



EXECUTIVE BRIEF

# Annual Report

# 2021



### **About America's Health Rankings®**

For over three decades, *America's Health Rankings®* has assessed the nation's health and provided data-driven insights to support better health outcomes and build healthier communities. Produced by the United Health Foundation, *America's Health Rankings* evaluates a comprehensive set of health, environmental and socioeconomic data to illuminate both health challenges and successes, determine national and state health benchmarks and enable stakeholders to take action to improve health.

As the longest-running state-by-state analysis of our nation's health, the platform provides actionable data that stakeholders can use to effect change either in a state or nationally and continue the dialogue of improving our nation's health.

### **About the Annual Report**

The *Annual Report* was developed in partnership with the American Public Health Association (APHA). The United Health Foundation is pleased to partner with the APHA as a champion for the health of all people and all communities. The United Health Foundation's focus on improving health and health care in communities across the country closely aligns with APHA's mission to improve the health of the public and achieve equity in health status.



"The *America's Health Rankings 2021 Annual Report* marks the beginning of a new phase; we now can begin to analyze and understand the bigger picture of COVID-19, the impact of this public health emergency on the health of the nation overall and where we go from here."

*Dr. Georges C. Benjamin, American Public Health Association (APHA)*

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## Overview

For 32 years, *America's Health Rankings*<sup>®</sup> has provided a comprehensive analysis of the nation's health on a state-by-state basis. This year, as the nation continues to grapple with the effects of the COVID-19 public health crisis, the United Health Foundation remains committed to providing data-driven insights that can help build healthier communities across the country.

The 2021 *Annual Report* examines 81 measures from 30 unique data sources to understand the impact that social, economic, environmental and other factors have on health, as well as trends that reflect the nation's changing health over time. With many measures, the data are broken down to expose differences by geography, education level, income level, age and gender, as well as race and ethnicity — often revealing differences among groups that national or state aggregate data may mask.

This year's *Annual Report* features new publicly available data collected during the COVID-19 pandemic. The latest data reveal a complex picture of the nation's health and provide insights into the early effects of the COVID-19 pandemic on Americans' health and well-being. The *Annual Report* highlights a dramatic increase in the U.S. death rate, as well as contrasting reversals of longer-term health trends across several measures.

The report finds that the COVID-19 pandemic has had a severe impact across the country, as the nation experienced a 17% increase between 2019 and 2020 in the overall U.S. death rate, according to an *America's Health Rankings* analysis of the latest provisional data from the Centers for Disease Control and Prevention (CDC).<sup>1</sup> The report further finds notable reversals of long-term trends in some measures during the pandemic, including a significant increase in the number of Americans reporting their health was very good or excellent. However, Americans continue to experience large disparities by geography, race and ethnicity, education and other factors, with new data that reinforce the broad, deep and persistent disparities highlighted in the 2021 *Health Disparities Report*.

The *Annual Report* underscores well-known challenges in some measures of behavioral and mental health while highlighting unexpected reversals of trends in others. Lastly, this year's report reveals that during the early part of the pandemic, flu vaccinations and the number of primary care and mental health providers reached their highest levels since *America's Health Rankings* began tracking the measures. Not all states benefited equally, as these rates varied significantly by geography.

In recognition of current public health challenges, *America's Health Rankings* continues to frequently update the platform to better equip public health leaders with data to navigate the pandemic. The *America's Health Ranking's website* contains state-by-state and national data for a variety of COVID-19 measures, including those identified as risk factors for severe illness and death, Medicare claims case and hospitalization rates, COVID-19 vaccination rates and provisional mortality rates.

The United Health Foundation and the APHA are pleased to offer *America's Health Rankings* and the *Annual Report* as resources to help policymakers, community leaders and other stakeholders understand the successes and challenges the nation is experiencing across a wide range of health measures, including the impact of the COVID-19 pandemic. Readers are also encouraged to visit [www.AmericasHealthRankings.org](http://www.AmericasHealthRankings.org), where they can explore the full report and access the entire suite of data and resources. We anticipate the report's findings will encourage meaningful dialogue and actionable insights that will help build healthier communities across the nation.

