keep us all focused on improving health broadly.”

Moving forward, information like the data in the 2022 *Annual Report* will be critical to guide our public health decisions; the pandemic has underscored that detailed data broken down by demographics are crucial to how we respond to emerging and ongoing health challenges. What's more, some positive notes from this period can help provide a roadmap. For example, more Americans are insured now than prior to the pandemic, and we have learned a lot about how to manage health and disease remotely and keep patients engaged via telehealth.

APHA is proud to partner with *America's Health Rankings* to release this report. We see this as an opportunity to keep us all focused on improving health broadly, with data that can help policymakers, community leaders, public health officials and citizens target our attention and resources as we figure out just how big of a setback the pandemic has been, get on our feet and start to chart a path forward.

National Highlights

Health Outcomes

<p>Premature death 18% ▲ from 7,337 to 8,659 years of life lost before age 75 per 100,000 population between 2019 and 2020. <small>Source: CDC WONDER, Multiple Cause of Death Files.</small></p>	<p>Drug deaths 30% ▲ from 21.5 to 27.9 deaths per 100,000 population between 2019 and 2020. <small>Source: CDC WONDER, Multiple Cause of Death Files.</small></p>	<p>Non-medical drug use 29% ▲ from 12.0% to 15.5% of adults between 2021 and 2022. <small>Source: RADARS[®] System, Survey of Non-Medical Use of Prescription Drugs Program.</small></p>	<p>Frequent mental distress 11% ▲ from 13.2% to 14.7% of adults between 2020 and 2021. <small>Source: CDC, Behavioral Risk Factor Surveillance System.</small></p>
<p>Suicide 3% ▼ from 14.5 to 14.0 deaths per 100,000 population between 2019 and 2020. <small>Source: CDC WONDER, Multiple Cause of Death Files.</small></p>	<p>Multiple chronic conditions 5% ▲ from 9.1% to 9.6% of adults between 2020 and 2021. <small>Source: CDC, Behavioral Risk Factor Surveillance System.</small></p>	<p>Obesity 6% ▲ from 31.9% to 33.9% of adults between 2020 and 2021. <small>Source: CDC, Behavioral Risk Factor Surveillance System.</small></p>	<p>High cholesterol 7% ▲ from 33.3% to 35.7% of adults between 2019 and 2021. <small>Source: CDC, Behavioral Risk Factor Surveillance System.</small></p>

Social and Economic Factors

<p>Firearm deaths 13% ▲ from 12.1 to 13.7 deaths per 100,000 population between 2019 and 2020. <small>Source: CDC WONDER, Multiple Cause of Death Files.</small></p>	<p>Unemployment 40% ▲ from 4.5% to 6.3% of the civilian workforce ages 16-64 between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>	<p>Poverty 5% ▲ from 12.2% to 12.8% of households between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>	<p>Less than high school education 7% ▼ from 11.4% to 10.6% of adults ages 25 and older between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>
<p>Per capita income 7% ▲ from \$35,672 to \$38,332 between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>	<p>Fourth grade reading proficiency 6% ▼ from 34.3% to 32.1% of students between 2019 and 2022. <small>Source: U.S. Department of Education, National Assessment of Educational Progress.</small></p>	<p>Food insecurity 11% ▼ from 11.7% to 10.4% of households between 2016-2018 and 2019-2021. <small>Source: USDA, Household Food Security in the United States report.</small></p>	<p>High-speed internet 3% ▲ from 89.4% to 92.4% of households between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>

Clinical Care

<p>Uninsured 7% ▼ from 9.2% to 8.6% of the population between 2019 and 2021. <small>Source: U.S. Census Bureau, American Community Survey.</small></p>	<p>Mental health providers 7% ▲ from 284.3 to 305.0 providers per 100,000 population between 2021 and 2022. <small>Source: CMS, National Plan and Provider Enumeration System.</small></p>	<p>Primary care providers 5% ▲ from 252.3 to 265.3 providers per 100,000 population between 2021 and 2022. <small>Source: CMS, National Plan and Provider Enumeration System.</small></p>
--	--	---

National Highlights

Findings

HEALTH OUTCOMES | MORTALITY

The nation experienced large increases in premature death during the first year of the pandemic, with worsening racial/ethnic disparities. Provisional COVID-19 death rates were highest among Hawaiian/Pacific Islander, American Indian/Alaska Native, Hispanic and Black populations.

Premature Death

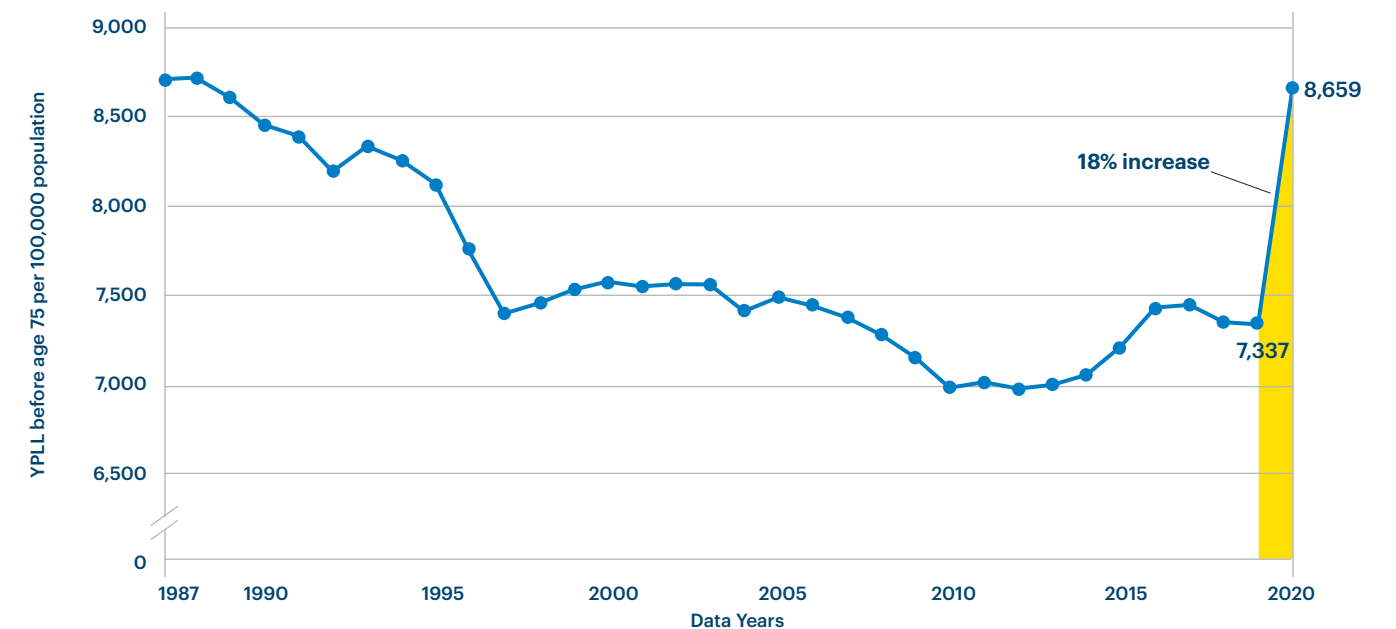
The leading causes of premature death (death before age 75) in 2020 were unintentional injury, cancer, heart disease, COVID-19, suicide, homicide, liver disease and diabetes, according to the National Center for Health Statistics [WISQARS Years of Potential Life Lost \(YPLL\) Report](#).² Factors contributing to premature death include social (education, unemployment and housing), environmental (distance to care and exposure to environmental hazards) and behavioral factors (smoking cessation, healthy eating and exercise).³

District of Columbia, led by 31% in New York (5,825 to 7,651 YPLL per 100,000 population), 26% in Arizona (7,523 to 9,469) and 24% in New Jersey (6,239 to 7,759). The states without significant changes were Hawaii and New Hampshire. All racial/ethnic subpopulations experienced significant increases in the premature death rate between 2015-2017 and 2018-2020: 16% among Hispanic (4,595 to 5,321), 14% among American Indian/Alaska Native (11,301 to 12,842), 10% among Black (10,532 to 11,581), 7% among Asian/Pacific Islander (3,187 to 3,397) and 3% among white (7,821 to 8,069) populations.

Changes over time. Nationally, the premature death rate — years of potential life lost (YPLL) before age 75 per 100,000 population — increased 18% from 7,337 to 8,659 between 2019 and 2020, the sharpest increase over a single year in *Annual Report* history. The premature death rate significantly increased in 48 states and the

Disparities. The premature death rate was 2.1 times higher in Mississippi (13,781 YPLL per 100,000 population) than in Hawaii (6,413), the states with the highest and lowest rates in 2020.

Premature death increased sharply between 2019 and 2020.



Source: CDC WONDER, Multiple Cause of Death Files, 1987-2020.

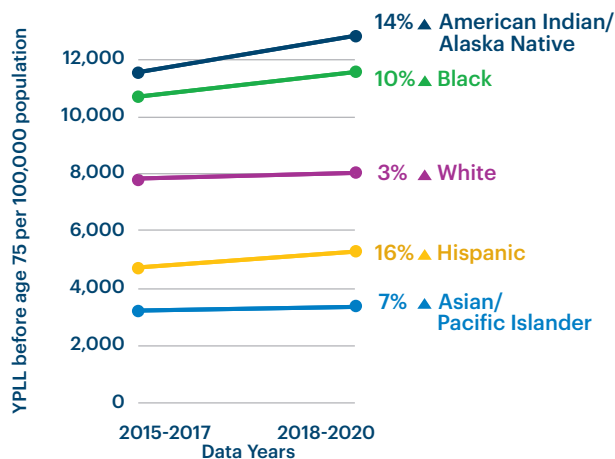
COVID-era impact by race/ethnicity. The disparity in the premature death rate between the American Indian/Alaska Native and Asian/Pacific Islander populations — the groups with the highest and lowest rates, respectively — widened between 2015-2017 and 2018-2020. The rate was 3.5 times higher among American Indian/Alaska Native (11,301 YPLL per 100,000 population) compared with Asian/Pacific Islander (3,187) populations in 2015-2017, and 3.8 times higher among American Indian/Alaska Native (12,842) compared with Asian/Pacific Islander (3,397) populations in 2018-2020.

Related Measure: Premature Death Racial Disparity

Nationally, the premature death racial disparity — calculated as the ratio of the premature death rate of the racial/ethnic group with the highest rate (American Indian/Alaska Native population) to that of the non-Hispanic white population — increased 14% from 1.4 to 1.6 between 2015-2017 and 2018-2020.

COVID-era impact by race/ethnicity

The **premature death disparity** between American Indian/Alaska Native and Asian/Pacific Islander populations widened.



Source: CDC WONDER, Multiple Cause of Death Files, 2015-2017 and 2018-2020. Note: All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups.

COVID Deaths – Provisional

The COVID-19 pandemic has claimed [more than 1,047,020 lives](#) across the U.S. as of September 14th, 2022.⁴ In 2021, COVID-19 was the [third-leading](#) cause of death.⁵ Provisional death data suggest that more deaths due to COVID-19 occurred in 2021 than in 2020.⁵

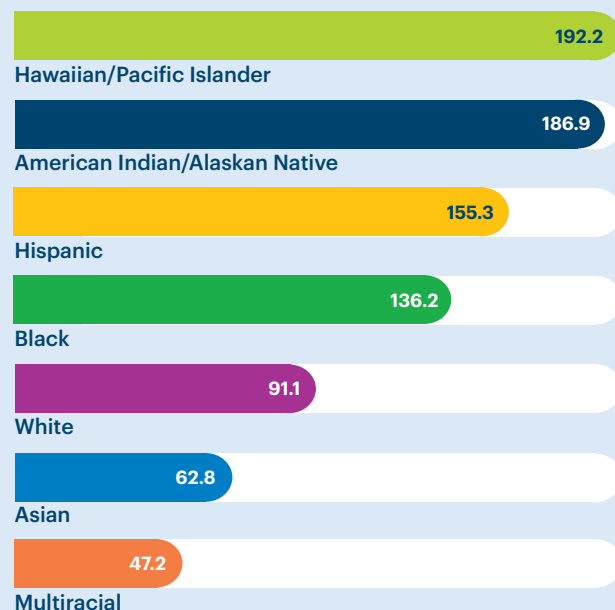
National estimate. Nationally, there were 102.6 deaths due to COVID-19 per 100,000 population in 2021, according to age-adjusted provisional data. This represents an increase over 2020, in which the COVID-19 death rate was 85.0 deaths per 100,000 population.

Disparities. The COVID-19 death rate was 5.3 times higher in Oklahoma (154.8 deaths per 100,000 population) than in Vermont (29.4), the states with the highest and lowest rates in 2021. The rate significantly varied by race/ethnicity and gender. It was 4.1 times higher among the Hawaiian/Pacific Islander (192.2) compared with the multiracial (47.2) population, and 1.6 times higher among males (130.5) than females (79.8).

Explore COVID-19 data at AmericasHealthRankings.org/explore/covid-19.

COVID deaths were 4.1 times higher among the Hawaiian/Pacific Islander population compared with the multiracial population in 2021.

Deaths per 100,000 population (age-adjusted)



Source: CDC WONDER, Provisional Multiple Cause of Death Files, 2021.

HEALTH OUTCOMES | BEHAVIORAL HEALTH

During the COVID-19 pandemic, drug deaths and non-medical drug use spiked and frequent mental distress continued to worsen. Meanwhile, the suicide rate decreased for the second consecutive year, with rates improving among the white population but worsening among the Hispanic population.

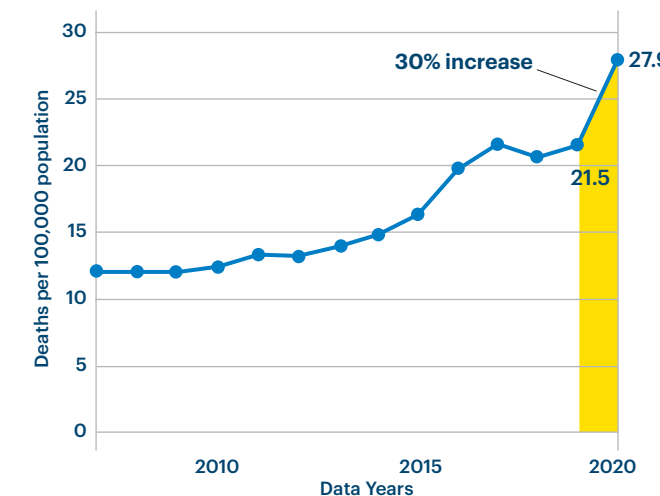
Drug Deaths

Heavy drug use and overdoses burden individuals, families, their communities, the health care system and the economy. Drug overdoses are a [leading cause of injury death](#), increasing [56.5%](#) between 2013 and 2019.^{6,7} Of the confirmed drug overdose deaths in the United States in 2020, roughly [75%](#) [involved an opioid](#).⁸

Changes over time. Nationally, the drug death rate — deaths due to drug injury (unintentional, suicide, homicide or undetermined) per 100,000 population — significantly increased 30% from 21.5 to 27.9 between 2019 and 2020, the sharpest increase over a single year in *Annual Report* history. In 2020, 91,799 people in the U.S. died due to drug injury, an increase of 21,169 people since 2019. The drug death rate significantly increased in 36 states and the District of Columbia, led by 54% in West Virginia (50.4 to 77.4 deaths per 100,000 population), 53% in South Carolina (22.2 to 34.0) and 51% in Kentucky (31.3 to 47.3). Nearly all age, racial/ethnic and gender groups experienced significant increases in the drug death rate. The largest increase was 49% among those ages 15-24 (11.2 to 16.7). By race/ethnicity, drug deaths increased 45% among multiracial (12.8 to 18.6), 43% among Black (26.0 to 37.1), 38% among American Indian/Alaska Native (29.6 to 40.7), 37% among Hispanic (12.8 to 17.5), 36% among Asian (3.3 to 4.5) and 25% among white (25.5 to 32.0) populations. By gender, drug deaths increased 32% among males (29.4 to 38.9) and 23% among females (13.7 to 16.9).

