

The Prevalence of Mental Health Conditions Was on the Rise Before the COVID-19 Pandemic and the Pandemic Had a Negative Effect on Mental Health



Mental health issues can take various forms, including anxiety, depression, posttraumatic stress disorder, and schizophrenia. These mental health issues fall under the umbrella of any mental illness (AMI).

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines mental illness among adults age 18 and over as “the presence of a diagnosable mental, behavioral, or emotional disorder in the past year (excluding developmental and substance use disorders).”¹ SAMHSA notes that the disorder must be of sufficient duration to meet diagnostic criteria specified within the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition. In addition, the disorder results in interference with or limitation of one or more major life activities (functional impairment).

AMI among adults refers to “adults aged 18 or older who currently or at any time in the past year have had a diagnosable mental, behavioral, or emotional disorder as defined above, regardless of the level of impairment in carrying out major life activities.”¹ Mental illnesses can range in severity from mild to severe, and serious mental illness (SMI) is a subset of AMI. SMI is a mental illness “resulting in substantial impairment in carrying out major life activities.”¹

This data spotlight focuses on adult mental health during the COVID-19 pandemic, particularly related to AMI, SMI, depression, and suicide. Disparities related to gender or sex, race and ethnicity, income or poverty, age, and geographic locationⁱ were assessed, where available, and significant differencesⁱⁱ are presented in the figures and text below the figures.

The COVID-19 Pandemic Took a Toll on Mental Health

Before the COVID-19 pandemic, the prevalence of AMI had increased from 17.7% in 2008 to 20.6% in 2019, and the prevalence of SMI had increased from 3.7% to 5.2% in the same years.² During the COVID-19 pandemic, mental health stressors were introduced, including infection and risk of infecting others; isolation and decreased social support; employment, income, and school disruptions; and worsening health problems. Stressors caused increased rates of mental health issues and exacerbated existing issues.^{3, 4, 5, 6, 7, 8} In late June 2020, 41% of U.S. adults reported at least one adverse mental or behavioral health condition.⁹

ⁱGeographic location is based on the 2013 National Center for Health Statistics Urban-Rural Classification Scheme, which includes six categories. Large central metropolitan counties are in a metropolitan statistical area (MSA) of 1 million or more population that contains the entire population of the largest principal city of the MSA, whose entire population is contained within the largest principal city of the MSA, or that contains at least 250,000 residents of any principal city in the MSA. Large fringe metropolitan counties are in MSAs of 1 million or more population that do not qualify as large central (i.e., suburban areas). Medium metropolitan counties are in MSAs of 250,000 to 999,999 population. Small metropolitan counties are in MSAs of less than 250,000 population. Micropolitan counties are in a micropolitan statistical area, and noncore counties are not in a metropolitan or micropolitan statistical area.

ⁱⁱUnless noted otherwise, for comparisons between populations, data points under each figure only report differences that are statistically significant (i.e., p value less than 0.05) and have a relative difference between the populations of at least 10%. The *National Healthcare Quality and Disparities Report* (NHQDR) methodology is described in Appendix A at <https://www.ahrq.gov/research/findings/nhqdr/nhqdr23/index.html>.



The mental health toll of the COVID-19 pandemic varied by factors such as occupation, age, gender, race/ethnicity, and preexisting mental health issues.^{4, 10, 11, 12, 13} People from historically marginalized racial and ethnic groups, people from gender and sexual minority groups, people with disabilities, unpaid caregivers, and healthcare workers were more likely to report symptoms of depression or anxiety during the first year of the COVID-19 pandemic.^{14, 15, 16, 17}

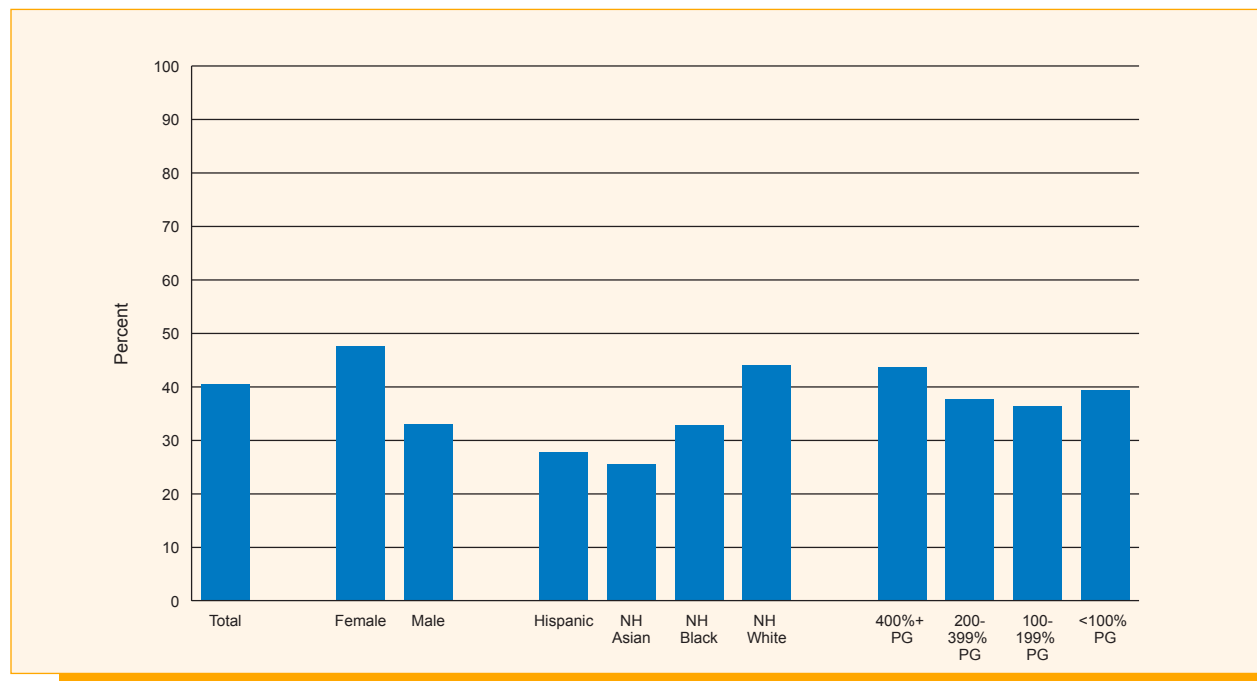
Social determinants of health (SDOH) also played a role in mental health outcomes.¹⁸ Individuals with preexisting education, employment, housing, or childhood upbringing issues were more likely to develop a mental health condition after a COVID-19 diagnosis than individuals without these SDOH issues.¹⁹