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1 Provisional death estimates are updated and reported continuously by the CDC's National Vital Statistics System (NVSS), using data from U.S. death certificates to provide an early indication of shifts in mortality trends in near real-time to researchers and policymakers. Provisional death estimates may change as additional data are received as the timeliness of death certificate submissions varies across geographies. The final mortality data are released annually once all deaths have been investigated, processed and reviewed for completeness and quality.

# The report finds that the **COVID-19** pandemic has had a severe impact across the country, reflected in a **17% increase in the provisional U.S. death rate between 2019 and 2020.**

## Key Findings

### Dramatic Increase in Mortality During COVID-19

The COVID-19 pandemic has had a severe impact across the country, as the nation experienced a 17% increase in the provisional overall U.S. death rate between 2019 and 2020.

According to *America's Health Rankings'* analysis of the CDC provisional mortality data, between 2019 and 2020, deaths from all causes (all-cause mortality) increased 17% from 715.2 to 835.4 deaths per 100,000 population. The most recent provisional 2021 data showed an even larger increase of 21% from pre-pandemic levels, from 715.2 to 865.6 deaths per 100,000 population between 2019 and the 12 months ending March 31, 2021.

Between 2019 and 2020, all-cause mortality increased in all states and the District of Columbia, led by 29% in New York (616.2 to 797.1), 27% in New Jersey (657.3 to 834.4), 23% in the District of Columbia (703.2 to 862.3) and 22% in Louisiana (857.0 to 1,044.7).

According to a CDC report featuring 2020 provisional data, COVID-19 was the third-leading cause of death in the country in 2020, at a rate of 91.5 per 100,000 — or nearly 378,000 deaths.<sup>2</sup>

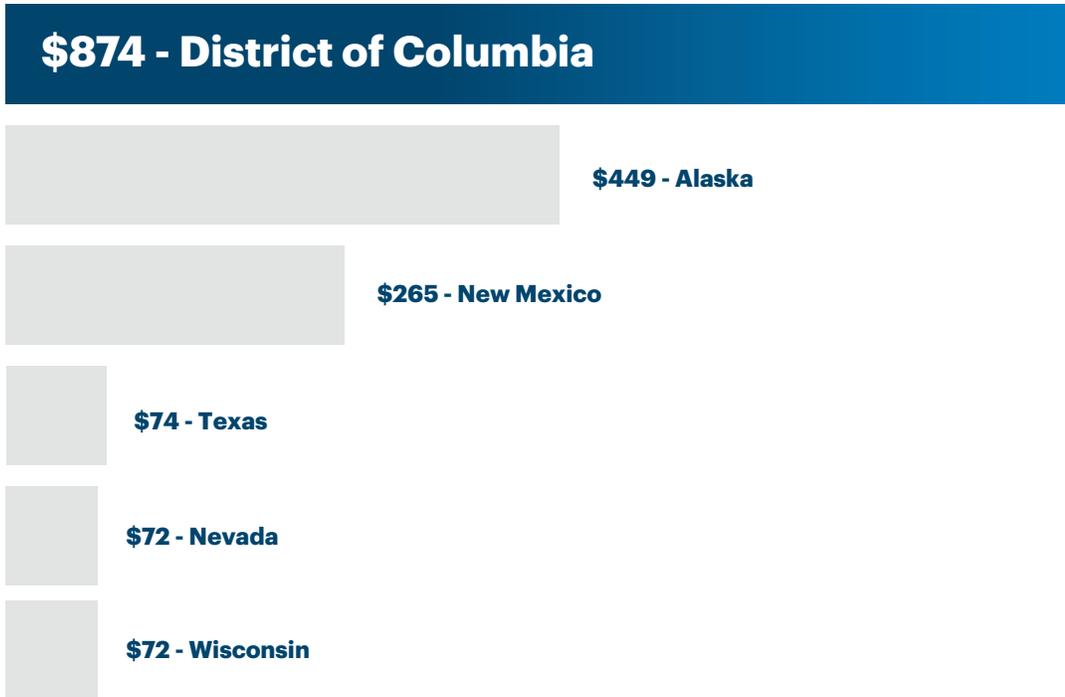
The impacts of the pandemic have not been experienced equally: death rates with COVID-19 listed as an underlying or contributing cause in 2020 were highest among the non-Hispanic American Indian/Alaska Native population (187.8), males (115.0) and adults ages 85 and older (1,797.8). COVID-19-related deaths among the Hispanic population (164.3), the Black population (151.1) and the Hawaiian/Pacific Islander population (122.3) also all exceeded the national rate (91.5).