Disparities. The drug death rate was 7.9 times higher in West Virginia (77.4 deaths per 100,000 population) than in South Dakota (9.8), the states with the highest and lowest rates in 2020. The rate significantly varied by race/ethnicity, gender and age.

Drug deaths increased sharply between 2019 and 2020.



Source: CDC WONDER, Multiple Cause of Death Files, 2007-2020.

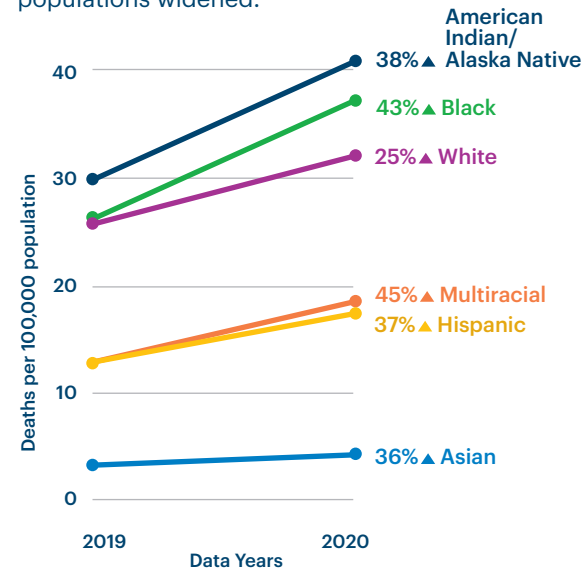
The drug death rate was:

- 9.0 times higher among the American Indian/Alaska Native (40.7) compared with the Asian (4.5) population.
- 4.1 times higher among those ages 35-44 (53.9) than those 65-74 (13.2).
- 2.3 times higher among males (38.9) than females (16.9).

COVID-era impact by race/ethnicity. The disparity in the drug death rate between the American Indian/Alaska Native and Asian populations — the groups with the highest and lowest rates, respectively — widened by 9.9 deaths per 100,000 population between 2019 and 2020. The rates among the American Indian/Alaska Native and Black populations increased by 11.1 deaths per 100,000 population, and the rate among the Asian population increased by 1.2 deaths per 100,000 population.

COVID-era impact by race/ethnicity

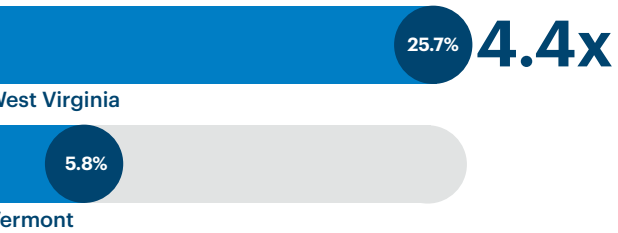
The drug death disparity between American Indian/Alaska Native and Asian populations widened.



Source: CDC WONDER, Multiple Cause of Death Files, 2019 and 2020.
 Note: The change among the Hawaiian/Pacific Islander population was not significant. All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups.

Non-medical drug use was highest in West Virginia and lowest in Vermont in 2022.

Percentage of adults



Source: RADARS® System, Survey of Non-Medical Use of Prescription Drugs Program, 2022.

Non-medical Drug Use – Past Year

The use of illicit drugs, including the use of prescription drugs without a doctor’s guidance, can be dangerous and have long-lasting consequences. [Short-term effects](#) include heart attack, stroke, psychosis, overdose and death.⁹ Potential long-term effects include heightened risk for [diseases](#) like HIV, hepatitis and [endocarditis](#) and conditions such as heart disease and certain cancers and mental illnesses.^{9,10}

Changes over time. Nationally, the percentage of adults who reported using prescription drugs non-medically (including pain relievers, stimulants and sedatives) or illicit drugs (excluding cannabis) in the last 12 months significantly increased 29% from 12.0% to 15.5% between 2021 and 2022. Non-medical drug use significantly increased in 10 states, led by 82% in West Virginia (14.1% to 25.7%). All education, income and gender groups and some racial/ethnic groups experienced significant increases in non-medical drug use. By group, the largest increases were 46% among those with less than a high school education (3.5% to 5.1%), 45% among those with incomes \$25-\$74,999 (15.0% to 21.7%), 43% among females (10.1% to 14.4%) and 34% among white adults (12.5% to 16.7%).

Disparities. Non-medical drug use was 4.4 times higher in West Virginia (25.7%) than in Vermont (5.8%), the states with the highest and lowest prevalence in 2022. The prevalence varied most by race/ethnicity, education and income, and also significantly varied by gender. It was:

- 3.8 times higher among other race (31.7%) compared with Asian (8.4%) adults. Hawaiian/Pacific Islander (20.1%) adults also had a high prevalence.*
- 3.8 times higher among those with some post-high school education (19.4%) than those with less than a high school education (5.1%). College graduates (18.0%) also had a high prevalence.*
- 2.6 times higher among those with incomes less than \$25,000 (26.7%) than those with incomes of \$75,000 or more (10.2%).

* The values of the two highest groups were not significantly different from each other based on non-overlapping 95% confidence intervals.

Frequent Mental Distress

Frequent mental distress aims to capture the population experiencing persistent and likely severe mental health issues, defined by 14 or more days of poor mental health a month. A strong relationship exists between the [14-day](#) period and clinically diagnosed mental disorders such as depression and anxiety.¹¹

Changes over time. Nationally, the prevalence of frequent mental distress increased 11% from 13.2% to 14.7% of adults between 2020 and 2021. Frequent mental distress significantly increased in seven states, led by 41% in Alaska (9.9% to 14.0%), 29% in Illinois (10.0% to 12.9%) and 21% in Maine (12.6% to 15.2%). Some racial/ethnic, income, age, gender and education groups experienced significant increases in frequent mental distress. By group, the largest increases were 45% among Asian adults (7.4% to 10.7%), 13% among those with incomes less than \$25,000 (20.7% to 23.4%) and \$25-\$49,999 (14.1% to 15.9%), 12% among those ages 18-44 (16.5% to 18.4%), and 10% among both males (10.9% to 12.0%) and those with a high school diploma or GED degree (13.1% to 14.4%).[‡]

Disparities. Frequent mental distress was 1.8 times higher in West Virginia (19.3%) than in Hawaii (10.7%), the states with the highest and lowest prevalence in 2021. The prevalence varied most by income, age and race/ethnicity, and also significantly varied by education and gender. It was:

- 2.5 times higher among those with incomes less than \$25,000 (23.4%) than those with incomes of \$75,000 or more (9.4%).[‡]
- 2.2 times higher among those ages 18-44 (18.4%) than those 65 and older (8.5%).
- 2.0 times higher among multiracial (21.9%) compared with Asian (10.7%) adults. American Indian/Alaska Native (20.9%) adults also had a high prevalence and Hawaiian/Pacific Islander (12.0%) adults also had a low prevalence.*

[‡] Education and income subpopulations are among adults ages 25-44.

* The values of the two highest groups and the two lowest groups were not significantly different from each other, respectively, based on non-overlapping 95% confidence intervals.

Note: 2021 national estimates exclude Florida. See Appendix (page 35) for details.

Suicide

Suicide was the [12th-leading cause of death](#) in the United States in 2020.¹² Mental illness and substance use disorders are the most significant [risk factors](#) for suicidal behaviors.¹³ In addition, [environmental factors](#) such as stressful life events and access to lethal means such as firearms or drugs may increase the risk of suicide.¹⁴

Changes over time. Nationally, the suicide rate — deaths due to intentional self-harm per 100,000 population — significantly decreased 3% from 14.5 to 14.0 between 2019 and 2020, and 5% (from 14.8) since its peak in 2018. In 2020, 45,979 people in the U.S. died by suicide, a decrease of 1,532 people since 2019. The suicide rate significantly decreased 10% in Florida (15.5 to 13.9 deaths per 100,000 population) and Pennsylvania (14.5 to 13.1) and 6% in California (11.3 to 10.6) between 2019 and 2020. Some age, gender and racial/ethnic groups experienced significant decreases in the suicide rate. By group, decreases were:

- 13% among those ages 55-64 (19.4 to 16.9), 8% among ages 45-54 (19.6 to 18.0) and 6% among ages 65-74 (15.5 to 14.5).
- 8% among females (6.1 to 5.6) and 2% among males (23.4 to 22.9).
- 5% among the white population (18.2 to 17.3).

During this time, the suicide rate significantly increased 5% among those ages 25-34 (17.5 to 18.4).

Disparities. The suicide rate was 4.2 times higher in Wyoming (31.8 deaths per 100,000 population) than in New Jersey (7.6), the states with the highest and lowest rates in 2020. The rate in the District of Columbia (5.4) was lower than the rate in any state. The rate significantly varied by gender, race/ethnicity and age. It was:

- 4.1 times higher among males (22.9) than females (5.6).
- 3.4 times higher among the American Indian/Alaska Native (23.1) compared with the Asian (6.7) population.
- 1.5 times higher among those ages 85 and older (20.9) than those 15-24 (14.2). Those ages 65-74 (14.5) also had a low rate.*

* The values of the two lowest groups were not significantly different from each other based on non-overlapping 95% confidence intervals.

HEALTH OUTCOMES | PHYSICAL HEALTH

Rates of multiple chronic conditions, obesity and high cholesterol worsened. Data released in September 2022 show nearly one-third of adults with COVID-19 reported experiencing symptoms lasting three months or longer.

Multiple Chronic Conditions

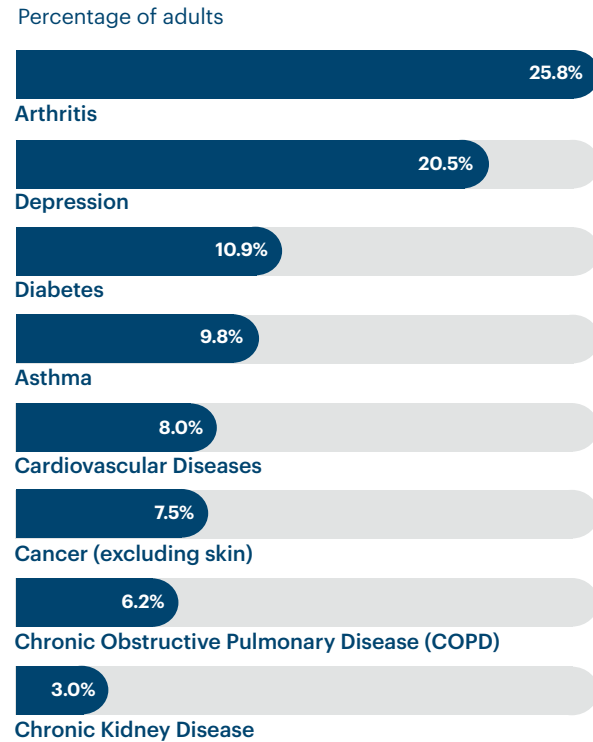
Chronic conditions are medical conditions that last more than a year, require ongoing medical attention and/or limit daily life activities. As the number of chronic conditions an individual experiences increases, the risks of the following [outcomes](#) also increase: physical, social and cognitive limitations; unnecessary hospitalizations; adverse drug events; and mortality.¹⁵

Changes over time. Nationally, the percentage of adults who had three or more chronic conditions increased 5% from 9.1% to 9.6% between 2020 and 2021. This comes after a drop between 2019 and 2020, when the percentage of adults with multiple chronic conditions [decreased 4% nationally](#). State changes in the prevalence of multiple chronic conditions were not notable. The prevalence of multiple chronic conditions significantly increased 8% among those with incomes less than \$25,000 (20.2% to 21.9%).* Three of the eight chronic conditions included in this measure increased 5% or more: Cancer (excluding skin) increased 10% (6.8% to 7.5%) and arthritis and depression increased 5% (24.5% to 25.8% and 19.5% to 20.5%, respectively).

Disparities. The prevalence of multiple chronic conditions was 3.2 times higher in West Virginia (18.1%) than in Hawaii (5.6%), the states with the highest and lowest prevalence in 2021. The prevalence varied most by age, race/ethnicity, income and education, and also significantly varied by gender and metropolitan status. It was:

- 6.4 times higher among those ages 65 and older (20.5%) than those 18-44 (3.2%).
- 5.7 times higher among American Indian/Alaska Native (15.5%) compared with Asian (2.7%) adults.

The most prevalent chronic condition in 2021 was arthritis.



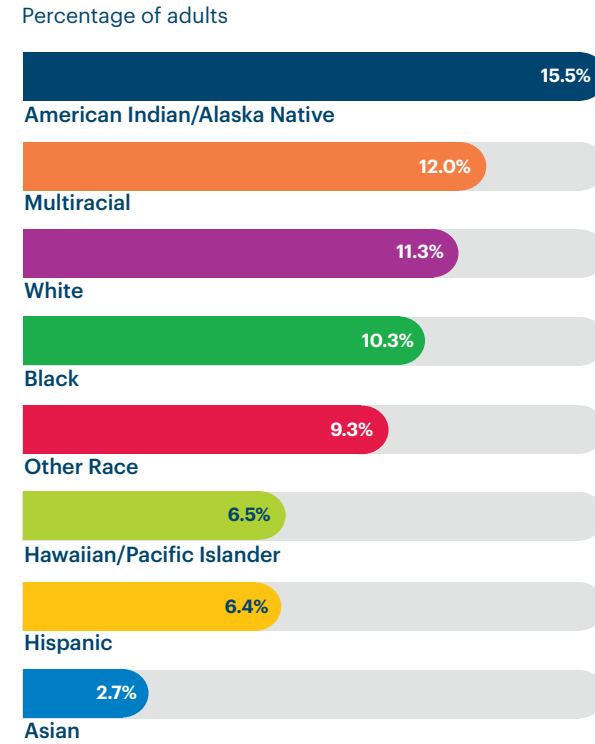
Source: CDC, Behavioral Risk Factor Surveillance System, 2021.

- 4.1 times higher among those with incomes less than \$25,000 (21.9%) than those with incomes of \$75,000 or more (5.3%).*
- 2.9 times higher among those with less than a high school education (17.4%) compared with college graduates (6.1%).*

* Education and income subpopulations are among adults ages 25-44.

Note: 2021 national estimates exclude Florida. See Appendix (page 35) for details.

The prevalence of multiple chronic conditions was 5.7 times higher among American Indian/Alaska Native adults compared with Asian adults in 2021.