Screening for Mental Health Issues Was Not Common and Varied by Population Characteristics

Although the U.S. Preventive Services Task Force recommends screening all adults for depression, screening for depression and other mental health issues was not widespread during the pandemic. The 2020 Medical Expenditure Panel Survey assessed if, in the past 12 months, a healthcare professional had asked about “mood, such as whether you are anxious or depressed.”

As presented in Figure 1, the findings showed that only 40% of adults were asked about their mood, and the rate varied significantly by gender, race/ethnicity, income, age, and geographic location. Individuals, particularly in certain subpopulations, and their providers may be unaware of a mental health issue, and individuals may not be receiving needed treatment.

Figure 1. Adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, by gender, race/ethnicity, and income, 2020



Key: NH = non-Hispanic; PG = federal poverty guideline.

Source: Agency for Healthcare Research Quality, Medical Expenditure Panel Survey, 2020.

- ◆ **Overall.** In 2020, 40.3% of adults were asked by a healthcare professional about their mood, such as whether they were anxious or depressed (Figure 1).
- ◆ **Gender.** In 2020, the percentage of adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, was higher for females (47.3%) than for males (32.8%).
- ◆ **Race and ethnicity.** In 2020, the percentage of adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, was lower for Hispanic (27.6%), non-Hispanic Asian (25.3%), and non-Hispanic Black (32.6%) adults than for non-Hispanic White adults (43.8%).
- ◆ **Income.** In 2020, the percentage of adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, was lower for adults in households with incomes 200%-399% of the poverty guideline (37.5%), 100%-200% of the poverty guideline (36.1%), and below the poverty guideline (39.2%) than for adults in households with incomes more than 400% of the poverty guideline (43.5%).
- ◆ **Age.** In 2020, the percentage of adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, was higher for adults age 65 and over (43.7%) than for adults ages 18-44 (37.9%). There was no statistically significant difference between adults ages 45-64 and adults ages 18-44 (data not shown).
- ◆ **Geographic location.** In 2020, the percentage of adults asked by a healthcare professional about their mood, such as whether they were anxious or depressed, was lower for adults living in large central metro areas (36.2%) than for adults living in large fringe metro areas (41.0%). There were no statistically significant differences between adults living in medium metro, small metro, micropolitan, or noncore areas and adults living in large fringe metro areas (data not shown).

Barriers to Treatment Can Deter People From Receiving Needed Mental Health Care

If a mental health condition is identified, people should receive care from a trained mental health provider. However, even before the COVID-19 pandemic, the number of mental health providers was not sufficient to meet demand.^{20, 21} The shortage of providers was exacerbated by the increased need for mental health care brought on by pandemic stressors and a lack of notable increases in mental health providers over time.

The need for mental health providers is particularly great in historically marginalized communities and varies by geographic area.²² The Health Resources and Services Administration designates health professional shortage areas (HPSAs).²³ As of June 2023, 163 million people were living in mental health HPSAs and 61% of counties had a geographic HPSA.ⁱⁱⁱ

ⁱⁱⁱGeographic HPSAs are defined as “a shortage of providers for an entire group of people within a defined geographic area” and, for this analysis, included high-risk geographic HPSAs; 58% of counties were “full county geographic HPSAs” (where the entire county is a geographic HPSA), 3% were “partial county geographic HPSAs” (where at least one subdivision or census tract is a HPSA), and 39% did not contain geographic HPSAs.

Figure 2 is a map of mental health HPSAs where darker colors indicate a higher need for mental health providers. Figure 3 shows that geographic mental health HPSAs were more common in rural and high-poverty areas.