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<sup>2</sup> Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, *Provisional Mortality Data – United States, 2020*. <https://www.cdc.gov/mmwr/volumes/70/wr/mm7014e1.htm>

## Public health funding increased 33% between 2017-2018 and 2019-2020; despite this increase, large disparities remain across the nation.

Public health funding per person.



Source: CDC, HRSA and Trust for America's Health, 2019-2020.

## Increase in Public Health Funding During COVID-19

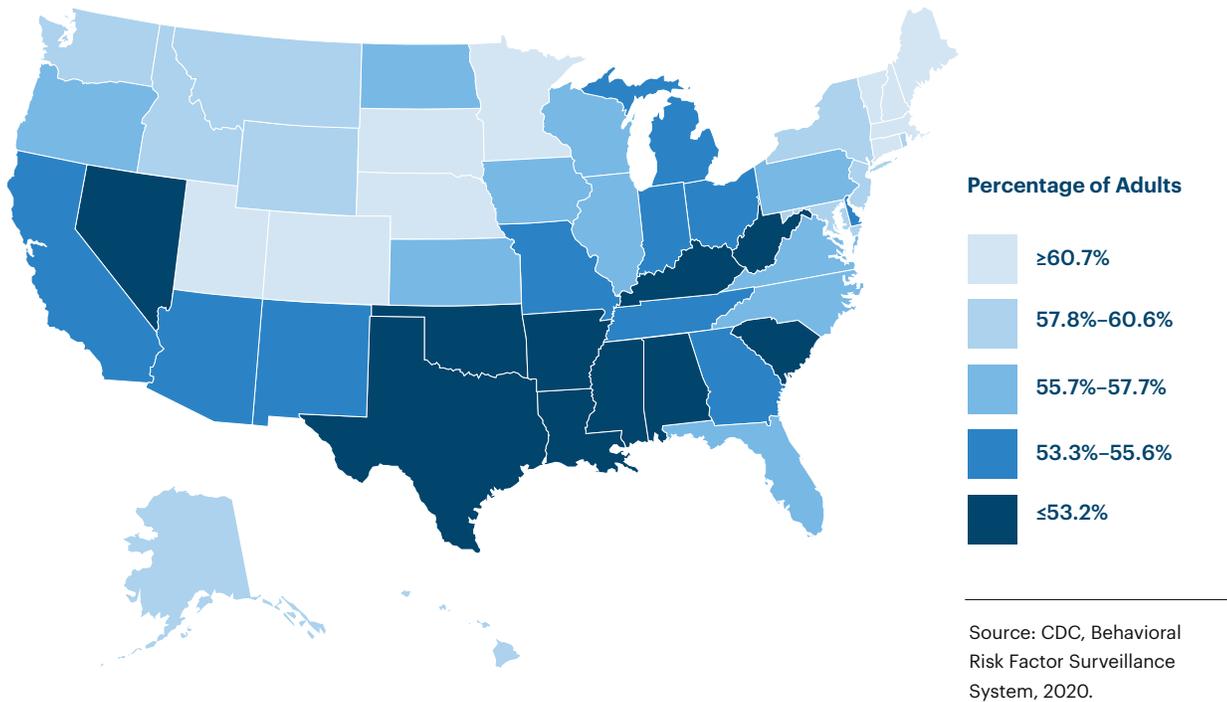
The *Annual Report* also found that public health funding increased dramatically nationwide and in each state — in part due to COVID-19 relief policy responses to this public health emergency.