Source: CDC, Behavioral Risk Factor Surveillance System, 2021.

Risk Factors

Often, existing health conditions put people at risk of further, more severe illness. Obesity, high blood pressure and high cholesterol are [risk factors](#) for heart disease and stroke.¹⁶ These risk factors are modifiable, meaning that people can take action to reduce their risk and stave off future disease.

Changes over time. Nationally, the prevalence of obesity* among adults increased 6% (31.9% to 33.9%) between 2020 and 2021, a new record high. High cholesterol* among adults increased 7% (33.3% to 35.7%) between 2019 and 2021. During these periods, obesity significantly increased in five states, led by 12% in both New Mexico (30.9% to 34.6%) and Montana (28.5% to 31.8%). High cholesterol significantly increased in 14 states, led by 31% in South Dakota (28.1% to 36.7%). Most age, racial/ethnic, gender, education and income groups experienced significant increases in at least one of these risk factors.

Disparities. Obesity was 1.6 times higher in West Virginia (40.6%) than in Hawaii (25.0%) in 2021; however, the prevalence in the District of Columbia (24.7%) was lower than the prevalence in any state. High cholesterol was 1.3 times higher in West Virginia (41.0%) than in Montana (30.5%), the states with the highest and lowest prevalence rates in 2021. The prevalence of obesity varied most by race/ethnicity and high cholesterol varied most by age. Both also significantly varied by education, income, gender and metropolitan status.

* Obesity is defined as the percentage of adults with a body mass index of 30.0 or higher based on reported height and weight. High cholesterol is the percentage of adults who reported having their cholesterol checked and were told by a health professional that it was high.

Note: National estimates exclude New Jersey in 2019 and Florida in 2021. See Appendix (page 35) for details.

Long COVID

After individuals have been infected with COVID-19, it is possible for them to experience long-term effects from the infection. [Symptoms](#) may start with an initial COVID-19 infection or appear later. Even people who did not experience symptoms from a COVID-19 infection can develop long COVID.¹⁷

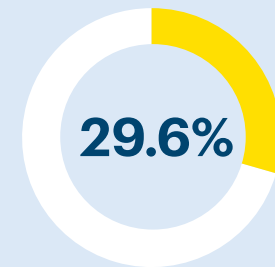
National estimate. Nationally, 29.6% of adults who reported ever testing positive or being told by a health care provider that they had COVID-19 experienced symptoms lasting three months or longer when surveyed in September 2022.

Disparities. Long COVID was 2.3 times higher in West Virginia (49.4%) than in Vermont (21.5%), the states with the highest and lowest prevalence in September 2022. The prevalence significantly varied by education, race/ethnicity, age and gender. It was:

- 1.9 times higher among those with less than a high school education (42.5%) compared with college graduates (22.6%).
- 1.7 times higher among Hispanic (33.2%) compared with Asian (19.1%) adults. Black (29.6%) adults also had a high prevalence.*
- 1.7 times higher among those ages 50-59 (33.9%) than those 80 and older (20.4%). Those ages 40-49 (31.9%) and 60-69 (29.6%) also had a high prevalence and those ages 70-79 (25.3%), 18-29 (27.1%) and 30-39 (28.7%) also had a low prevalence.*
- 1.5 times higher among females (35.1%) than males (23.5%).

* The values of the two highest groups and four lowest groups were not significantly different from each other, respectively, based on non-overlapping 95% confidence intervals.

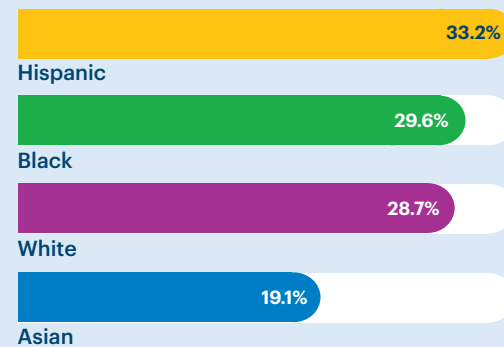
Nearly 3 in 10 adults who have tested positive for COVID-19 have reported experiencing symptoms of long COVID.



Source: U.S. Census Bureau, Household Pulse Survey, 09/14/2022-09/26/2022.

Long COVID was 1.7 times higher among Hispanic adults compared with Asian adults.

Percentage of adults who reported ever having COVID-19



Source: U.S. Census Bureau, Household Pulse Survey, 09/14/2022-09/26/2022.

Explore COVID-19 data at AmericasHealthRankings.org/explore/covid-19.

Firearm deaths increased, with disparities by race/ethnicity that worsened during the pandemic.

Firearm Deaths

The U.S. has seen an uptick in [firearm deaths](#) over the last decade.¹⁸ In 2020, there were more than 45,000 deaths by gun violence, the highest number ever recorded. Additionally, firearm deaths surpassed motor vehicle accidents as the [leading cause](#) of death among children¹⁹ — a concerning trend for U.S. communities.

Changes over time. Nationally, the firearm death rate — deaths due to firearm injury of any intent (unintentional, suicide, homicide or undetermined) per 100,000 population — significantly increased 13% from 12.1 to 13.7 between 2019 and 2020. In 2020, 45,222 people in the U.S. died due to firearm injury, an increase of 5,515 people since 2019. The firearm death rate significantly increased in 18 states, led by 33% in Kentucky (15.3 to 20.3 deaths per 100,000 population), 32% in New York (4.1 to 5.4) and 29% in Illinois (10.8 to 13.9). Most racial/ethnic, gender and age groups experienced significant increases in the firearm death rate, including:

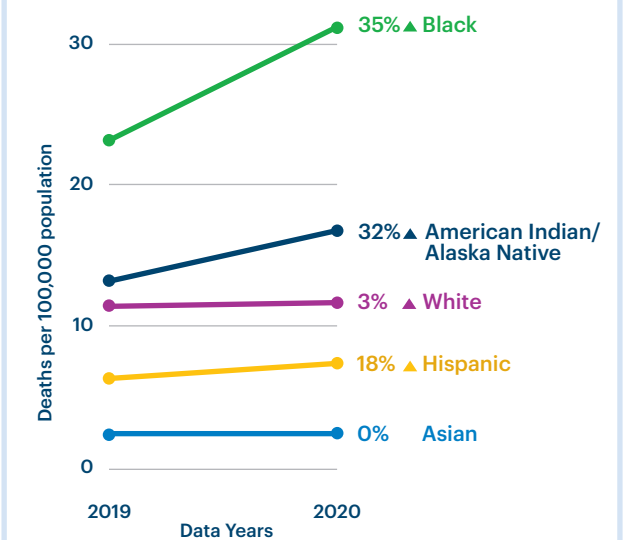
- 35% among Black (23.4 to 31.5), 32% among American Indian/Alaska Native (13.4 to 17.7), 18% among Hispanic (6.5 to 7.7) and 3% among white (11.6 to 12.0) populations.
- 13% among males (21.3 to 24.1) and 12% among females (3.4 to 3.8).
- 28% among those ages 15-24 (17.4 to 22.2), 25% among those 25-34 (18.1 to 22.7) and 14% among those 35-44 (14.6 to 16.7).

Disparities. The firearm death rate was 8.0 times higher in Mississippi (28.0 deaths per 100,000 population) than in Hawaii (3.5), the states with the highest and lowest rates in 2020. The rate significantly varied by race/ethnicity, gender and age. It was:

- 12.1 times higher among Black (31.5) compared with Asian (2.6) populations.
- 6.3 times higher among males (24.1) than females (3.8).

COVID-era impact by race/ethnicity

The **firearm death disparity** between Black and Asian populations widened.



Source: CDC WONDER, Multiple Cause of Death Files, 2019, 2020.

Note: Changes among the Asian, Hawaiian/Pacific Islander and multiracial populations were not significant. All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups.

- 2.1 times higher among those ages 25-34 (22.7) than those 65-74 (10.9). Those ages 15-24 (22.2) also had a high rate.*

COVID-era impact by race/ethnicity. The disparity in the firearm death rate between the Black and Asian populations — the populations with the highest and lowest rates, respectively — widened between 2019 and 2020. The rate was 9.0 times higher among Black (23.4 deaths per 100,000 population) compared with Asian (2.6) populations in 2019, and 12.1 times higher among Black (31.5) compared with Asian (2.6) populations in 2020.

* The values of the two highest groups were not significantly different from each other based on non-overlapping 95% confidence intervals.

SOCIAL AND ECONOMIC FACTORS | ECONOMIC RESOURCES

Economic hardship index measures of unemployment and poverty have worsened since the beginning of the COVID-19 pandemic, while the percentage of adults with less than a high school education and per capita income improved.

Economic Hardship Index

The [economic hardship index](#) compares economic conditions among communities.²⁰ The measure combines six population-level social and economic measures, providing a more comprehensive picture of the economic difficulties faced in a community than a single measure could provide.

Changes over time. Economic conditions that worsened nationally between 2019 and 2021 include unemployment (40% increase from 4.5% to 6.3%), poverty (5% increase from 12.2% to 12.8%) and crowded housing (3% increase from 3.3% to 3.4%). Economic measures that improved include the percentage of adults ages 25 and older with less than a high school education (7% decrease from 11.4% to 10.6%) and per capita income (7% increase from \$35,672 to \$38,332). Changes in all subcomponents of the index were significant, except dependency, the percentage of the population ages 0-17 or 65 and older.

Disparities. The economic hardship index score was highest in Louisiana (100) and New Mexico and Mississippi (both 99); scores were lowest in New Hampshire (1), Colorado (18) and Vermont (23) in 2021. A higher score indicates worse economic conditions.

Related Measure: Income Inequality (80:20 Ratio)

Changes over time. Nationally, income inequality — the ratio of median household income at the 80th percentile to median household income at the 20th percentile — significantly increased 2% from 4.85 to 4.96 between 2019 and 2021.

Economic conditions worsened nationally between 2019 and 2021.

Unemployment
40% ▲
among the civilian workforce ages 16-64.

Poverty
5% ▲
among households.

Crowded housing
3% ▲
among occupied housing units with more than one person per room.

Less than high school education
7% ▼
among adults ages 25 and older.

Per capita income
7% ▲

Source: U.S. Census Bureau, American Community Survey, 2019, 2021.

SOCIAL AND ECONOMIC FACTORS | EDUCATION

The first pandemic-era education data show a drop in reading proficiency. Racial/ethnic disparities in fourth grade reading proficiency have widened.

Fourth Grade Reading Proficiency

Fourth grade reading proficiency is an important indicator of educational development. By the time children reach fourth grade, they are expected to be able to read in order [to learn](#) other subjects.²¹ If children are not proficient in reading by this age, it becomes harder for them to succeed academically.

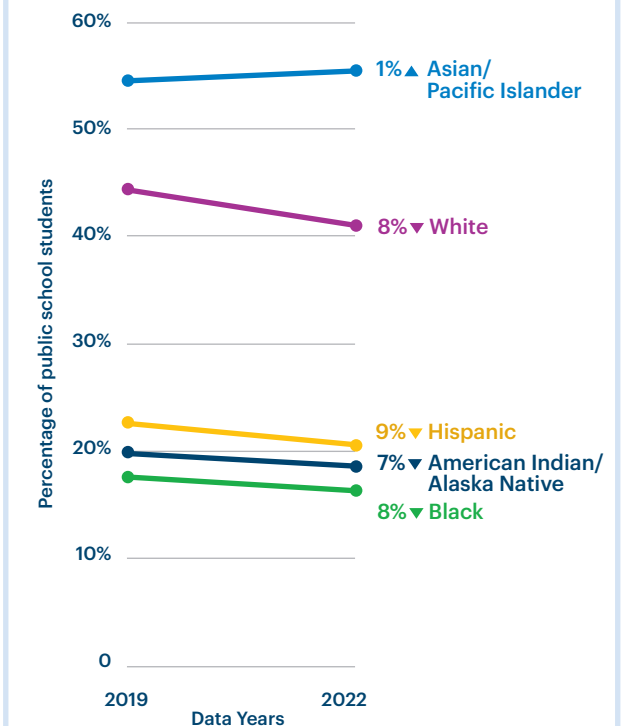
Changes over time. Nationally, the percentage of fourth grade public school students who scored proficient or above on the reading assessment decreased 6% from 34.3% to 32.1% between 2019 and 2022. The percentage decreased 10% or more in 23 states and the District of Columbia, led by 26% in West Virginia (30.3% to 22.3%), 22% in Delaware (32.5% to 25.3%) and 19% in Maine (36.0% to 29.2%). Over the same period, the rate increased in four states, led by 10% in Louisiana (25.7% to 28.3%). The percentage decreased 9% among Hispanic (22.6% to 20.5%), 8% among both Black (17.6% to 16.2%) and white (44.4% to 41.0%), and 7% among American Indian/Alaska Native (19.8% to 18.5%) students, while increasing 1% among Asian/Pacific Islander students (54.5% to 55.3%).

Disparities. Fourth grade reading proficiency was 2.0 times higher in Massachusetts (42.6%) than in New Mexico (21.0%), the states with the highest and lowest percentage in 2022.

COVID-era impact by race/ethnicity. The disparity in fourth grade reading proficiency between Asian/Pacific Islander and Black students — the groups with the highest and lowest rates, respectively — widened between 2019 and 2022. The percentage was 3.1 times higher among Asian/Pacific Islander (54.5%) compared with Black (17.6%) students in 2019, and 3.4 times higher among Asian/Pacific Islander (55.3%) compared with Black (16.2%) students in 2022.

COVID-era impact by race/ethnicity

The fourth grade reading proficiency disparity between Asian/Pacific Islander and Black fourth grade students widened.



Source: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 2019, 2022.

Note: All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups.

SOCIAL AND ECONOMIC FACTORS | SOCIAL SUPPORT AND ENGAGEMENT

Food insecurity and high-speed internet have improved. Racial/ethnic disparities in high-speed internet have narrowed.