Figure 2. Mental health HPSAs, 2023

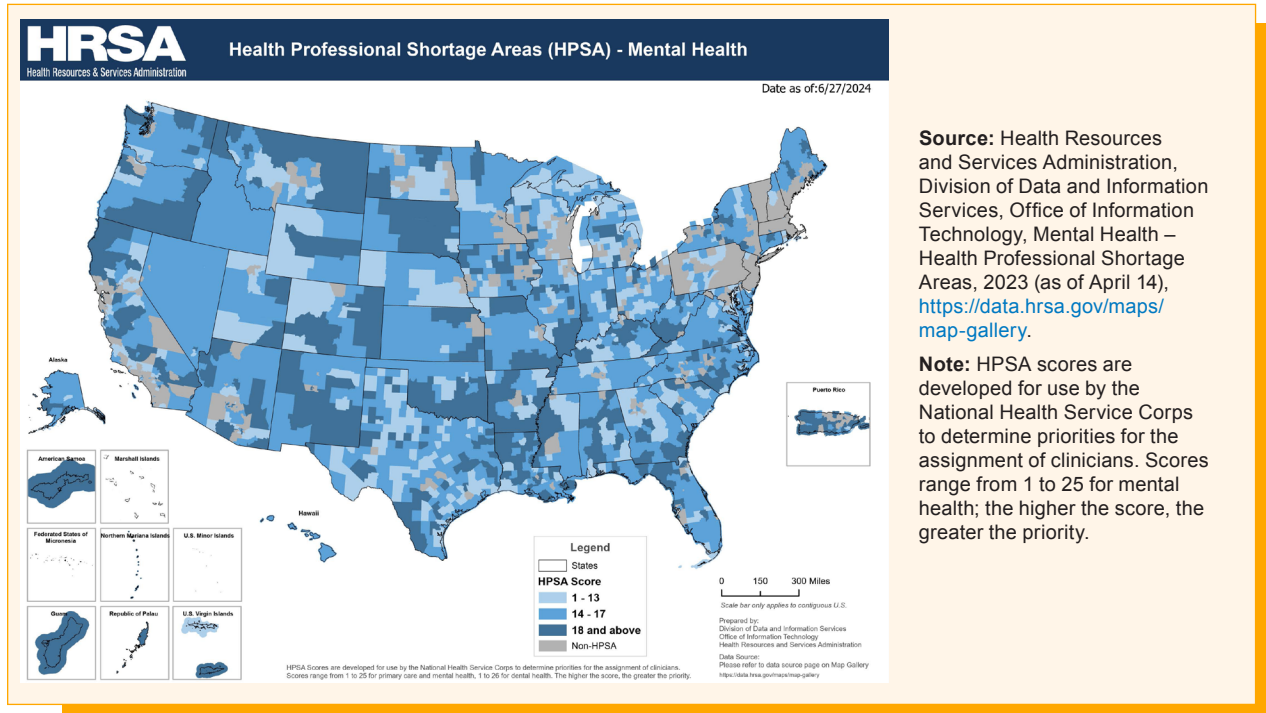
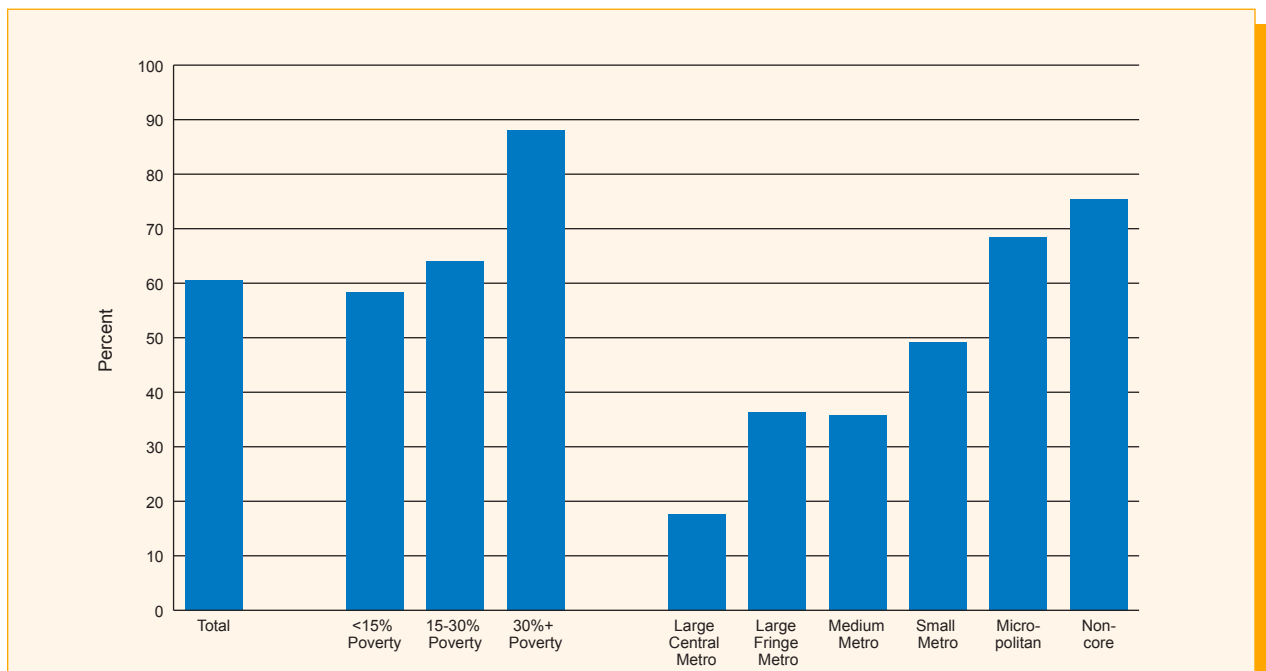


Figure 3. Geographic mental health professional shortage area counties by percentage of the population in poverty and geographic location, 2023