In 2019-2020, public health funding — state dollars dedicated to public health and federal dollars directed to states by the CDC and the Health Resources & Services Administration (HRSA) — reached its highest level since 2014-2015 when *America's Health Rankings* began using the current source for tracking the measure. Funding increased 33% nationally between 2017-2018 and

2019-2020, from \$87 to \$116 per person. This includes increases in all 50 states and the District of Columbia by 12% or more. The largest increases were 77% in Iowa (\$91 to \$161), 75% in the District of Columbia (\$499 to \$874), 67% in New Jersey (\$66 to \$110) and 60% in both Alaska (\$281 to \$449) and Vermont (\$144 to \$231).

Despite these increases across the nation, large differences remain among states' levels of public health funding. In 2019-2020, per-person public health funding was highest in the District of Columbia (\$874), Alaska (\$449), New Mexico (\$265) and Hawaii (\$241), and lowest in Nevada and Wisconsin (both \$72), Texas (\$74) and Ohio (\$75).

**There was a 13% increase in adults reporting their health was very good or excellent — reversing a downward trend — with a higher percentage concentrated in the West, Midwest and Northeast.**



## A Reversal in Trends, But Disparities Remain

This year’s *Annual Report* also found notable reversals of long-term trends in some measures during the pandemic, including a significant increase in the number of Americans reporting their health was very good or excellent. However, Americans continue to experience large disparities by geography, race and ethnicity, educational attainment and other factors, with new data reinforcing the broad, deep and persistent disparities highlighted in the 2021 *Health Disparities Report*.

## High Health Status

In contrast with the stark increase in U.S. mortality, the percentage of adults reporting that their health was very good or excellent increased 13% nationally between 2019 and 2020, from 49.7% to 56.3% — reversing a downward trend that began in 2012, when the percentage of adults reporting high health status was 52.7%. Despite this positive development, Americans in certain geographic areas and among some subpopulations had lower percentages of high health status.



## Multiple Chronic Conditions

Further, the percentage of adults who had three or more of eight chronic conditions decreased 4% nationally between 2019 and 2020, from 9.5% to 9.1% — decreasing for the second year in a row and dropping below the previous lowest rate of 9.4% in 2015, when *America's Health Rankings* first analyzed data for this measure.

Among the eight conditions that comprise the measure — arthritis, asthma, cancer (excluding skin), cardiovascular disease (heart disease, heart attack or stroke), chronic kidney disease, chronic obstructive pulmonary disease, depression and diabetes — cancer prevalence decreased the most. Nearly 16.7 million adults reported ever being told by a health professional that they had cancer in 2020. This is a 7% decrease nationally between 2019 and 2020, from 7.3% to 6.8%. This reverses a 3% increase in the cancer rate between 2018 and 2019 — and a 9% increase between 2016 and 2019.

It is possible that a marked decline in routine cancer screenings due to the COVID-19 pandemic may have contributed to this decrease, with some cases of cancer and other chronic conditions going undiagnosed. Recent research has found that nearly two-thirds of patients scheduled for routine cancer screenings during the pandemic skipped their visits<sup>3</sup> and that breast cancer and cervical cancer screening rates declined by 87% and 84%, respectively, when comparing April 2020 to the five previous years.<sup>4</sup> Further analysis will be necessary as additional data become available to understand the full impact of COVID-19 on chronic conditions in the U.S.

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3 American Society of Clinical Oncology, *ASCO Cancer Opinions Survey*, 2020.

<https://www.asco.org/sites/new-www.asco.org/files/content-files/2020-ASCO-National-Cancer-Opinions-Survey-New-Findings.pdf>

4 A. DeGoff, J. Miller, K. Sharma, et al., "COVID-19 impact on screening test volume through the National Breast and Cervical Cancer early detection program, January–June 2020, in the United States," *Preventive Medicine*, 2021.

Between 2019 and 2020, excessive drinking decreased 5% nationally from 18.6% to 17.6% of adults. The rate of excessive drinking hasn't been this low since 2014.

5%

Source: CDC, Behavioral Risk Factor Surveillance System, 2020.

## Insufficient Sleep

The 2021 *Annual Report* also notes that the percentage of adults who reported sleeping, on average, fewer than seven hours in a 24-hour period reached the lowest prevalence since *America's Health Rankings* began tracking the measure in 2012. It decreased 6% nationally, from 34.5% to 32.3%, between 2018 and 2020. Despite this improvement, nearly 83.4 million adults reported insufficient sleep in 2020.