Food Insecurity

Food insecurity is a complex problem and does not exist in isolation. Many food-insecure families also struggle with [disadvantages](#) resulting from structural racism, lack of affordable housing, high medical costs and low wages.²² Food insecurity has broad effects on [health](#) due to the mental and physical stress it places on the body.²³

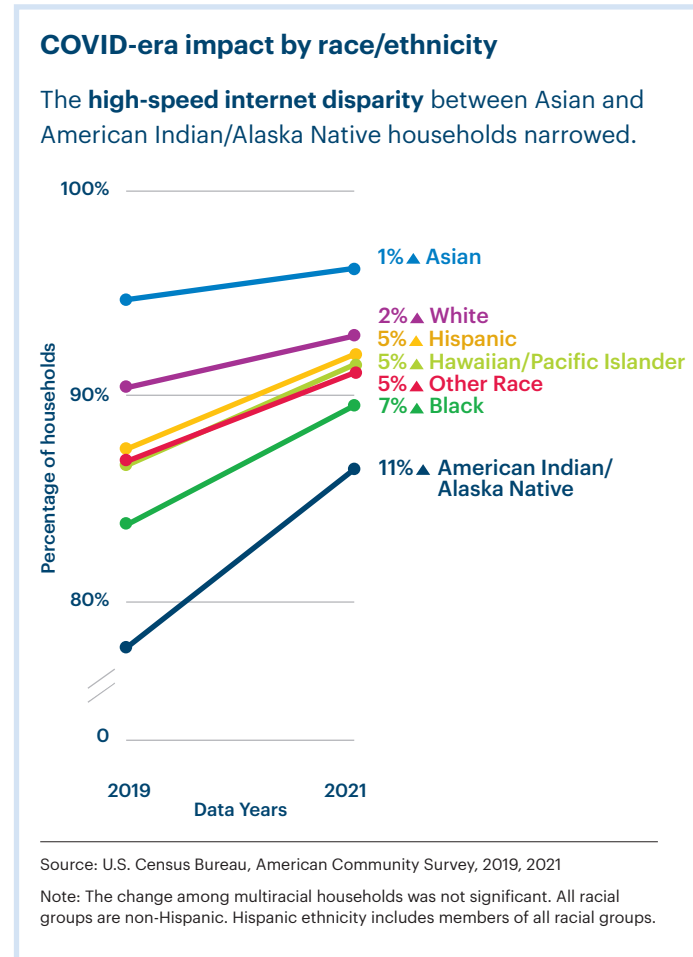
Changes over time. Nationally, the percentage of households unable to provide adequate food for one or more household members due to lack of resources significantly decreased 11% from 11.7% to 10.4% between 2016-2018 and 2019-2021, and has decreased 29% (from 14.6%) since 2011-2013. Food insecurity significantly decreased 28% in Indiana (13.5% to 9.7%) between 2016-2018 and 2019-2021.

Disparities. Food insecurity was 2.8 times higher in Mississippi (15.3%) than in New Hampshire (5.4%), the states with the highest and lowest prevalence in 2019-2021.

High-speed Internet

Lack of access to high-speed internet has recently been identified as a [social determinant of health](#).²⁴ Having high-speed internet access has been especially [crucial](#) during the COVID-19 pandemic, as many employers and educators have transitioned to remote work and learning.²⁵ Moreover, having high-speed internet is vital for receiving health care via [telehealth](#).²⁶

Changes over time. Nationally, the percentage of households with a broadband internet subscription and a computer, smartphone or tablet significantly increased 3% from 89.4% to 92.4% between 2019 and 2021. High-speed internet access increased in all 50 states, led by 6% in both New Mexico (81.4% to 86.4%) and Arkansas (84.1% to 88.9%). Nearly all racial/ethnic groups experienced significant increases in high-speed internet access.



Disparities. High-speed internet access was 1.1 times higher in Washington and Utah (both 95.2%) than in Mississippi (85.2%), the states with the highest and lowest prevalence in 2021.

COVID-era impact by race/ethnicity. The disparity in high-speed internet access between Asian and American Indian/Alaska Native households — the groups with the highest and lowest prevalence, respectively — narrowed from 17.0 percentage points to 9.8 percentage points between 2019 and 2021. The American Indian/Alaska Native rate increased 11% (77.9% to 86.3%) and the Asian rate increased 1% (94.9% to 96.1%).

PHYSICAL ENVIRONMENT | CLIMATE CHANGE

Twelve states had four out of four assessed climate change policies in place, and 14 states had zero out of four in 2021. Transportation energy use declined during the COVID-19 pandemic.

Climate Change Policies

Currently in the U.S., the [effects](#) of climate change can be observed in rising sea levels, wildfires, droughts and extreme rainfall.²⁷ Some states have made efforts to reduce the impacts of climate change by implementing the following four policies: legally binding electricity portfolio standards, carbon pricing policies, climate change action plans and economy-wide greenhouse gas emission targets.

Changes over time. Nationally, the number of climate change policies in place increased in Nevada (from two to three) and Utah (from zero to one) between 2020 and 2021.

Disparities. In 2021, 12 states had all four climate change policies in place: California, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont and Virginia. However, 14 states did not have any of the four climate change policies in place: Alabama, Alaska, Georgia, Idaho, Indiana, Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee, West Virginia and Wyoming.

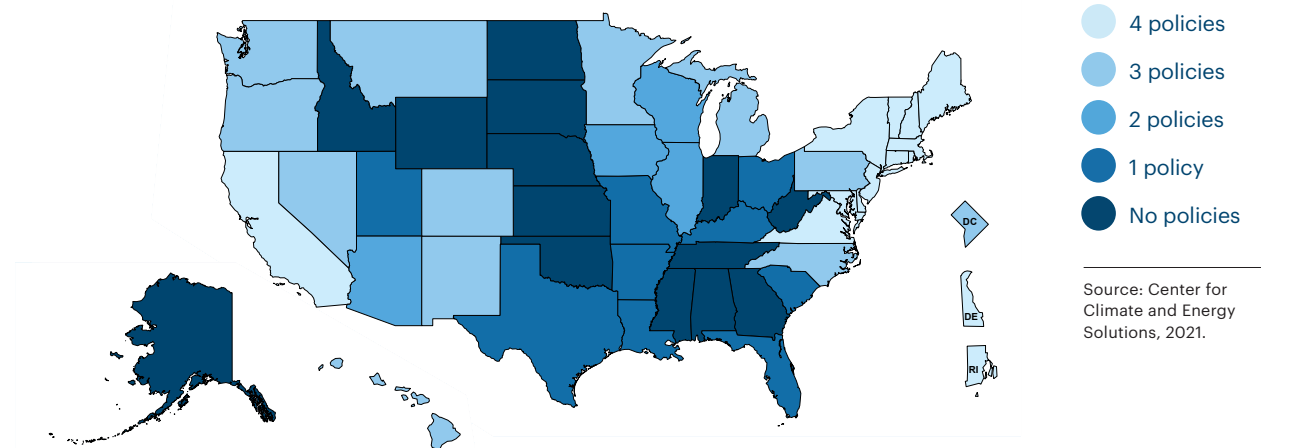
Transportation Energy Use

The transportation of people and cargo accounts for [more than one-fourth](#) of the energy consumed annually in the U.S.²⁸ Negative effects of transportation emissions [occur](#) in the air, water and ground.²⁹ These effects include acid rain, smog, contaminated drinking water, heavy metal contamination, plant and animal die-offs and slowed decomposition of organic material.

Changes over time. Nationally, the amount of energy consumed by the transportation of people and goods per 100,000 population decreased 15% from 8.7 to 7.4 trillion British thermal units (BTU) per 100,000 population between 2019 and 2020. The rate of transportation energy use decreased 20% or more in eight states and the District of Columbia, led by 37% in Hawaii (12.3 to 7.7), 26% in both Massachusetts (7.0 to 5.2) and Washington (8.9 to 6.6), and 24% in New York (6.2 to 4.7).

Disparities. The rate of transportation energy use was 4.8 times higher in Alaska (22.5 trillion BTU per 100,000 population) than in New York (4.7), the states with the highest and lowest rates in 2020. The rate in the District of Columbia (2.4) was lower than the rate in any state.

Twelve states had all four climate change policies in place in 2021.



CLINICAL CARE | ACCESS TO CARE

The nation has improved in access to care measures of uninsured, mental health providers and primary care providers, though large geographic disparities remain.

Uninsured

Health insurance is critical in helping people receive the preventive and medical care they need to achieve and maintain good health. Compared with insured adults, uninsured adults have inadequate access to [preventive services](#), worse [health outcomes](#) and higher rates of [premature death](#).³⁰⁻³²

Changes over time. Nationally, the percentage of the population not covered by private or public health insurance decreased 7% from 9.2% to 8.6% between 2019 and 2021. The uninsured rate significantly decreased in 15 states, led by 29% in Maine (8.0% to 5.7%) and 19% in both Idaho (10.8% to 8.8%) and New Hampshire (6.3% to 5.1%).

Disparities. The uninsured rate was 7.2 times higher in Texas (18.0%) than in Massachusetts (2.5%), the states with the highest and lowest rates in 2021. The rate significantly varied by education, race/ethnicity and age. It was:

- 6.0 times higher among those with less than a high school education (22.2%) compared with college graduates (3.7%).
- 3.5 times higher among other race (20.1%) compared with white (5.7%) populations. The American Indian/Alaska Native (19.6%) population also had a high rate.*
- 1.8 times higher among those ages 26-34 (15.1%) than those 55-64 (8.3%).

* The values of the two highest groups were not significantly different from each other based on non-overlapping 95% confidence intervals.

Uninsured was highest in Texas and lowest in Massachusetts in 2021.

Percentage of population



Source: U.S. Census Bureau, American Community Survey, 2021.

Providers

[Primary care physicians](#) are typically the patient's first point of contact with the health care system and provide critical preventive care, disease management and referrals to specialists.³³ Having a sufficient supply of primary care physicians in a community has numerous [benefits](#), including lower rates of infants with low birthweight, lower all-cause mortality and longer life spans, reductions in health system costs and reductions in health disparities.³⁴ Mental health providers offer [essential care](#) to people with mental or behavioral disorders through assessments, diagnoses, treatments, medications and therapeutic interventions.³⁵ Demand for mental health professionals is [projected to increase](#) during and after the COVID-19 pandemic.³⁶

Changes over time. Nationally, primary care providers* increased 5% from 252.3 to 265.3 providers per 100,000 population between September 2021 and September 2022. During this time, mental health providers* increased 7% from 284.3 to 305.0 providers per 100,000 population, and 40% since *America's Health Rankings* first included the measure in 2017 (from 218.0). The supply of primary care providers increased by 5% or more in 32 states and the District of Columbia, led by 11% in the district (494.0 to 546.4) and 8% in Louisiana (226.8 to 243.9), Florida (266.9 to 288.6) and Arizona (221.2 to 239.9). The supply of mental health providers increased by 7% or more in 27 states and the District of Columbia, led by 14% in both the district (589.6 to 670.5) and Arizona (154.8 to 176.0) and 12% in Texas (133.0 to 148.6).

Disparities. The supply of primary care providers was 1.9 times higher in Massachusetts (383.1 providers per 100,000 population) than in Nevada (205.1), and the supply of mental health providers was 5.6 times higher in Massachusetts (722.2) than in Alabama (128.8), the states with the highest and lowest rates in September 2022.

* Primary care providers include general practice, family practice, obstetrics and gynecology, pediatrics, geriatrics and internal medicine providers, as well as physician assistants and nurse practitioners. Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care.

CLINICAL CARE | PREVENTIVE CLINICAL SERVICES

COVID-19 vaccination rates varied by race/ethnicity.

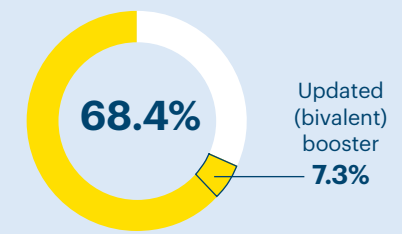
COVID-19 Vaccination and Bivalent Booster Dose

COVID-19 vaccinations and boosters can protect both [individuals and communities](#) while reducing strain on health care systems.³⁷ Currently, COVID-19 vaccines are recommended for everyone 6 months of age and older. The vaccine and booster combination continues to [decrease risk](#) of hospitalization and death for those who contract COVID-19.³⁸

National estimate. As of October 27, 2022, 226,933,827 people or 68.4% of the total U.S. population completed a primary COVID-19 vaccination series, defined as having received one dose of a single-dose vaccine or two doses on different days (regardless of time interval) of either an mRNA or a protein-based series. In addition, 7.3% of the population with a completed primary vaccination series had an updated (bivalent) booster dose since September 1, 2022. COVID-19 vaccination rates remain lower among children than adults. A primary series was completed by 3.5% of children younger than age 5, 31.7% of children ages 5-11 and 60.9% of children ages 12-17.

Disparities. The percentage of the population who completed a primary COVID-19 vaccination series was 1.6 times higher in Rhode Island (86.3%) than in Wyoming (52.4%), the states with the highest and lowest rates as of October 27, 2022. The percentage was 1.5 times higher among Asian (63.7%) compared with Black (43.7%) populations. However, data constraints limit our ability to understand the racial/ethnic breakdown of those who have been vaccinated against COVID-19. For 21.5% of the population who completed the primary COVID-19 vaccination series, their race was unknown — emphasizing the need to prioritize collecting demographic, including racial/ethnic, information in public health data.

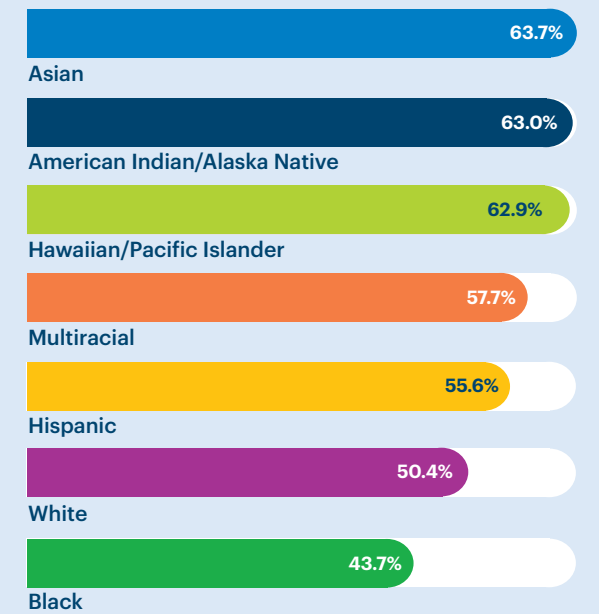
More than two-thirds of the U.S. population have completed their primary COVID-19 vaccination series, and of those, just over 7% of had an updated (bivalent) booster dose as of October 27, 2022.



Source: CDC, COVID Data Tracker, 10/27/2022.

COVID vaccinations were 1.5 times higher among Asian compared with Black populations as of October 27, 2022.

Percentage of population



Source: CDC, COVID Data Tracker, 10/27/2022.

Note: All racial groups are non-Hispanic. Hispanic ethnicity includes members of all racial groups. Race/ethnicity was unknown for 21.5% of the population who completed the primary COVID-19 vaccination series.

Explore COVID-19 data at AmericasHealthRankings.org/explore/covid-19.

State Rankings

Each state has experienced unique challenges during the COVID-19 public health crisis. The rankings included in this year's *Annual Report* — the first ranking analysis since 2019 — are derived from 51 measures across five categories of health: social and economic factors, physical environment, behaviors, clinical care and health outcomes. The rankings are based on an updated [model of health](#) first published in 2020 with the *America's Health Rankings® Senior Report*. For a more detailed description of how the overall rank is calculated, visit [AmericasHealthRankings.org](#).

New Hampshire Ranks No. 1

[New Hampshire](#) is the healthiest state in this report. It ranks in the top quintile across four out of five categories: social and economic factors (No. 1), clinical care (No. 4), behaviors (No. 1) and health outcomes (No. 6).

Strengths: Low premature death rate, low percentage of household food insecurity and low income inequality.

Challenges: High prevalence of excessive drinking, high Black/white residential segregation and low percentage of community water supply with fluoridated water.

[Massachusetts](#) (No. 2), [Vermont](#) (No. 3), and [Connecticut](#) and [Hawaii](#) (tied at No. 4) complete the top five healthiest states.