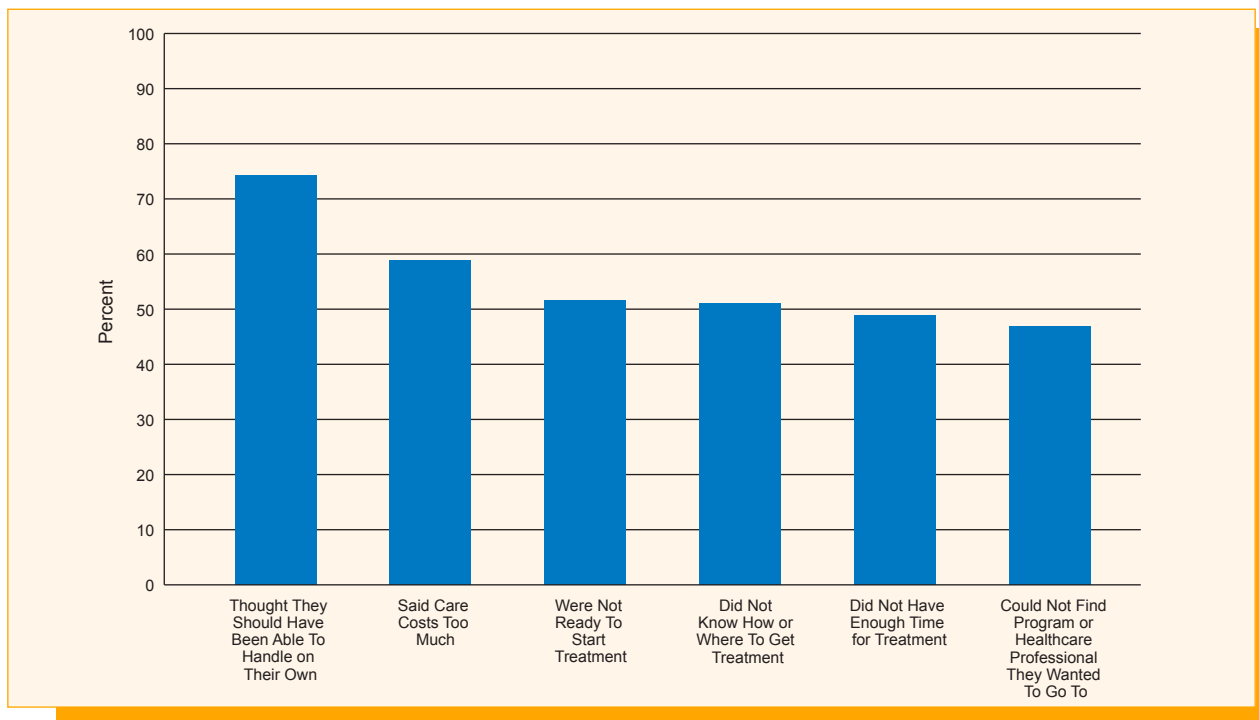
Source: Health Resources and Services Administration, Mental Health - Health Professional Shortage Areas, 2023.

- ◆ **Overall.** In 2023, 60.5% of counties contained a geographic mental health HPSA (Figure 3).
- ◆ **Population in poverty.** In 2023, the percentage of counties containing a geographic mental health HPSA was higher for counties with more than 30% of the population in poverty (88.1%) than for counties with less than 15% of the population in poverty (58.4%). There was no statistically significant difference between counties with 15%-30% of the population in poverty and counties with less than 15% of the population in poverty.
- ◆ **Geographic location.** In 2023, the percentage of counties containing a geographic mental health HPSA was lower for large central metro counties (17.6%) than for large fringe metro counties (36.4%). The percentage of counties containing a geographic mental health HPSA was higher for small metro (49.2%), micropolitan (68.5%), and noncore (75.5%) counties than for large fringe metro counties (36.4%). There was no statistically significant difference between medium metro counties and large fringe metro counties.

Along with fewer mental health providers than needed, the literature shows that stigma against mental illness, lack of insurance coverage, and costs are key barriers to people seeking care).^{24, 25, 26, 27, 28}

Figure 4 supports the literature and shows commonly reported barriers.

Figure 4. Most commonly reported reasons for not receiving mental health services in the past year among adults with any mental illness and a perceived unmet need for mental health services, 2022



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2022.

- ◆ In 2022, the following percentages of adults with any mental illness who perceived an unmet need for mental health services cited the following reasons (Figure 4):
 - » Thought they should have been able to handle on their own, 74.2%;
 - » Said care costs too much, 58.9%;
 - » Were not ready to start treatment, 51.6%;
 - » Did not know how or where to get treatment, 51.1%;
 - » Did not have enough time for treatment, 48.9%; and
 - » Could not find a program or healthcare professional they wanted to go to, 46.8%.

In addition to these barriers, subpopulations, such as historically marginalized racial and ethnic groups, gender and sexual minority groups, and people with disabilities, may have additional difficulties receiving care. These include lacking trust in providers and the healthcare system, facing language barriers with English-speaking providers, and encountering unconscious biases affecting treatment. People may also have cultural differences (e.g., different or lack of terminology about specific mental health concepts) in their ideas and beliefs around mental health and mental illness.^{29, 30}

Telehealthcare can improve access to mental health care for many populations. Before the COVID-19 pandemic, telehealthcare use was low across all healthcare specialties. Policy changes and concerns about COVID-19 transmission during the pandemic increased the use of telehealthcare, particularly for mental health care.