There were significant decreases in insufficient sleep in 18 states and the District of Columbia between 2018 and 2020, led by 16% in Tennessee (40.0% to 33.7%), 15% in New York (38.6% to 32.9%) and 14% in both the District of Columbia (34.8% to 30.1%) and New Jersey (37.6% to 32.3%).

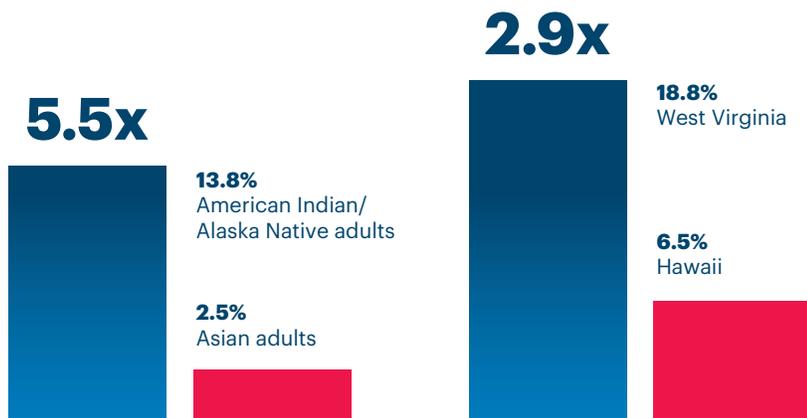
Between 2018 and 2020, the decrease was most notable among the following racial and ethnic groups: 19% among Asian adults (37.5% to 30.5%), 17% among adults who identified their race as other (43.2% to 35.8%) and 13% among both American Indian/Alaska Native (44.1% to 38.2%) and multiracial (45.3% to 39.5%) adults.

## Excessive Drinking

In another trend reversal, between 2019 and 2020, the percentage of adults who engaged in excessive drinking — reporting either binge drinking (four or more drinks for females or five or more drinks for males on one occasion in the past 30 days) or heavy drinking (eight or more drinks per week for females or 15 or more drinks per week for males) — decreased 5% nationally from 18.6% to 17.6% of adults. The rate of excessive drinking hasn't been this low since 2014.

This change was largely driven by a decrease in binge drinking, from 16.8% in 2019 to 15.7% in 2020. In contrast, heavy drinking moved from 6.5% to 6.7% between 2019 and 2020.

**Multiple chronic conditions varied by race and ethnicity — and also revealed stark disparities across states.**



Source: CDC, Behavioral Risk Factor Surveillance System, 2020.

**Persistent Disparities**

The 2021 *Annual Report* reaffirms key findings in the inaugural *America's Health Rankings 2021 Health Disparities Report*, released in June 2021. Large, persistent disparities affect Americans across geographic, racial and ethnic, age and educational lines.

In addition to geographic disparities, educational attainment continues to be closely associated with feelings of good health. High health status was 2.4 times higher among adults ages 25 and older who graduated from college (69.3%) than those with less than a high school education (29.3%) — and with each increase in educational attainment, high health status was significantly higher.

In 2020, insufficient sleep varied most notably across states and racial and ethnic groups. Insufficient sleep was 1.5 times higher in Hawaii (39.4%) than in Colorado (26.8%), the states with the highest and lowest rates, respectively. It was also 1.5 times higher among Hawaiian/Pacific Islander adults (46.2%) than Asian (30.5%) and white (30.6%) adults.

The latest publicly available data underscore the 2021 *Health Disparities Report's* findings that multiple chronic conditions varied by race and ethnicity — and also reveal wide disparities across states. In 2020, the rate of multiple chronic conditions was approximately 5 times higher among American Indian/Alaska Native (13.8%) and multiracial (13.1%) adults than Asian adults (2.5%). It was also 2.9 times higher in West Virginia (18.8%) than in Hawaii (6.5%), the states with the highest and lowest rates, respectively.

## Frequent mental distress varied across gender, income and race and ethnicity.

# 1.5x

higher among females (16.0%) than males (10.9%).

# 2.3x

higher among adults ages 25 and older with an annual household income less than \$25,000 (20.7%) than those with an income of \$75,000 or more (8.9%).