Louisiana Ranks No. 50

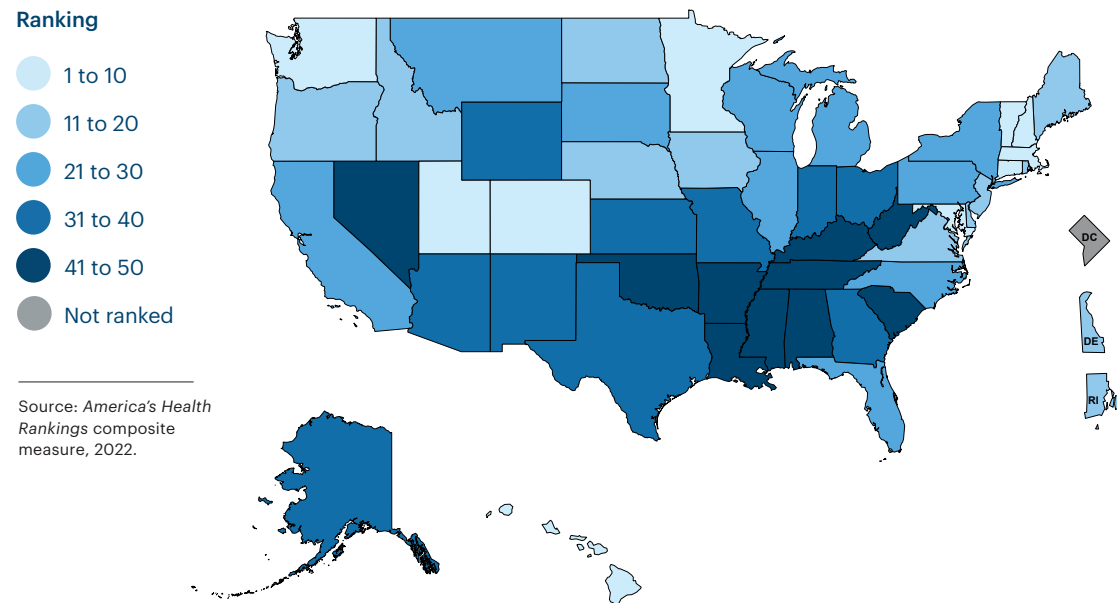
[Louisiana](#) has the most opportunity to improve, ranking in the bottom quintile across all model categories: social and economic factors (No. 50), physical environment (No. 48), clinical care (No. 42), behaviors (No. 50) and health outcomes (No. 50).

Strengths: Low Black/white residential segregation, high prevalence of having a dedicated health care provider and high adolescent HPV vaccination rate.

Challenges: High premature death rate, high economic hardship index score and high prevalence of physical inactivity.

[Mississippi](#) (No. 49), [Arkansas](#) (No. 48), [West Virginia](#) (No. 47) and [Alabama](#) (No. 46) complete the five least healthy states.

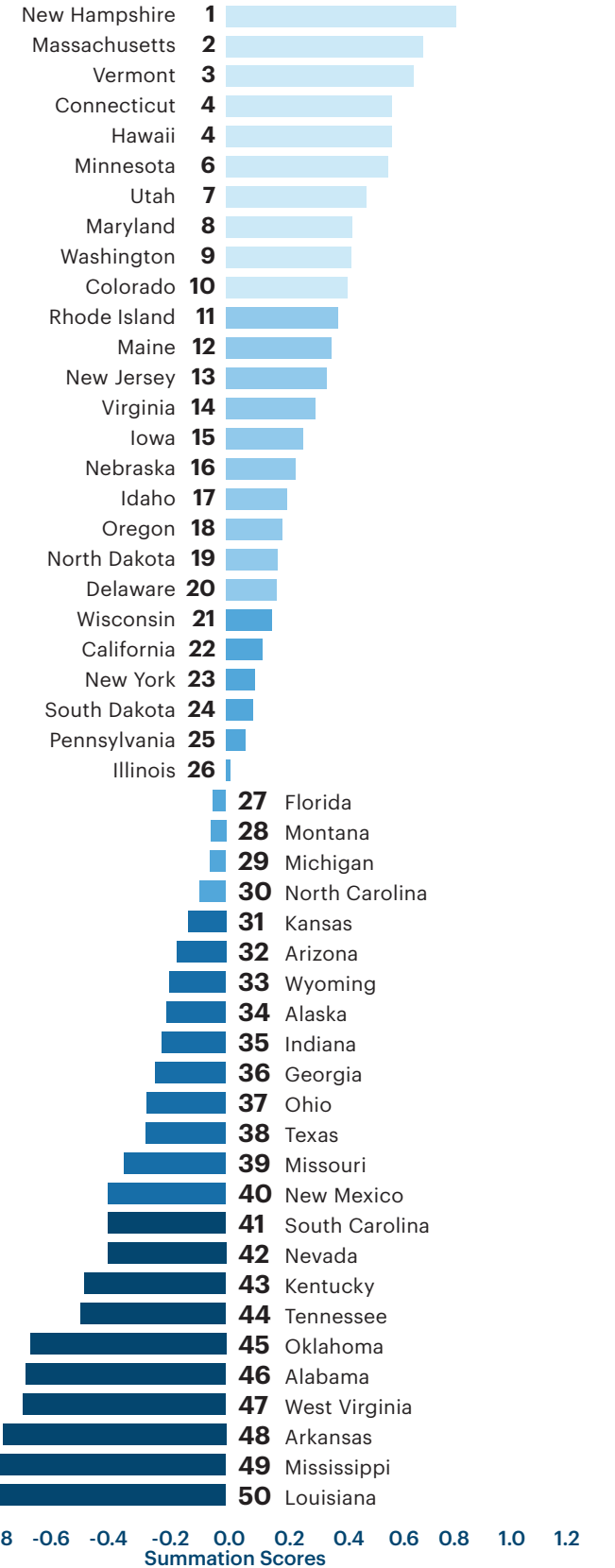
2022 Annual Report State Rankings



This graph displays the state scores in order of rank from healthiest to least healthy. The difference between the lengths of the bars indicates the difference between state scores. For example, Mississippi (No. 49) and Louisiana (No. 50) have a large difference in score, making it more of a challenge for Louisiana to move up in the rankings. There is also a large gap in score between Tennessee (No. 44) and Oklahoma (No. 45).

To further explore state-level data, visit [AmericasHealthRankings.org](#). The website features downloadable State Summaries for each state as well as the District of Columbia. Each summary describes state-specific strengths, challenges, trends and rankings for individual measures, allowing users to identify which measures positively or negatively influenced their state's overall rank. This can be visualized by selecting a state in the [Explore Data](#) section. The website also features the Adjust My Rank tool that allows users to explore how progress and challenges across key measures can impact a state's overall rank.

2022 Annual Report State Rankings and Scores*



International Comparison

Comparing the health of the United States to that of other countries is an indicator of the progress the United States has made and where it has potential to improve measures of health and create healthier communities. The [Organization for Economic Co-operation and Development \(OECD\)](#), the data source for this section, is composed of 38 member countries, including the United States.³⁹ OECD's mission is to promote the economic development and social well-being of people worldwide. OECD collects and analyzes data from each member country on a wide range of social, economic and health-related topics.

The COVID-19 pandemic has had [profound effects](#) on global population health.⁴⁰ Despite differences in reporting across countries, the picture is becoming clearer. [Among OECD countries](#), more than 110 million COVID-19 infections and more than 2.1 million deaths were reported as of October 2021.⁴⁰ According to OECD, this represented approximately 47% of all reported global COVID-19 infections and 44% of deaths at that time.⁴⁰ Overall mortality rates were also up. In 2020 alone, more than [1.8 million excess deaths](#) were reported in the 36 OECD countries with data.⁴¹ Preliminary data suggest excess deaths were high in 2021 as well. Emerging evidence suggests that the [risk of infection and adverse health effects](#) were higher in the first year of the pandemic among individuals with lower incomes or educational attainment, ethnic minorities and immigrants as well as their families across OECD countries, similar to the U.S.⁴⁰

[Vaccinations](#) against COVID-19 have been an important tool to protect against severe illness and death across the world, but vaccination coverage varies markedly across OECD countries. As of October 2021, the percentage of the population fully vaccinated ranged from a low of less than 40% in Colombia and Mexico to a high of 86% in Portugal.⁴⁰

The longer-term implications of the pandemic will not be clear for some time, including the direct and indirect effects on countries' economies and the mental and physical health of their populations.

The following analysis compares the U.S. with other OECD countries using three health measures: infant mortality, life expectancy at birth and total health spending. Data presented are from 2020 unless specified. For infant mortality, the top and bottom states from the *2022 Health of Women and Children Report* were included for reference. Top and bottom states were also included for life expectancy, using data from the National Center for Health Statistics, National Vital Statistics System.

The U.S. had a higher infant mortality rate and lower life expectancy than most other OECD countries. Even the best performing U.S. states ranked poorly among member countries for the infant mortality and life expectancy measures, despite the U.S. having the highest total health spending of all OECD countries.

The longer-term implications of the pandemic will not be clear for some time, including the direct and indirect effects on countries' economies and the mental and physical health of their populations.

Infant mortality

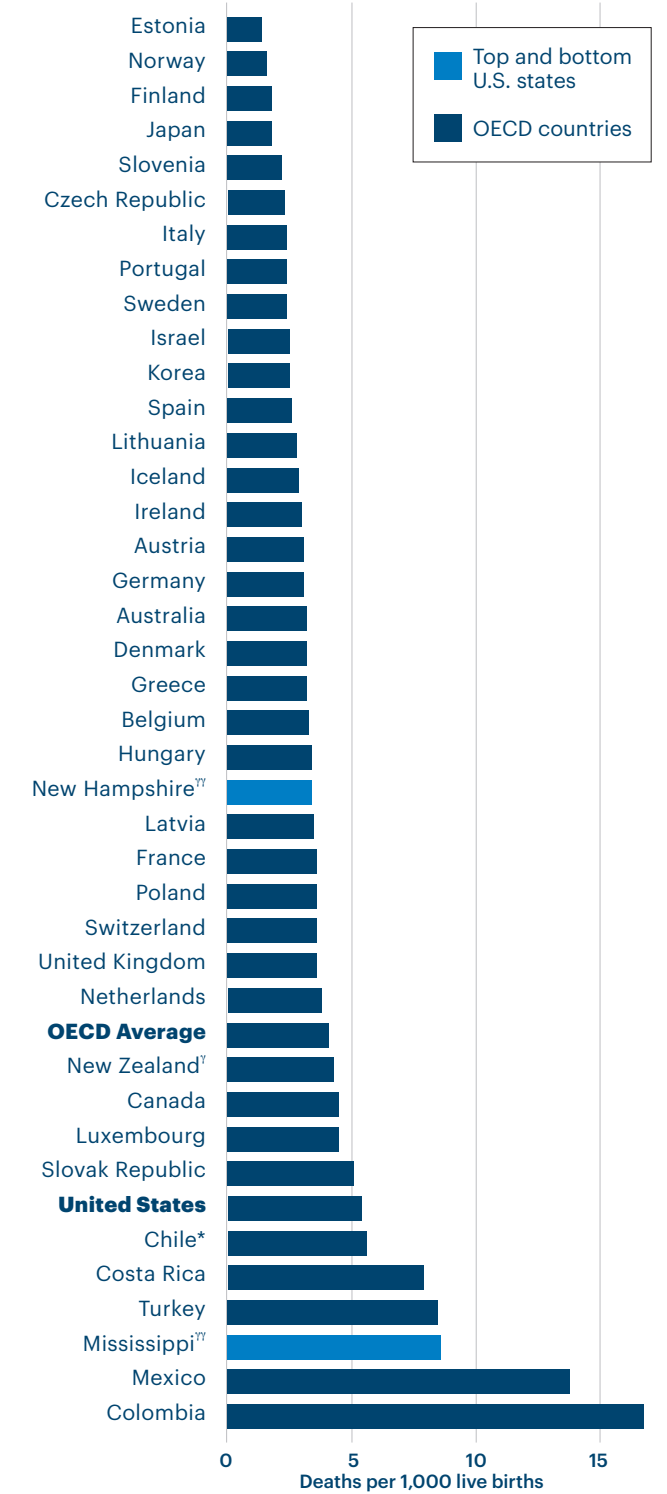
[Infant mortality](#) accounts for deaths among children under 1 year of age.⁴² [Over the past 50 years](#), the U.S. infant mortality rate has not improved at the same pace as that of other OECD countries.⁴³

The average rate of infant mortality among OECD countries was 4.1 deaths per 1,000 live births. At 5.4 deaths per 1,000 live births, the U.S. ranked No. 33 out of the 38 OECD countries. Estonia (No. 1) had the lowest rate in 2020, with 1.4 deaths per 1,000 live births. Mexico (No. 37) and Colombia (No. 38) had the highest infant mortality rates of OECD countries at 13.8 and 16.8 deaths per 1,000 live births, respectively. There were large racial/ethnic disparities among U.S. infants. In 2018-2019, the [mortality rate](#) was 3 times higher among Black infants at 10.7 deaths per 1,000 live births compared with Asian infants at 3.5 deaths per 1,000 live births.

According to the *2022 Health of Women and Children Report*, New Hampshire was the state with the lowest infant mortality rate at 3.4 deaths per 1,000 live births, placing it on par with Hungary (also 3.4, No. 23). The state with the highest rate, Mississippi, had an infant mortality rate of 8.6 deaths per 1,000 live births, which was more than twice the OECD average.

Over the past 50 years, the U.S. infant mortality rate has not improved at the same pace as that of other OECD countries.

The U.S. ranked 33 out of 38 OECD countries on infant mortality.



Source: Organization for Economic Co-operation and Development, 2020 or most recent year available; CDC WONDER, Linked Birth/Infant Death Files, 2018-2019.

* Provisional data
^Y 2018 data
^{YY} 2018-2019 data

Life expectancy

Life expectancy at birth describes how long a newborn can expect to live, on average, assuming current death rates remain the same.⁴⁴ Life expectancy has [increased over the past 50 years](#) in all OECD countries.¹ However, the COVID-19 pandemic has had profound global effects on life expectancy due to the high number of deaths from COVID-19 and other related causes.