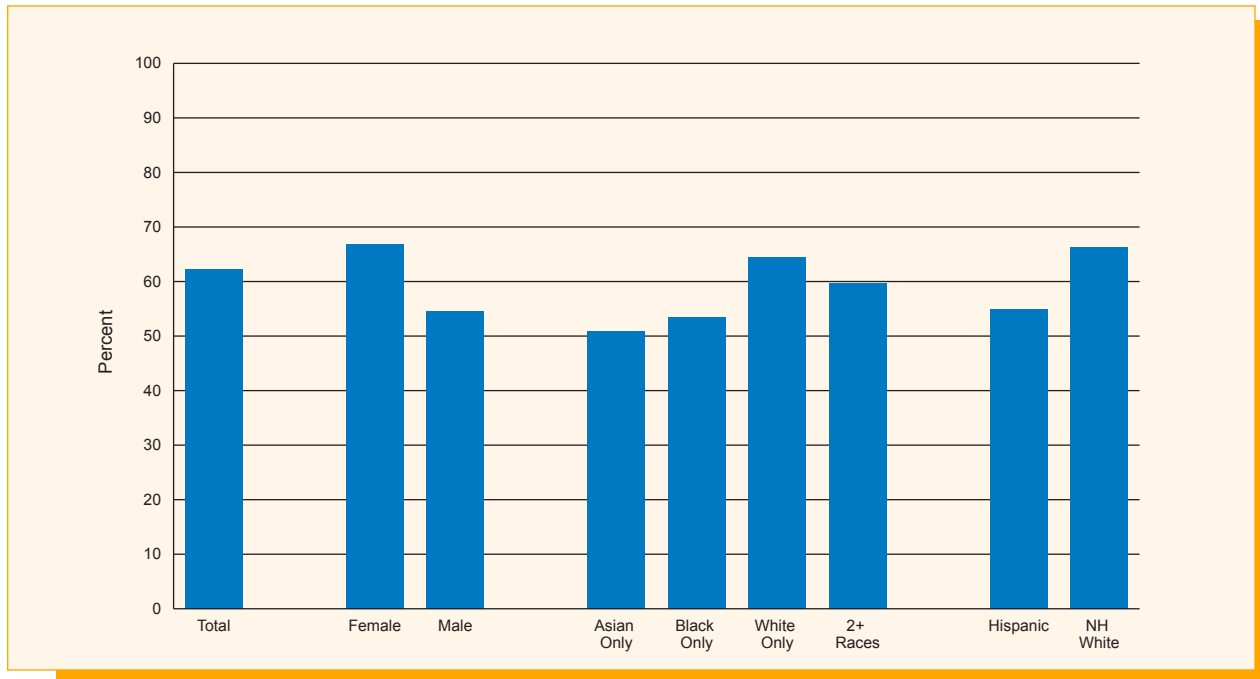
Less than 1% of mental health specialty care was provided via telehealthcare prepandemic, compared with more than 50% in spring 2020.³¹ While the percentage of mental health care provided via telehealthcare has decreased since 2020, the use of telehealthcare remains more common than before the pandemic.³¹ Additional details are available in the 2023 *National Healthcare Quality and Disparities Report* (NHQDR).

Many Adults With Mental Health Issues Do Not Get Treatment

For reasons such as those mentioned above, many people who have mental health needs do not receive treatment, and notable disparities exist in access to care and receipt of treatment.³² Analyses showed that male, Asian, Black, Hispanic, and younger adults with a major depressive episode (MDE)^{iv} were less likely to receive treatment (Figure 5).

^{iv}An MDE is experiencing at least five of the nine MDE symptoms in the same 2-week period and at least one of the symptoms is having a depressed mood or loss of interest or pleasure in activities that had been enjoyable.

Figure 5. Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months, by gender, race, and ethnicity, 2021 and 2022 combined



Key: NH = non-Hispanic.

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2021 and 2022 combined.

Note: Sample sizes for the subpopulations of American Indian/Alaska Native and Native Hawaiian/Pacific Islander adults were too small to produce statistically reliable data.

- ◆ **Overall.** In 2021 and 2022, 62.3% of adults with an MDE in the last 12 months received treatment for depression in the last 12 months (Figure 5).
- ◆ **Gender.** In 2021 and 2022, the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months was higher for female adults (66.9%) than for male adults (54.6%).
- ◆ **Race.** In 2021 and 2022, the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months was lower for Asian (50.8%) and Black (53.5%) adults than for White adults (64.4%). There was no statistically significant difference between multiracial adults and White adults.
- ◆ **Ethnicity.** In 2021 and 2022, the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months was lower for Hispanic adults (55.0%) than for non-Hispanic White adults (66.2%).
- ◆ **Income.** In 2021 and 2022, there were no statistically significant differences by income in the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months (data not shown).
- ◆ **Age.** In 2021 and 2022, the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months was higher for adults ages 45-64 years (70.5%) and adults age 65 and over (69.5%) than for adults ages 18-44 years (58.6%) (data not shown).
- ◆ **Geographic location.** In 2021 and 2022, the percentage of adults with an MDE in the last 12 months who received treatment for depression in the last 12 months was higher for adults living in noncore areas (71.0%) than for adults living in large fringe metro areas (63.5%).