# 2.9x

higher among multiracial adults (21.1%) than Asian adults (7.4%).

Source: CDC, Behavioral Risk Factor Surveillance System, 2020.

## Longstanding Challenges, but Some Trend Reversals in Mental and Behavioral Health

The *Annual Report* underscores well-known challenges in some measures, while revealing a reversal of trends in others, warranting further exploration by the public health community to understand the impact of the COVID-19 pandemic on the nation's mental and behavioral health.

### Frequent Mental Distress

Between 2019 and 2020, frequent mental distress decreased 4% nationally, from 13.8% to 13.2%. Despite this decrease, frequent mental distress still affected approximately 34.1 million adults in 2020.

This decrease reverses a steady upward trend from 2014 to 2019 in the percentage of adults who reported their mental health was not good 14 or more days in the past 30 days. Between 2019 and 2020, it decreased 7% among adults ages 25 and older with a high school degree (14.1% to 13.1%) and 6% among males (11.6% to 10.9%).

However, between 2019 and 2020, frequent mental distress increased 19% among adults ages 25 and older with an annual household income of \$75,000 or more (7.5% to 8.9%) and 13% among college graduates ages 25 and older (8.3% to 9.4%). Despite these increases, the rates of frequent mental distress in these groups remain substantially lower compared to those with lower income and education levels.

Building on the 2021 *Health Disparities Report*, the new data show frequent mental distress varied widely across geography, race and ethnicity, age, education, income and gender in 2020. It was 2.9 times higher among multiracial adults (21.1%) than Asian adults (7.4%), 2.3 times higher among adults ages 25 and older with an annual household income less than \$25,000 (20.7%) than those with an income of \$75,000 or more (8.9%) and 1.5 times higher among females (16.0%) than males (10.9%).

## Drug Deaths

Even before the pandemic began, drug deaths were rising, part of a long-term upward trend since 2009. Between 2018 and 2019, deaths due to drug injury (unintentional, suicide, homicide or undetermined) increased 4% nationally from 20.6 to 21.5 deaths per 100,000 population — representing roughly 70,600 deaths in 2019. Provisional data recently released by the CDC show that drug overdose deaths reached a record high of roughly 93,000 in 2020.<sup>5</sup>

The *Annual Report* reveals that between 2018 and 2019, drug deaths increased significantly in eight states — led by 27% in Mississippi (10.6 to 13.5), 23% in Minnesota (11.5 to 14.2) and 16% in California (13.5 to 15.7) — and decreased significantly in one state, Michigan (8% from 26.3 to 24.2). Drug deaths increased significantly across a variety of subpopulations:

- 15% among both the Black (22.3 to 25.7) and Hispanic (11.1 to 12.8) populations.
- 11% among adults ages 65-74 (10.2 to 11.3), 7% among adults ages 55-64 (28.3 to 30.4), 6% among adults ages 35-44 (38.3 to 40.5) and 5% among adults ages 45-54 (35.3 to 36.9).

Furthermore, in 2021, 12.0% of U.S. adults reported non-medical drug use, or using prescription drugs non-medically (including pain relievers, stimulants, sedatives) or illicit drugs (excluding cannabis) in the last 12 months.

## E-Cigarette Use

Between 2017 and 2020, reported e-cigarette use<sup>6</sup> increased 13% nationally from 4.6% to 5.2%; nearly 7.0 million adults used e-cigarettes or other electronic vaping products at least once in their lifetime and now use daily or some days in 2020. E-cigarette use rose significantly in four states: 55% in Nebraska (3.8% to 5.9%), 41% in both Connecticut (3.2% to 4.5%) and Utah (5.1% to 7.2%, making it the state with the highest rate) and 36% in Minnesota (3.6% to 4.9%).

E-cigarette use varied significantly by age, race and ethnicity, gender, education and income. Notably, e-cigarette use was 10.6 times higher among adults ages 18-44 (9.5%) than adults ages 65 and older (0.9%). It was also approximately 2-3 times higher among Hawaiian/Pacific Islander (9.1%), multiracial (8.4%) and American Indian/Alaska Native (7.3%) adults than Black adults (3.3%). This increase contrasts the long-term national success in lowering cigarette smoking rates, which recently decreased 9% nationally from 17.1% to 15.5% of adults between 2017 and 2020.