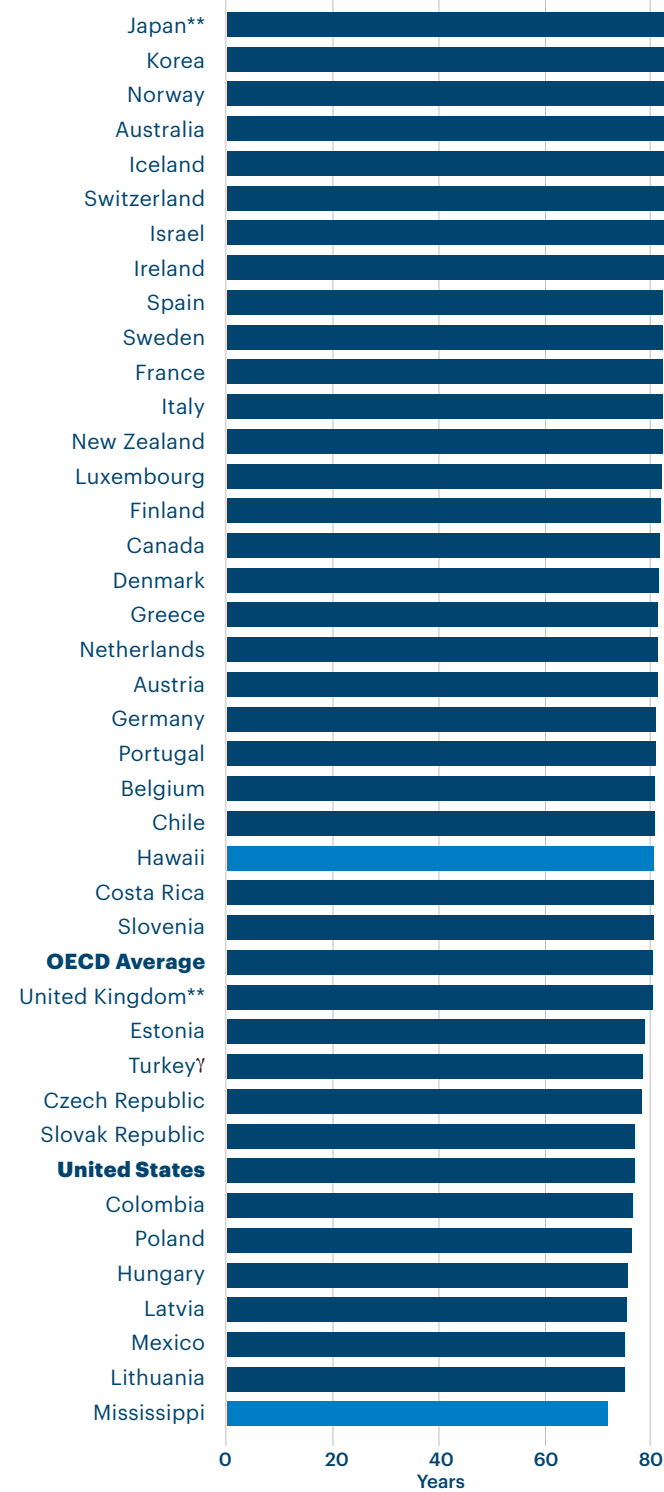
In 2020, life expectancy fell in [nearly all OECD countries](#) with available data.¹ Norway, Japan, Costa Rica, Denmark, Finland and Latvia were the exceptions. Nine countries had a decrease of one year or more; the largest decreases occurred in the U.S. (1.6 years) and Spain (1.5 years).

The average life expectancy in OECD countries was 80.5 years. The U.S. life expectancy at birth was 77.0 years and ranked No. 31 out of the 38 OECD countries, tied with the Slovak Republic (also 77.0 years) and falling between the Czech Republic (78.3 years, No. 30) and Colombia (76.7 years, No. 33).

Hawaii, the state with the highest life expectancy at 80.7 years, fell between Slovenia and Costa Rica (both 80.6 years, No. 25) and Belgium and Chile (both 80.8 years, No. 23). Mississippi, the state with the lowest life expectancy at 71.9 years, fell well below Lithuania (75.1 years, No. 38), the OECD country with the lowest life expectancy.

In 2020, life expectancy fell in nearly all OECD countries with available data.

The U.S. ranked 31 out of 38 OECD countries on life expectancy at birth.



Source: Organization for Economic Co-operation and Development, 2020 or most recent year available; National Center for Health Statistics, National Vital Statistics System, 2020.

** Estimated
[†] 2019 data

■ Top and bottom U.S. states
 ■ OECD countries

International Comparison | LIFE EXPECTANCY

Total health spending

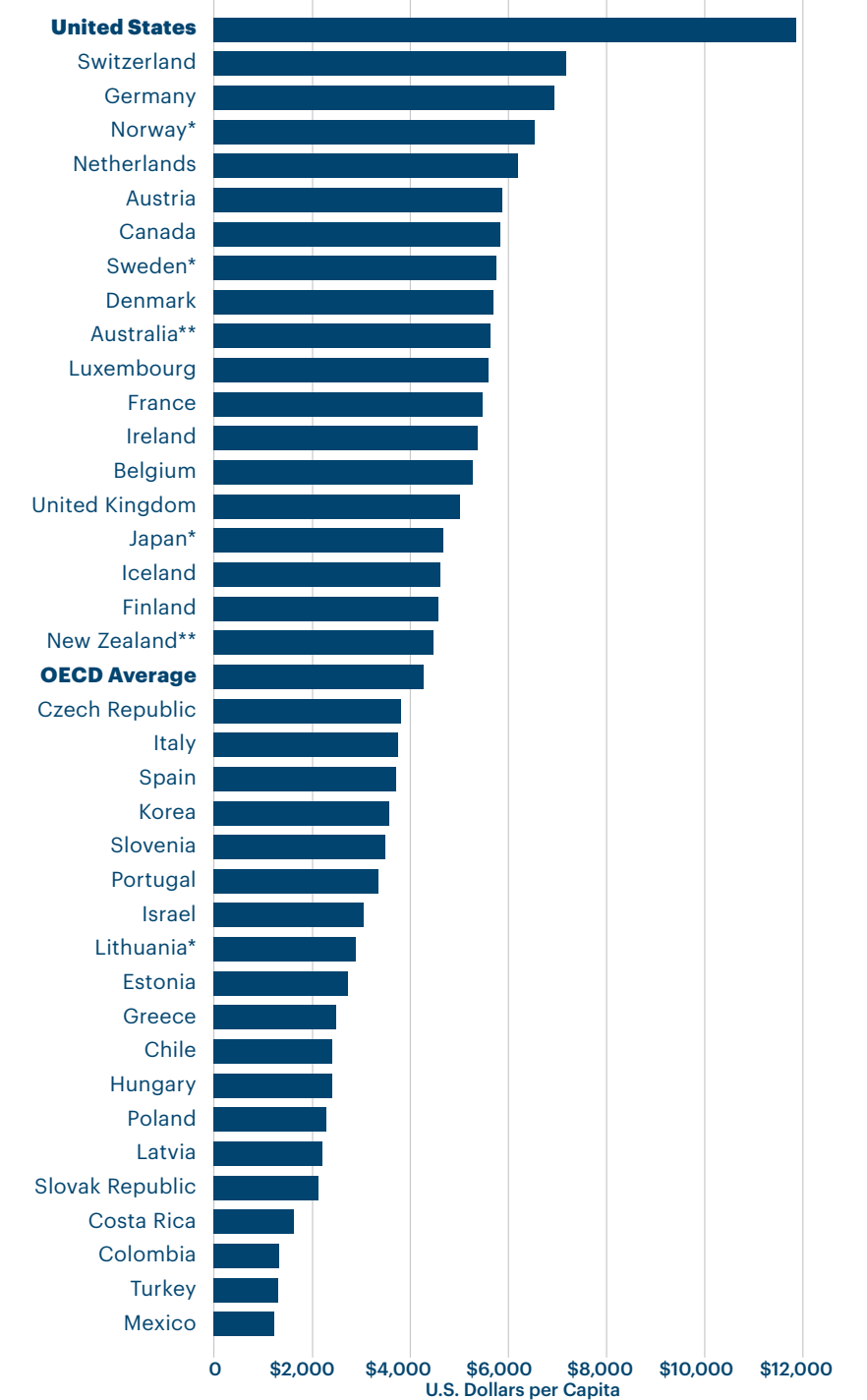
Total health spending represents the total consumption of goods and services; this includes personal health care (such as curative, rehabilitative and long-term care) and collective services (such as prevention and public health services).⁴⁵

Prior to the COVID-19 pandemic, per capita health spending increased in OECD countries by an average of 2.7% annually.⁴⁶ Estimates suggest that [health expenditures grew](#) approximately 5% on average in 2020 in response to the COVID-19 pandemic, the largest increase in spending in approximately 15 years.^{46,47} Preliminary estimates for 2021 suggest that health spending has continued to increase at a similar pace.

The average total spending on health in OECD countries was \$4,272 U.S. dollars per capita in 2020. The U.S. spent nearly three times that amount, totaling \$11,859 U.S. dollars per capita. Switzerland, which spent the second most on health among OECD countries (\$7,179), still spent only about two-thirds the amount the U.S. spent.

Spending on inpatient and outpatient care accounted for the largest share of the difference between the U.S. and other countries, and represented [a greater share of health spending](#) in 2018.⁴⁸ Roughly [50% of total health spending](#) in the U.S. came from public funds in 2017, which was much less than the OECD average of 71%.⁴⁹

The U.S. spent more on health care than other OECD countries.



Source: Organization for Economic Co-operation and Development, 2020.

* Provisional data

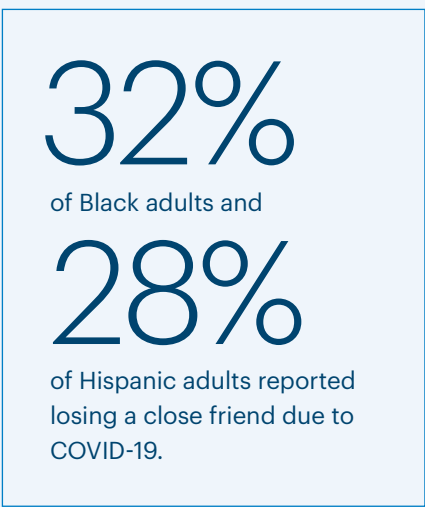
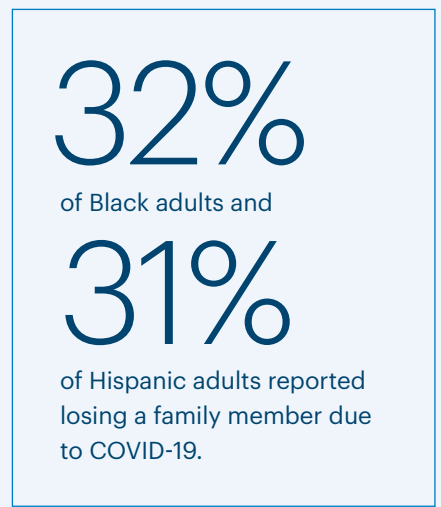
** Estimated

International Comparison | TOTAL HEALTH SPENDING

Special Feature

COVID-era Disparities Survey

Fielded online in October 2022 by Morning Consult, the personal experiences of over 3,800 surveyed Americans show a variety of differences by race and ethnicity in the pandemic's impact on their well-being, as well as the factors that contributed to those effects.



Survey data show disparate impact of factors affecting Americans' health during pandemic

The COVID-19 pandemic has had a profound impact on all Americans, from physical and mental health to clinical care and economic resources to social support and engagement. *America's Health Rankings* has found concerning disparities by race/ethnicity across a broad array of measures as pandemic-era data have been released. The effects of the pandemic have not entirely subsided — it continues to affect the daily lives of Americans and many aspects of their health and well-being.

To better understand the racial/ethnic health disparities experienced across these categories during the pandemic, *America's Health Rankings* launched the COVID-era Disparities Survey in partnership with Morning Consult. The survey, conducted via internet panel, polled a total of 3,849 U.S. adults ages 18 and older, with oversamples of American Indian/Alaska Native, Asian, Black, Hispanic and Hawaiian/Pacific Islander populations. Each of the surveyed groups was weighted based on age, gender, race/ethnicity, education and region. Along with the quantitative portion of the survey, respondents provided personal perspectives in their own words to illustrate how their and their families' health was impacted during this challenging time.

Nearly 1/3 of Black and Hispanic adults lost a close friend or family member as a result of COVID-19

As premature death spiked during the COVID-19 pandemic, and racial disparities widened, the impact of deaths related to COVID-19 was felt unequally between racial groups. According to survey results, Black (32%), Hispanic (31%), American Indian/Alaska Native (26%) and Hawaiian/Pacific Islander (26%) adults were significantly more likely than white (19%) and Asian (15%) adults to report losing a family member as a result of COVID-19. Similarly, 32% of Black adults and 28% of Hispanic adults reported losing a close friend, compared with 21% of white adults and 14% of Asian adults. American Indian/Alaska Native (26%) and Hawaiian/Pacific Islander (27%) adults were also more likely to have lost a close friend compared with Asian adults.

"I felt a lot more anxious and unsure about what might happen to my loved ones, so that took a toll on me."

- 26-year-old Hispanic male from Texas

"During the early part of the pandemic, I knew people who were hospitalized because they contracted COVID-19 so I was always very worried."

- 69-year-old Black female from New York

Many adults delayed care during the pandemic; American Indian/Alaska Native and Hawaiian/Pacific Islander adults more likely to have not yet caught up

The survey found differences by race/ethnicity in those who delayed receiving care over the course of the pandemic. Hispanic (52%), Hawaiian/Pacific Islander (51%), American Indian/Alaska Native (50%) and Asian (49%) adults had higher rates of delaying care compared with Black adults (42%). The rate was also significantly higher among Hispanic adults than white adults (46%).

Adults surveyed who reported delaying care were asked to select which factors most influenced the delay of needed care.* Among those who reported delaying medical care, nearly half of Hawaiian/Pacific Islander adults (49%) cited difficulty getting an appointment, compared with 23% of Black adults, 27% of Asian adults, 28% of Hispanic adults and 34% of white adults. Of those who reported delaying care, Hawaiian/Pacific Islander (32%) and American Indian/Alaska Native (30%) adults had higher rates of not yet being caught up on that postponed care, compared with 20% of Black adults and 21% of Asian adults who delayed care. White adults (26%) also had a higher rate of not being caught up compared with Black adults.

“There are so many others whom I know and those I never will who were so very greatly impacted in many ways by the COVID-19 pandemic. COVID-19 touched my life in a drastic way...”

– 69-year-old Pacific Islander female from Arkansas

Mental health especially impacted by occupational stress, financial issues and social isolation

Beyond the direct health impact of the disease itself, respondents identified the indirect economic implications of the pandemic as a major factor affecting their well-being. Across all racial and ethnic groups surveyed, job/occupational stress (excluding job loss), financial issues and social isolation were the factors that most negatively

impacted mental health during the COVID-19 pandemic. Over half of Hawaiian/Pacific Islander adults (56%) and 50% of Hispanic adults reported that job/occupational stress had a negative impact on their mental health, compared with 39% of white and Black adults, 46% of American Indian/Alaska Native adults and 45% of Asian adults. Relatedly, Hawaiian/Pacific Islander adults and American Indian/Alaska Native adults (both 59%), Hispanic adults (58%), white adults (54%) and Black adults (51%) reported financial issues negatively impacted their mental health during the pandemic at higher rates compared with Asian adults (46%). Hispanic adults (54%) reported that social isolation negatively impacted their mental health at a higher rate than Asian adults (47%).

“[The pandemic was] exhausting and draining and difficult for families with school-age children.”

– 42-year-old Black female from New York

The survey found that lower-income adults (annual household income under \$50,000) were more likely than those in the same racial/ethnic group with a higher income (annual household income \$50,000 or higher) to say their mental health was worse at the time of the survey compared to prior to the pandemic. For example, 38% of white adults and 32% of Hispanic adults with incomes less than \$50,000 said their mental health is worse now than before the pandemic, compared with 24% of white adults and 21% of Hispanic adults with incomes more than \$100,000.