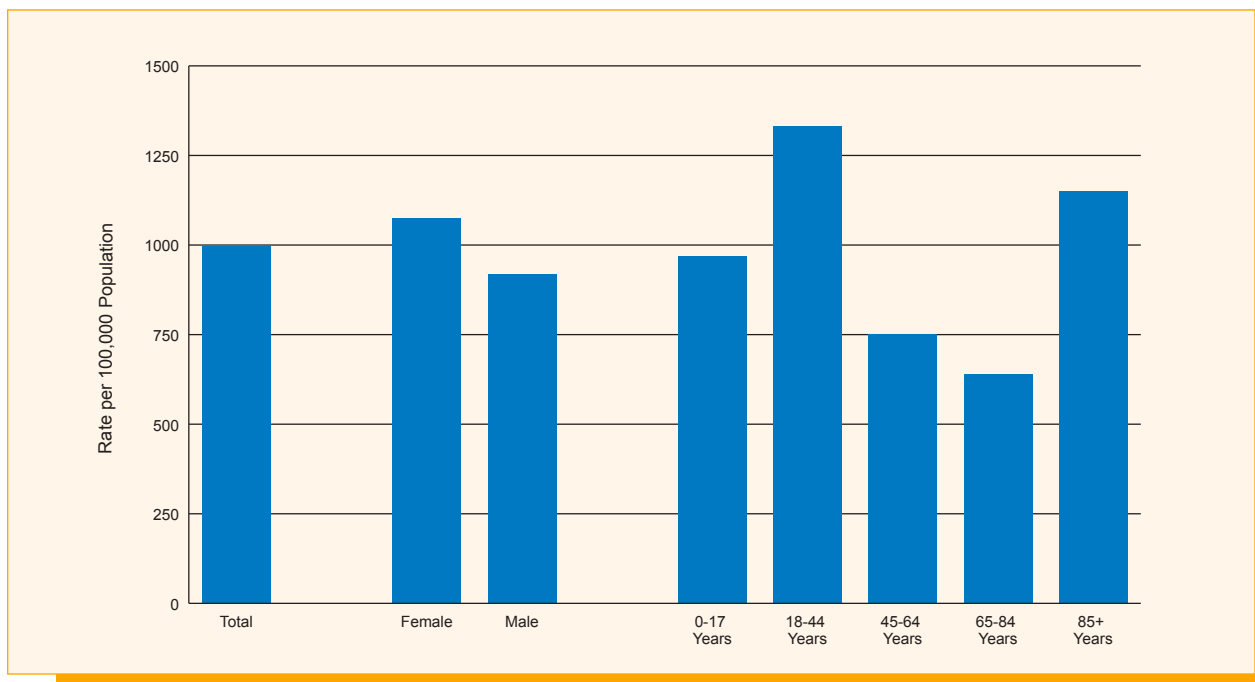
There were no statistically significant differences between adults living in large central metro, medium metro, small metro, or micropolitan areas and adults living in large fringe metro areas (data not shown).

Mental Health Issues Can Lead to Serious Outcomes

Mental health issues can lead to serious outcomes, including avoidable medical care and death, and these outcomes varied significantly by patient characteristics. Figures 6 and 7 show that, for children and adults combined, emergency department (ED) visits for mental health conditions were higher for females, adults ages 18-44, people with lower incomes, and people living in more rural areas.

While ED visits are primarily intended for people with a severe or urgent healthcare need, many people who lack access to ambulatory healthcare services (e.g., people without health insurance, those in HPSAs) may go to the ED as their primary source of care.

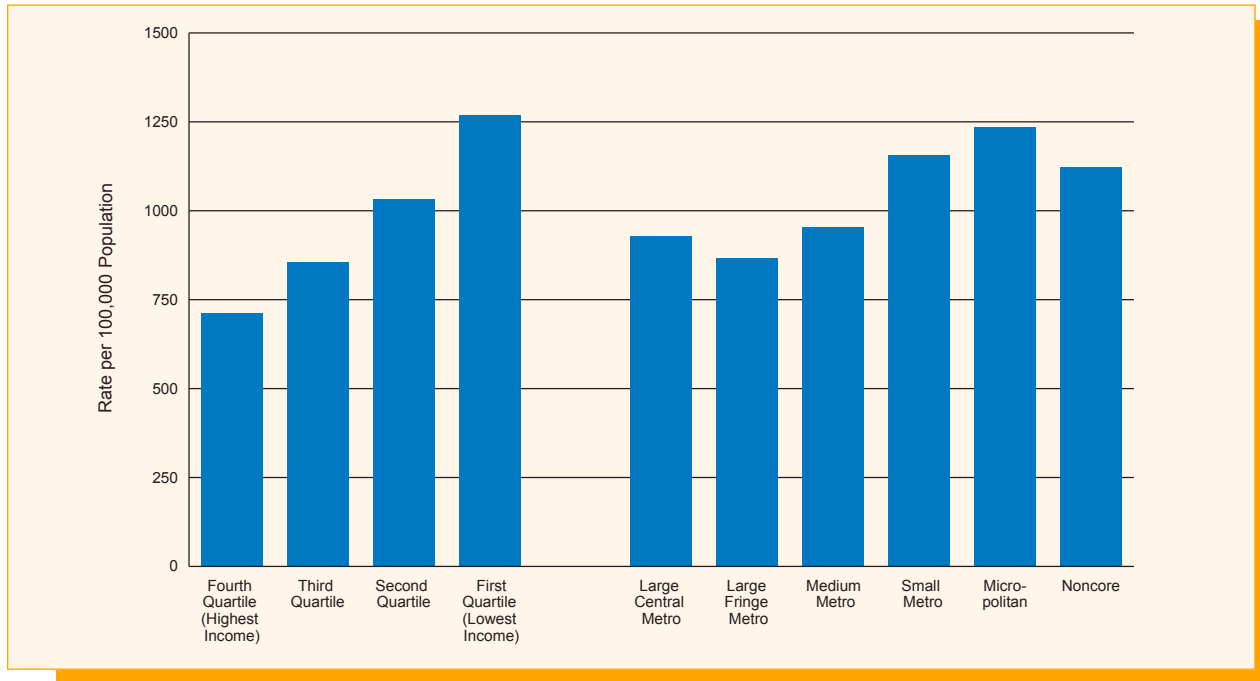
Figure 6. Emergency department visits with a principal diagnosis related to mental health per 100,000 population, by sex and age, 2021



Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2021.

- ◆ **Overall.** In 2021, the rate of ED visits with a principal diagnosis related to mental health was 998 per 100,000 population (Figure 6).
- ◆ **Sex.** In 2021, the rate of ED visits with a principal diagnosis related to mental health was higher for females (1,075 per 100,000 population) than for males (919 per 100,000 population).
- ◆ **Age.** In 2021, the rate of ED visits with a principal diagnosis related to mental health was lower for people ages 0-17 (969 per 100,000 population), ages 45-64 (752 per 100,000 population), ages 65-84 (640 per 100,000 population), and age 85 and over (1,151 per 100,000 population) than for people ages 18-44 (1,333 per 100,000 population).

Figure 7. Emergency department visits with a principal diagnosis related to mental health per 100,000 population, by median income of patient’s ZIP Code and by geographic location, 2021



Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2021.

- ◆ **Income.** In 2021, the rate of ED visits with a principal diagnosis related to mental health was higher for people living in ZIP Codes in the third quartile (856 per 100,000 population), second quartile (1,034 per 100,000 population), and first quartile of income (1,269 per 100,000 population) compared with people living in ZIP Codes in the fourth quartile (713 per 100,000 population) (Figure 7).
- ◆ **Geographic location.** In 2021, the rate of ED visits with a principal diagnosis related to mental health was higher for people living in small metro (1,157 per 100,000 population), micropolitan (1,234 per 100,000 population), and noncore (1,122 per 100,000 population) areas compared with people living in large fringe metro areas (868 per 100,000 population). There were no statistically significant differences between adults living in large central metro and medium metro areas and adults living in large fringe metro areas.

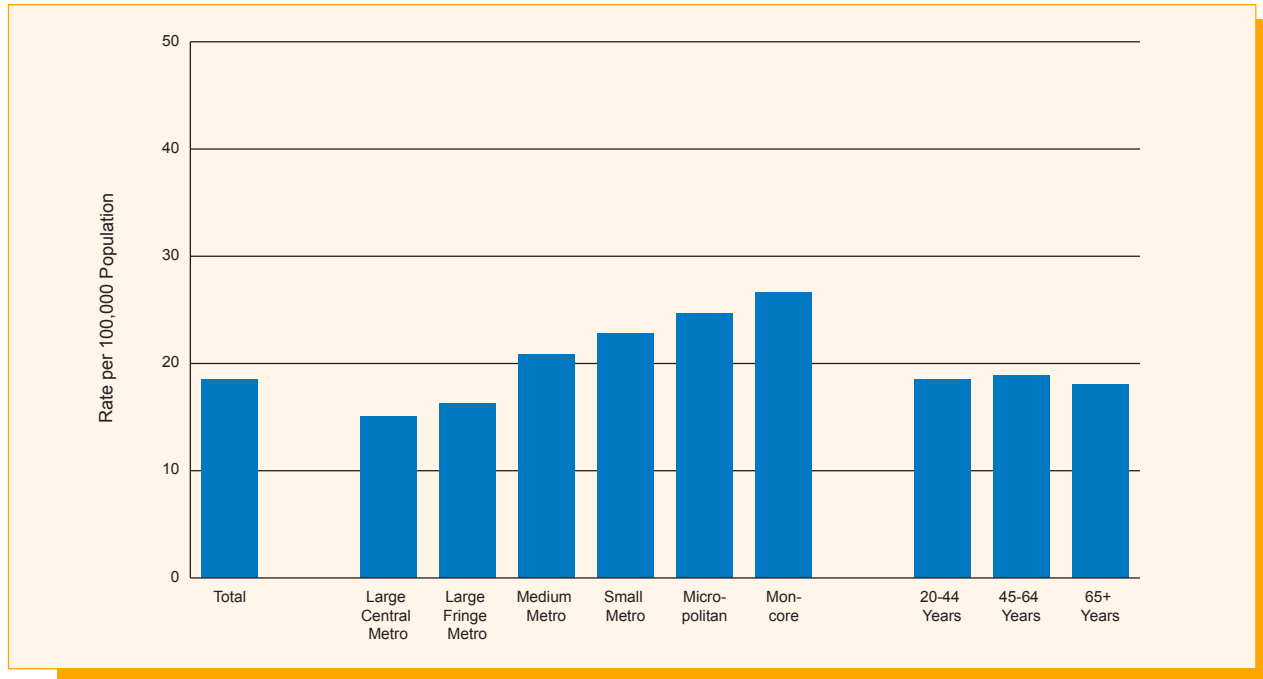
The rate of suicide deaths also showed notable disparities, but the disparities did not always align with the disparities in mental health ED admissions.^v Similar to mental health ED admissions, suicide rates were higher for adults living in more rural areas (Figure 8). However, while females were more likely to have a mental health ED admission, males were more likely to die by suicide.^{vi}

^vThe measure of suicide death rates in this data spotlight is for adults age 20 and over. When assessing suicide deaths for all ages, the geographic location, gender, and race disparities remain.