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5 CDC, National Center for Health Statistics, Vital Statistics Rapid Release, “Provisional Drug Overdose Death Counts,” 2021. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

6 Data were available for 38 states in 2020. National value is the median of the 38 states with data.

## Behavioral Health Measures

**4%** ▲

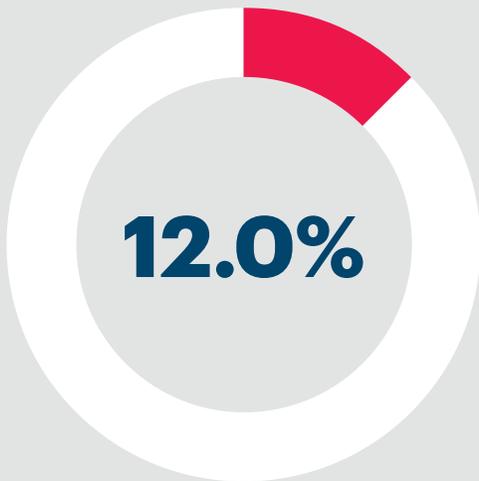
**increase in drug deaths**  
between 2018 and 2019.

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

**93,000**

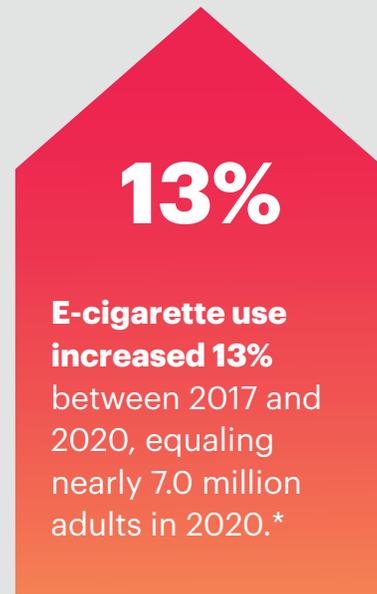
**drug deaths** in 2020 —  
a record high.

Source: Ahmad, FB et al. "Provisional Drug Overdose Death Counts." National Center for Health Statistics, November 10, 2021.



**12.0% of adults reported using prescription drugs non-medically or illicit drugs (excluding cannabis) in the last 12 months.**

Source: Denver Health and Hospital Authority, RADARS® System Survey of Non-Medical Use of Prescription Drugs Program, 2021.



\*Data were available for 38 states in 2020. National value is the median of the 38 states with data.

Source: CDC, Behavioral Risk Factor Surveillance System, 2020.

# During the early part of the pandemic, the nation saw improvements in several measures of clinical care, including increases in flu vaccinations.

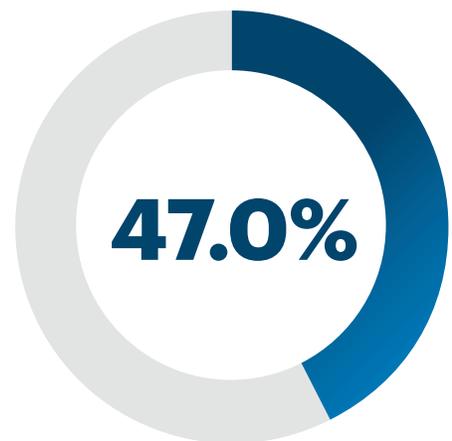
## Successes and Challenges in Clinical Care

During the early part of the pandemic, the nation saw improvements in several measures of clinical care, including increases in flu vaccinations and in the number of primary care and mental health providers — which reached their highest levels since *America's Health Rankings* began tracking the measures. Not all states benefited equally, as the number of mental health and primary care providers and flu vaccination rates varied significantly by geography.

### Flu Vaccination

The percentage of adults who reported receiving a seasonal flu vaccination in the past year increased 8% nationally, from 43.7% to 47.0% of adults between 2019 and 2020 — the highest prevalence since *America's Health Rankings* started tracking the measure in 2012.