Continued impact of social isolation varies by race/ethnicity, with differences in contributing factors

Social isolation remained a challenge for many Americans at the time of the survey. Hawaiian/Pacific Islander (17%) and Hispanic (16%) adults reported higher rates of feeling much more socially isolated from family and friends now versus prior to the pandemic, compared with Black and Asian adults (both 9%) and American Indian/Alaska Native adults (10%).

The survey results highlight how the factors that contributed to social isolation during the first year of the

Actions that surveyed adults said helped lessen social isolation during the pandemic...



59%
New hobbies and activities

59%
Spending more time with family members

58%
Social media

57%
Audio and video calling

pandemic varied by racial/ethnic groups.* However, not being able to engage in regular activities and not being able to see friends and family in person were consistently reported as the most impactful factors across groups. A higher percentage of Asian adults reported that not being able to travel (69%) influenced their feeling of social isolation a lot or some, compared with all other racial/ethnic groups. Black (50%) and Hawaiian/Pacific Islander (47%) adults reported that not being able to attend church/spiritual events influenced their feelings of social isolation a lot or some at a higher rate than most other racial/ethnic groups.

“The simple fact that I couldn’t partake in going outside or to my local restaurants and bars or interact with humans in general took a toll on both mental/physical and social/financials.”

– 38-year-old Hawaiian/Pacific Islander male from Illinois

Overall, roughly 3 in 5 adults said more time with family members (59%), new hobbies and activities (59%), social media (58%), and audio and video calling (57%) helped lessen social isolation a lot or some during the pandemic. There were some differences by race/ethnicity, as a higher percentage of Black adults (63%) said using social media

helped lessen social isolation a lot or some compared with white (55%), Hispanic (58%) and American Indian/Alaska Native (46%) adults. 67% of Asian adults, 65% of Black adults and 62% of Hispanic adults said audio and video calling helped lessen social isolation, which was a higher rate than among white (55%) and American Indian/Alaska Native (49%) adults.

“The pandemic was a hit on a lot of aspects of life, but it also made me rethink everything, be appreciative of basic things, and...become a stronger individual.”

– 26-year-old Asian male from Ohio

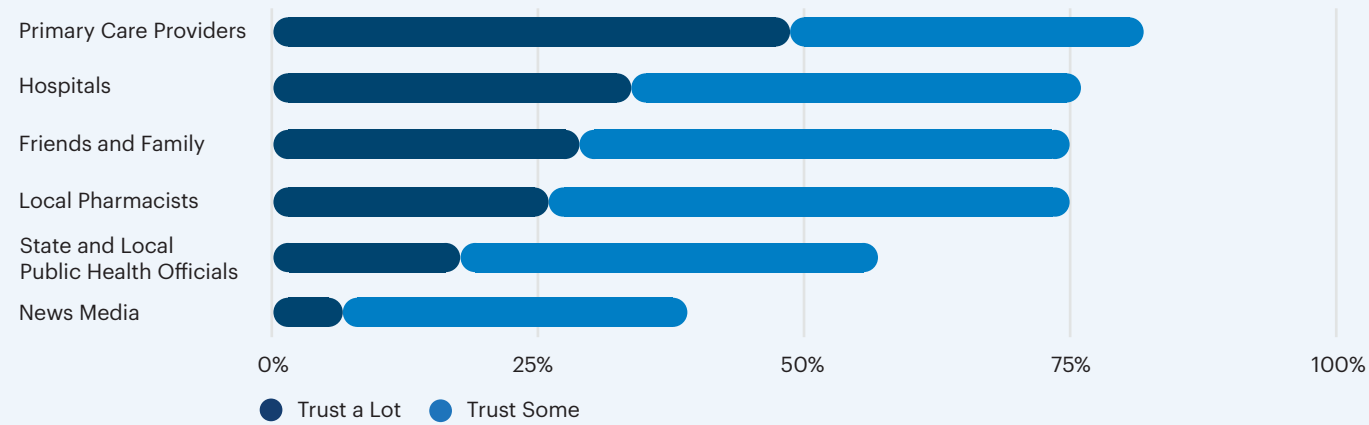
Higher-income and white adults more likely to have resumed pre-pandemic activities

Nearly 4 in 10 white adults (38%) reported that they have resumed all social activities that they engaged in before the pandemic, a higher rate than among Hispanic (31%), Black (28%), Asian (24%) and Hawaiian/Pacific Islander (25%) adults surveyed. Within racial/ethnic groups, adults with higher household incomes were more likely to have resumed their pre-pandemic activities than those with lower incomes. For example, 82% of Hispanic and 89% of Asian adults with incomes more

* Options in the survey included: Worried about contracting COVID-19 at the facility, Difficulty getting an appointment, Facility was closed, Cost-related barriers, Difficulty finding a physician or other healthcare provider who would see me, Lack of access to transportation, Uninsured/high copay, No insurance coverage, Not enough time, Barriers related to telehealth or virtual appointments, Moved during the COVID-19 pandemic and did not have a healthcare provider and None of the above.

* Options in the survey included: Not being able to see friends and family in person, Not being able to engage in regular activities, Not being able to travel, Not being able to attend church/spiritual events and Not being able to attend school/classes in person.

Level of Trust in Sources of Health-Related Information
 Percentage of respondents reporting they place a lot or some trust in the following for information related to their personal and family's health



Source: America's Health Rankings COVID-era Disparities Survey, 2022.

than \$100,000 have resumed activities, compared to 72% of Hispanic and 74% of Asian adults with incomes less than \$50,000.

Reasons for not resuming pre-pandemic activities varied. Overall, adults surveyed in the general population who have not returned to all social activities were most worried about getting or spreading COVID-19 or other infectious diseases (43%) and financial barriers (38%). Mental or physical barriers were cited most often among white (29%) and Hispanic (26%) adults compared with Black (19%) and Asian (17%) adults. Meanwhile, American Indian/Alaska Natives who have not returned to all social activities were more likely to report feeling disconnected from programs or people they were once connected to (36%), compared with Black and Asian (both 25%) adults surveyed.

"I feel very disconnected to anyone in my past that was once connected to me."

– 55-year-old American Indian/Alaska Native male from Texas

Addressing inequities and understanding sources of trust as leaders look ahead

As policymakers and health officials seek to recover from the pandemic and prepare the country for the

next public health emergency, the COVID-era Disparities Survey findings highlight the importance of addressing the inequities affecting different racial/ethnic groups that may have contributed to their experiences during COVID-19. It is also important to recognize the varying levels of trust that Americans have in different health authorities and institutions that shape their health care.

Respondents of all racial and ethnic populations expressed a high level of trust in primary care providers. Overall, 82% of adults said they place a lot (49%) or some (33%) trust in their primary care provider for information related to their personal and family's health. Three-fourths of the general population surveyed also place a lot or some trust in hospitals (76%), friends and family (75%) and local pharmacists (75%). Respondents expressed lower levels of trust in other messengers: about 18% of adults surveyed trust state and local public health officials a lot and 39% trust them some, and only 7% of adults said they trust the news media a lot (32% trust them some). Communicating and disseminating health information through trusted sources — especially the providers who play a close and crucial role in patient care and education — and rebuilding trust in others will be important to consider when planning for the future.*

* Options in the survey included: Your primary care provider, Hospitals, Friends and family, Local pharmacists, Federal public health officials (e.g., CDC), State and local public health officials, Spiritual leaders/clergy, The news media (e.g., newspapers, television, radio), State elected officials, Social media, Community leaders and Federal elected officials.

Appendix

NATIONAL SUMMARY | METHODOLOGY | REFERENCES

United States

Health Department Website: hhs.gov

Summary

DRUG DEATHS

▲30%

from 21.5 to 27.9 deaths per 100,000 population between 2019 and 2020.

NON-MEDICAL DRUG USE

▲29%

from 12.0% to 15.5% of adults between 2021 and 2022.

PREMATURE DEATH

▲18%

from 7,337 to 8,659 years lost before age 75 per 100,000 population between 2019 and 2020.

FOOD INSECURITY

▼11%

from 11.7% to 10.4% of households between 2016-2018 and 2019-2021.

HIGH-SPEED INTERNET

▲8%

from 85.2% to 92.4% of households between 2016 and 2021.

UNINSURED

▼7%

from 9.2% to 8.6% of the population between 2019 and 2021.

MULTIPLE CHRONIC CONDITIONS

▲5%

from 9.1% to 9.6% of adults between 2020 and 2021.

Measures		U.S. Value
SOCIAL & ECONOMIC FACTORS		
Community and Family Safety	Occupational Fatalities (deaths per 100,000 workers)	3.9
	Public Health Funding (dollars per person)	\$116
	Violent Crime (offenses per 100,000 population)	399
Economic Resources	Economic Hardship Index (index from 1-100)	—
	Food Insecurity (% of households)	10.4%
	Income Inequality (80/20 ratio)	4.96
Education	Fourth Grade Reading Proficiency (% of public school students)	32.1%
	High School Graduation (% of students)	85.8%
	High School Graduation Racial Disparity (percentage point difference)**	15.1
Social Support and Engagement	Adverse Childhood Experiences (% ages 0-17)	14.0%
	High-speed Internet (% of households)	92.4%
	Residential Segregation — Black/White (index from 0-100)	—
	Volunteerism (% ages 16+)	33.4%
	Voter Participation (% of U.S. citizens ages 18+)	60.1%
PHYSICAL ENVIRONMENT		
Air and Water Quality	Air Pollution (micrograms of fine particles per cubic meter)	7.8
	Drinking Water Violations (% of community water systems)	0.8%
	Risk-screening Environmental Indicator Score (unitless score)	—
	Water Fluoridation (% of population served)	73.0%
Housing and Transit	Drive Alone to Work (% of workers ages 16+)	67.8%
	Housing With Lead Risk (% of housing stock)	16.9%
	Severe Housing Problems (% of occupied housing units)	17.0%
CLINICAL CARE		
Access to Care	Avoided Care Due to Cost (% ages 18+)	8.8%
	Providers (per 100,000 population)	
	Dental Care	60.6
	Mental Health	305.0
	Primary Care	265.3
Uninsured (% of population)	8.6%	
Preventive Clinical Services	Colorectal Cancer Screening (% ages 50-75)	74.3%
	Dental Visit (% ages 18+)	66.7%
	Immunizations	
Childhood Immunizations (% by age 24 months)	70.5%	
Flu Vaccination (% ages 18+)	46.5%	
HPV Vaccination (% ages 13-17)	61.7%	
Quality of Care	Dedicated Health Care Provider (% ages 18+)	84.1%
	Preventable Hospitalizations (discharges per 100,000 Medicare beneficiaries)	2,770
BEHAVIORS		
Nutrition and Physical Activity	Exercise (% ages 18+)	23.0%
	Fruit and Vegetable Consumption (% ages 18+)	7.4%
Sexual Health	Physical Inactivity (% ages 18+)	23.7%
	Chlamydia (new cases per 100,000 population)	481.3
	High-risk HIV Behaviors (% ages 18+)	5.6%
Sleep Health	Teen Births (births per 1,000 females ages 15-19)	15.4
	Insufficient Sleep (% ages 18+)	32.3%
Smoking and Tobacco Use	E-cigarette Use (% ages 18+)*	6.7%
	Smoking (% ages 18+)	14.4%
HEALTH OUTCOMES		
Behavioral Health	Drug Deaths (deaths per 100,000 population)*	27.9
	Excessive Drinking (% ages 18+)	17.3%
	Frequent Mental Distress (% ages 18+)	14.7%
	Non-medical Drug Use (% ages 18+)	15.5%
Mortality	Premature Death (years lost before age 75 per 100,000 population)	8,659
	Premature Death Racial Disparity (ratio)**	1.6
Physical Health	Frequent Physical Distress (% ages 18+)	10.9%
	Low Birthweight (% of live births)	8.2%
	Low Birthweight Racial Disparity (ratio)**	2.0
	Multiple Chronic Conditions (% ages 18+)	9.6%
	Obesity (% ages 18+)	33.9%

* Non-ranking measure.

— Data not available, missing or suppressed.

** Disparity measures compare the group with the highest or lowest rate and the white rate.

For measure descriptions, source details and methodology, visit AmericasHealthRankings.org.

Methodology

Annual Report

The 2022 *Annual Report* includes 83 individual measures developed from 29 data sources. For each measure, the most recently available state-level data as of November 1, 2022 are presented as the value. For a full list of measures, definitions and source details, see the 2022 *Annual Report* Appendix on the *America's Health Rankings* website. Significance is based on non-overlapping 95% confidence intervals when comparing data over time or across demographic subpopulations. New measures available in this year's report include firearm deaths and high school completion.

The state health rankings are a summation of select state-level population health measures. Data for 12 of the 51 measures used in the ranking calculation were repeated from the 2021 edition as no new data were available. Ranking methodology, measures and weights as well as measure changes based on input from an Advisory Committee throughout recent *Annual Report* history are described under [Model and Methodology](#) on the *America's Health Rankings* website.

[Florida](#) data are missing from the national values for measures from the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as the state was unable to collect data to meet the CDC's minimum requirements for inclusion in the 2021 annual aggregate data set. Also, in 2019 [New Jersey](#) did not meet CDC's minimum requirements for inclusion in the BRFSS annual aggregate data set.

COVID-era impact analysis by race/ethnicity, spotlighted in this special edition, were assessed by investigating all measures with race/ethnicity data to determine if there were significant changes between before the pandemic (2019 and earlier) and the most recent data available. For measures with significant changes by race/ethnicity, disparity ratios (highest value divided by the lowest value) were calculated and compared to determine if the disparity had widened or narrowed. Absolute differences were also compared.

Subpopulation Group Definitions

Subpopulation analyses are performed to illuminate age, gender, race and ethnicity, education, income and metropolitan status disparities. Not all subpopulations are available for all data sources and measures. Individual estimates are suppressed if they do not meet the reliability criteria laid out by the data source or by established internally. Some values have wide confidence intervals, meaning that the true value may be far from the estimate listed.

Data are provided where available for the following racial and ethnic groups: American Indian/Alaska Native, Asian, Black or African American (labeled as Black), Hispanic or Latino (labeled as Hispanic), Native Hawaiian or Other Pacific Islander (labeled as Hawaiian/Pacific Islander), white, multiracial and/or those who identify as other race. Ethnicity was collected separately on surveys. People who identified as Hispanic or Latino may be of any race. Of note, racial groups are collected differently across data sources. For example, some sources combined Asian and Pacific Islander while other sources differentiated Asian from Native Hawaiian and Other Pacific Islander. In most data provided, the racial and ethnic groups are mutually exclusive, meaning all racial groups were non-Hispanic.

COVID-19 Data

A few measures highlighted in this year's report come from *America's Health Rankings COVID-19 Data*. These data include 17 measures developed from seven sources with data related to COVID-19 deaths, vaccinations, booster doses, long COVID and pandemic-related life disruptions. Most COVID-19 data were updated with each 2022 *America's Health Rankings* state-level report publication (May, October, December). [COVID-19 Data](#) and [source details](#) can be found on the *America's Health Rankings* website. Long COVID data presented are from the September 14–26, 2022 Phase 3.6 of the U.S. Census Bureau's Household Pulse Survey.

COVID-era Disparities Survey

The COVID-era Disparities Survey was conducted by Morning Consult on behalf of the United Health Foundation to better understand the COVID-19 pandemic's effect across racial and ethnic groups. The online non-probability survey was conducted from October 12-23, 2022 among U.S. adults 18 and older. Respondents were recruited to be on an internet panel from a variety of sources (web ads, mobile survey apps, survey walls, etc.) to minimize potential coverage error and were invited to participate in exchange for incentives.

Statistical modeling was used to control for self-selection to create unbiased and representative samples independent of the initial recruitment process. First, a sampling frame was built for the population of interest based on publicly available data from the U.S. Census Bureau. Respondents were invited to participate based on mutually exclusive sampling strata based off of the sampling frame. This process (quota sampling) ensured that those asked to participate were representative of the non-institutionalized adult U.S. population on important demographic characteristics. For this study, quotas were filled based off the intersection of age and gender. Second, respondents were terminated from the sample if they did not meet requirements for attentiveness, credibility, speeding, straightlining and satisficing. Third, all respondents that passed the quality assurance process were then weighted using iterative proportional fitting (or raking) to the sampling frame to ensure they were representative on a broader set of demographic characteristics, including age, gender, race/ethnicity, education and U.S. census region.

Six independent samples were collected. One for the general population and separate samples for specific racial/ethnic groups. For comparison within the report, white non-Hispanic adults were a subset of the general population data.

Sample sizes and margins of error (MOE):

Population	Sample size	MOE
General population	n=1,000	+/- 3 percentage points
Hispanic adults	n=800	+/- 3 percentage points
Black adults	n=800	+/- 3 percentage points
Asian American adults	n=800	+/- 3 percentage points
American Indian/ Alaska Native adults	n=250	+/- 6 percentage points
Native Hawaiian or Other Pacific Islander adults	n=199	+/- 7 percentage points

Each of the samples surveyed was weighted based on age, gender, race/ethnicity, education and region. Throughout the analysis, significance testing was run to identify significant differences across racial and ethnic groups. To test for statistically significant differences between responses, Morning Consult tested for the quality of proportions with an alpha level set at 0.05 (5%).

References

1. "Trends in Life Expectancy." In Health at a Glance 2021: OECD Indicators, 80–81. Paris, France: OECD Publishing, 2021. <https://www.oecd-ilibrary.org/sites/e0d509f9-en/index.html?itemId=/content/component/e0d509f9-en>.
2. Web-based Injury Statistics Query and Reporting System (WISQARS). "WISQARS Years of Potential Life Lost (YPLL) Before Age 75." Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control, 2020. <https://wisqars.cdc.gov/cgi-bin/broker.exe>.
3. Garcia, Macarena C. et al. "Potentially Excess Deaths from the Five Leading Causes of Death in Metropolitan and Nonmetropolitan Counties — United States, 2010–2017." MMWR. Surveillance Summaries 68, no. 10 (November 8, 2019): 1–11. <https://doi.org/10.15585/mmwr.ss6810a1>.
4. Centers for Disease Control and Prevention. "COVID Data Tracker Weekly Review," October 21, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>.
5. Ahmad, Farida B. et al. "Provisional Mortality Data — United States, 2021." MMWR. Morbidity and Mortality Weekly Report 71, no. 17 (April 29, 2022): 597–600. <https://doi.org/10.15585/mmwr.mm7117e1>.
6. Centers for Disease Control and Prevention. "Health, United States, 2020–2021: Drug Overdose Deaths," August 8, 2022. <https://www.cdc.gov/nchs/health-us/topics/drug-overdose-deaths.htm>.
7. Mattson, Christine L. et al. "Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019." MMWR. Morbidity and Mortality Weekly Report 70, no. 6 (February 12, 2021): 202–7. <https://doi.org/10.15585/mmwr.mm7006a4>.
8. Centers for Disease Control and Prevention. "Death Rate Maps & Graphs," October 7, 2022. <https://www.cdc.gov/drugoverdose/deaths/index.html>.
9. National Institute on Drug Abuse. "Commonly Used Drugs Charts," August 20, 2020. <https://nida.nih.gov/research-topics/commonly-used-drugs-charts>.
10. Centers for Disease Control and Prevention. "Infectious Diseases, Opioids and Injection Drug Use in Persons Who Inject Drugs," August 31, 2021. <https://www.cdc.gov/pwuid/opioid-use.html>.
11. Slabaugh, S. Lane et al. "Leveraging Health-Related Quality of Life in Population Health Management: The Case for Healthy Days." Population Health Management 20, no. 1 (March 31, 2016): 13–22. <https://doi.org/10.1089/pop.2015.0162>.
12. National Institute of Mental Health. "Suicide." Accessed October 18, 2022. <https://www.nimh.nih.gov/health/statistics/suicide>.
13. Conner, Kenneth R. et al. "Metaanalysis of Mood and Substance Use Disorders in Proximal Risk for Suicide Deaths." Suicide and Life-Threatening Behavior 49, no. 1 (2019): 278–92. <https://doi.org/10.1111/sltb.12422>.
14. American Foundation for Suicide Prevention. "Risk Factors, Protective Factors, and Warning Signs," December 25, 2019. <https://afsp.org/risk-factors-protective-factors-and-warning-signs/>.
15. "Multiple Chronic Conditions—A Strategic Framework: Optimum Health and Quality of Life for Individuals with Multiple Chronic Conditions." Washington, D.C.: U.S. Department of Health and Human Services, 2010. https://www.hhs.gov/sites/default/files/ash/initiatives/mcc/mcc_framework.pdf.
16. Centers for Disease Control and Prevention. "Heart Disease and Stroke," September 8, 2022. <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/heart-disease-stroke.htm>.
17. Centers for Disease Control and Prevention. "Long COVID or Post-COVID Conditions," September 1, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html>.
18. Davis, Ari et al. "A Year in Review: 2020 Gun Deaths in the U.S." Baltimore, MD: Johns Hopkins Center for Gun Violence Solutions, 2022. <https://publichealth.jhu.edu/sites/default/files/2022-05/2020-gun-deaths-in-the-us-4-28-2022-b.pdf>.

19. Goldstick, Jason E. et al. "Current Causes of Death in Children and Adolescents in the United States." *New England Journal of Medicine* 386, no. 20 (May 19, 2022): 1955–56. <https://doi.org/10.1056/NEJMc2201761>.
20. Nathan, Richard P. et al. "Understanding Central City Hardship." *Political Science Quarterly* 91, no. 1 (1976): 47–62. <https://doi.org/10.2307/2149158>.
21. "2019 Kids Count Data Book: State Trends in Child Well-Being." Baltimore, MD: The Annie E. Casey Foundation, 2019. <https://assets.aecf.org/m/resourcedoc/aecf-2019kidscountdatabook-2019.pdf>.
22. Feeding America: Hunger and Health. "What Is Food Insecurity?" Accessed November 11, 2022. <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/>.
23. Feeding America: Hunger and Health. "What Are the Connections Between Food Insecurity and Health?" Accessed November 11, 2022. <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/hunger-health-101/>.
24. Bauerly, Brittney Crock et al. "Broadband Access as a Public Health Issue: The Role of Law in Expanding Broadband Access and Connecting Underserved Communities for Better Health Outcomes." *The Journal of Law, Medicine & Ethics* 47, no. S2 (June 2019): 39–42. <https://doi.org/10.1177/1073110519857314>.
25. McClain, Colleen et al. "The Internet and the Pandemic." Pew Research Center, September 1, 2021. <https://www.pewresearch.org/internet/2021/09/01/the-internet-and-the-pandemic/>.
26. Gajarawala, Shilpa N. et al. "Telehealth Benefits and Barriers." *The Journal for Nurse Practitioners* 17, no. 2 (February 2021): 218–21. <https://doi.org/10.1016/j.nurpra.2020.09.013>.
27. Center for Climate and Energy Solutions. "Science and Impacts." *Climate Essentials*, September 2019. <https://www.c2es.org/document/science-and-impacts/>.
28. U.S. Energy Information Administration. "Use of Energy Explained: Energy Use for Transportation." *Independent Statistics & Analysis*. Accessed October 24, 2022. <https://www.eia.gov/energyexplained/use-of-energy/transportation.php>.
29. Rodrigue, Jean-Paul. "The Environmental Relationships of Transportation Systems." *The Geography of Transport Systems*, December 7, 2017. <https://transportgeography.org/contents/chapter4/transportation-and-environment/transport-systems-environment/>.
30. Wilper, Andrew P. et al. "Health Insurance and Mortality in US Adults." *American Journal of Public Health* 99, no. 12 (December 1, 2009): 2289–95. <https://doi.org/10.2105/AJPH.2008.157685>.
31. Freeman, Joseph D. et al. "The Causal Effect of Health Insurance on Utilization and Outcomes in Adults: A Systematic Review of US Studies." *Medical Care* 46, no. 10 (2008). <https://doi.org/10.1097/MLR.0b013e318185c913>.
32. Woolhandler, Steffie et al. "The Relationship of Health Insurance and Mortality: Is Lack of Insurance Deadly?" *Annals of Internal Medicine* 167, no. 6 (June 27, 2017): 424–31. <https://doi.org/10.7326/M17-1403>.
33. AAFP. "Primary Care." Accessed November 15, 2022. <https://www.aafp.org/about/policies/all/primary-care.html>.
34. Starfield, Barbara et al. "Contribution of Primary Care to Health Systems and Health." *The Milbank Quarterly* 83, no. 3 (September 2005): 457–502. <https://doi.org/10.1111/j.1468-0009.2005.00409.x>.
35. NAMI: National Alliance on Mental Illness. "Types of Mental Health Professionals." Accessed November 15, 2022. <https://www.nami.org/About-Mental-Illness/Treatments/Types-of-Mental-Health-Professionals>.
36. "2020 Review of Physician and Advanced Practitioner Recruiting Incentives and the Impact of COVID-19." Dallas, TX: Merritt Hawkins, AMN Healthcare, 2020. https://www.merrithawkins.com/uploadedFiles/Merritt_Hawkins_Incentive_Review_2020.pdf.
37. Massetti, Greta M. et al. "Summary of Guidance for Minimizing the Impact of COVID-19 on Individual Persons, Communities, and Health Care Systems — United States, August 2022." *MMWR. Morbidity and Mortality Weekly Report* 71, no. 33 (August 19, 2022): 1057–64. <https://doi.org/10.15585/mmwr.mm7133e1>.
38. Centers for Disease Control and Prevention. "Benefits of Getting a COVID-19 Vaccine," August 17, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/vaccine-benefits.html>.
39. OECD. "About the OECD." Accessed November 11, 2022. <https://www.oecd.org/about/>.
40. Mueller, Michael et al. "The Health Impact of COVID-19." In *Health at a Glance 2021: OECD Indicators*, 37–76. Paris, France: OECD Publishing, 2021. <https://www.oecd-ilibrary.org/sites/b0118fae-en/index.html?itemId=/content/component/b0118fae-en#section-d1e13554>.
41. "Excess Mortality." In *Health at a Glance 2021: OECD Indicators*, 84–85. Paris, France: OECD Publishing, 2021. <https://www.oecd-ilibrary.org/sites/ec2de914-en/index.html?itemId=/content/component/ec2de914-en>.
42. "Infant Mortality Rates (Indicator)." Dataset. OECD Data, 2022. <https://doi.org/10.1787/83dea506-en>.
43. "CO1.1: Infant Mortality." OECD Family Database. OECD, July 2020. https://www.oecd.org/els/family/CO_1_1_Infant_mortality.pdf.
44. "Life Expectancy at Birth (Indicator)." Dataset. OECD Data, 2022. <https://doi.org/10.1787/27e0fc9d-en>.
45. "Health Spending (Indicator)." Dataset. OECD Data, 2022. <https://doi.org/10.1787/8643de7e-en>.
46. "Health Expenditure per Capita." In *Health at a Glance 2021: OECD Indicators*, 190–91. Paris, France: OECD Publishing, 2022. <https://www.oecd-ilibrary.org/sites/154e8143-en/index.html?itemId=/content/component/154e8143-en>.
47. OECD. "OECD Health Statistics 2022," July 5, 2022. <https://www.oecd.org/health/health-data.htm>.
48. Kurani, Nisha et al. "What Drives Health Spending in the U.S. Compared to Other Countries." *Peterson-KFF Health System Tracker (blog)*, September 25, 2020. <https://www.healthsystemtracker.org/brief/what-drives-health-spending-in-the-u-s-compared-to-other-countries/>.
49. Mueller, Michael et al. "Focus on Public Funding of Health Care." Brief. Paris, France: OECD Publishing, February 2020. <https://www.oecd.org/health/Public-funding-of-health-care-Brief-2020.pdf>.

America's Health Rankings® Annual Report is available in its entirety at AmericasHealthRankings.org. Visit the site to request or download additional copies. The special edition of the 2022 *America's Health Rankings Annual Report* is funded entirely by the United Health Foundation, a recognized 501(c)(3) organization. An Advisory Committee provided expertise and guidance in the design and selection of measures for the report.

United Health Foundation encourages the distribution of information contained in this publication for non-commercial and charitable, educational or scientific purposes. Please acknowledge *America's Health Rankings Annual Report* as the source and provide the following notice: ©2022 United Health Foundation. All Rights Reserved. Please acknowledge the original source of specific data as cited.

Data contained within this report were obtained from and used with permission of:

American Nonsmokers' Rights Foundation

Center for Climate and Energy Solutions

Organization for Economic Co-operation and Development

Rocky Mountain Poison & Drug Safety, RADARS© System

Trust for America's Health

U.S. Census Bureau

American Community Survey

Current Population Survey

U.S. Department of Agriculture, Economic Research Service

U.S. Department of Education, National Center for Education Statistics

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention

Centers for Medicare & Medicaid Services

Health Resources & Services Administration

U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy

U.S. Department of Justice, Federal Bureau of Investigation

U.S. Department of Labor, Bureau of Labor Statistics

U.S. Energy Information Administration, State Energy Data System

U.S. Environmental Protection Agency

Safe Drinking Water Information System

Toxic Release Inventory

Arundel Metrics, Inc. of Saint Paul, Minnesota, conducted this project for and in cooperation with United Health Foundation with design by Aldrich Design, Saint Paul, Minnesota.

Questions and comments on the report should be directed to the United Health Foundation at unitedhealthfoundationinfo@uhg.com.

Copyright ©2022 United Health Foundation

UNITED HEALTH FOUNDATION®

About the United Health Foundation

Through collaboration with community partners, grants and outreach efforts, the United Health Foundation works to improve our health system, build a diverse and dynamic health workforce and enhance the well-being of local communities. The United Health Foundation was established by UnitedHealth Group (NYSE: UNH) in 1999 as a not-for-profit, private foundation dedicated to improving health and health care. To date, the United Health Foundation has committed more than \$700 million to programs and communities around the world. To learn more, visit UnitedHealthFoundation.org.



About the American Public Health Association

The APHA champions the health of all people and all communities. The APHA strengthens the public health profession, promotes best practices and shares the latest public health research and information. The APHA is the only organization that combines a 150-year perspective, a broad-based member community and the ability to influence federal policy to improve the public's health. Learn more at www.apha.org.



For more information, contact:

The United Health Foundation
Jenifer McCormick
jenifer_mccormick@uhg.com
(952) 936-1917
AmericasHealthRankings.org