Flu vaccination rates increased significantly in 25 states and the District of Columbia between 2019 and 2020, led by 27% in Illinois (38.8% to 49.4%), 17% in Nevada (32.5% to 38.1%) and 16% in both Maine (46.4% to 53.6%) and Michigan (40.4% to 46.7%). However, flu vaccination rates varied widely across states in 2020, and were 1.5 times greater in Massachusetts (56.5%) than in Florida and Nevada (both 38.1%), the states with the highest and lowest rates, respectively.



**Nationally in 2020, 47.0% of adults reported receiving a seasonal flu vaccine in the past 12 months. This represents an 8% increase over 2019 and the highest prevalence since *America's Health Rankings* started tracking the measure in 2012.**

Source: CDC, Behavioral Risk Factor Surveillance System, 2020.

## The number of mental health providers increased 30% between 2017 and 2021, but disparities exist across states.

Rate calculated per 100,000 population.

**693.6**

**Massachusetts**

**5.7x**

more mental health providers

**120.8**

**Alabama**

Source: U.S. HHS, Centers for Medicare & Medicaid Services, National Plan and Provider Enumeration System, September 2021.

### Mental Health Providers

The number of mental health providers increased 6% nationally between 2020 and 2021, from 268.6 to 284.3 providers per 100,000 population. In 2021, there were approximately 937,000 providers — including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care as well as those treating alcohol and other drug abuse — in the U.S., nearly 55,000 more than in 2020. This is a 30% increase since 2017 (218.0), the year the measure was first included in *America's Health Rankings*.

Large disparities exist across states in the number of mental health providers per 100,000 population. In 2021, the number was highest in Massachusetts (693.6), Alaska (625.9) and Oregon (602.7) and lowest in Alabama (120.8), Texas (133.0) and West Virginia (149.7) — meaning there were 5.7 times more mental health providers per 100,000 in Massachusetts than in Alabama.

### Primary Care Providers

Similarly, the number of primary care providers increased 4% nationally, from 241.9 providers per 100,000 population in 2020 to 252.3 in 2021 — a total of approximately 831,000 providers, or 37,000 more than in 2020. This is an 18% increase since 2018 (213.8), when the measure was first included on the *America's Health Rankings* platform.

However, the number of primary care providers — including general practice, family practice, obstetrics and gynecology, pediatrics, geriatrics, internal medicine, physician assistants and nurse practitioners — per 100,000 varied significantly by geography; in 2021, the District of Columbia, the area with the most providers (494.0), had twice as many providers as Nevada, the state with the fewest (191.0).

## Sparking Action to Build Healthier Communities

The 2021 *America's Health Rankings Annual Report* paints a picture of the nation's ongoing public health successes and challenges and provides a first look at how the COVID-19 pandemic has shaped public health and Americans' individual well-being. Further research and analysis is necessary as the pandemic continues to better understand the long-term effects of COVID-19 and how trends and key findings may evolve over time.

The United Health Foundation and the American Public Health Association intend that this report sparks meaningful conversations among policymakers, health officials and community leaders about the challenges Americans face and potential solutions. As we gain a deeper understanding of the full ramifications of the COVID-19 pandemic, we encourage communities to engage in dialogue about the report's findings and explore local solutions to community challenges. We also hope public health leaders and experts will leverage the data included in this report to enhance and broaden the understanding of the current state of health in the country as we navigate the evolving pandemic.

To learn more about the *Annual Report*, visit the *America's Health Rankings* website to explore the data using customizable visualization tools, as well as the COVID-19 Report, which features data on COVID-19 cases, hospitalizations and death rates. Also available on the website is a [library of health topics](#) which features conditions identified as risk factors for more severe illness or death from COVID-19, as well as other related measures.

## 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 \$500 million to programs and communities around the world. To learn more, visit [UnitedHealthFoundation.org](http://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, promote 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](http://www.apha.org).



### For more information, contact:

The United Health Foundation  
Jenifer McCormick  
[jenifer\\_mccormick@uhg.com](mailto:jenifer_mccormick@uhg.com)  
(952) 936-1917

[www.AmericasHealthRankings.org](http://www.AmericasHealthRankings.org)