^{vi}Adult females were also more likely to attempt suicide (0.7%) than adult males (0.6%) (data not shown).

Notably, males of all racial groups had higher suicide rates than females in the same population groups. American Indian/Alaska Native and White males had the highest suicide rates of all the groups assessed (Figure 9).^{vii}

Figure 8. Suicide deaths among adults age 20 and over per 100,000 population, by geographic location and age, 2022

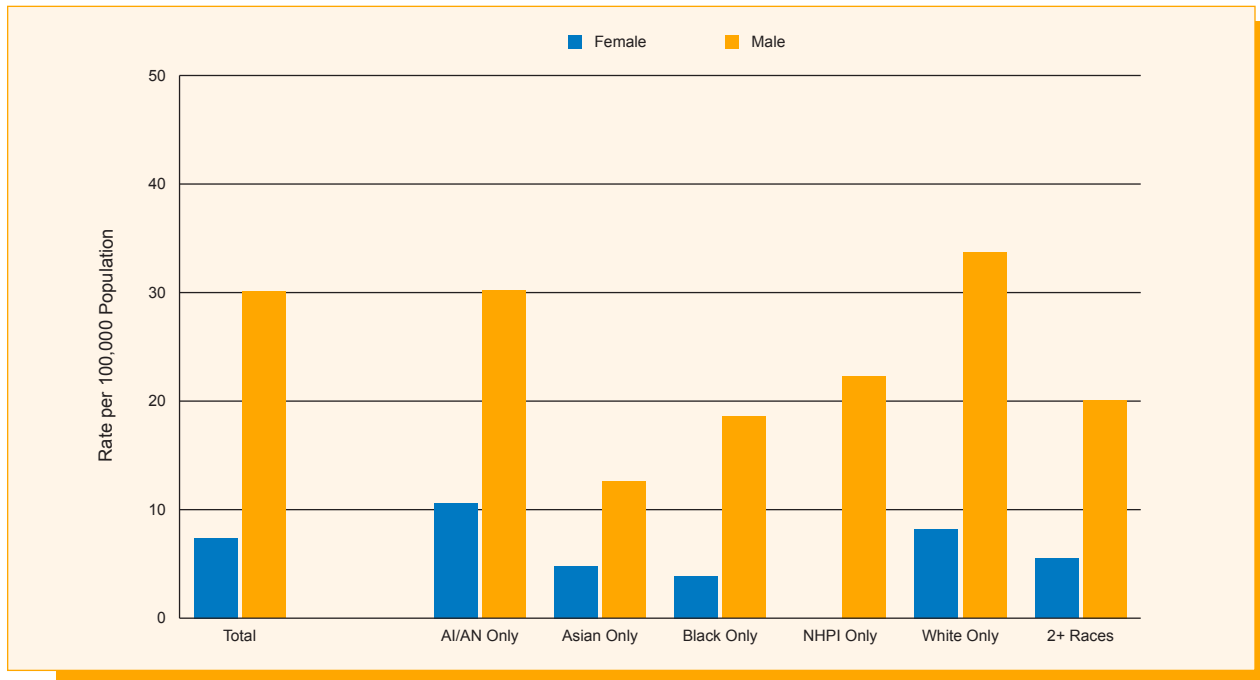


Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System – Mortality, 2022.

- ◆ **Overall.** In 2022, the rate of suicide deaths among adults age 20 and over was 18.5 per 100,000 population (Figure 8).
- ◆ **Geographic location.** In 2022, the rate of suicide deaths was higher for adults age 20 and over living in medium metro (20.8 per 100,000 population), small metro (22.8 per 100,000 population), micropolitan (24.7 per 100,000 population), and noncore (26.6 per 100,000 population) areas than for adults age 20 and over living in large fringe metro areas (16.3 per 100,000 population). There were no statistically significant differences between adults living in large central metro areas and adults living in large fringe metro areas.
- ◆ **Age.** In 2022, there were no statistically significant differences by age in rate of suicide deaths among adults age 20 and over.

^{vii}Additional information about suicide as a leading cause of death overall and within subpopulations and trends over time is available from the Centers for Disease Control and Prevention (<https://www.cdc.gov/suicide/facts/index.html>).

Figure 9. Suicide deaths among adults age 20 and over per 100,000 population, by gender and race, 2022



Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System – Mortality, 2022.

Note: Sample size for Native Hawaiian/Pacific Islander females was too small to produce statistically reliable data.

- ◆ **Gender.** In 2022, the rate of suicide deaths was lower for females age 20 and over (7.4 per 100,000 population) than for males age 20 and over (30.1 per 100,000 population). The rate of suicide deaths was lower for females age 20 and over than for males age 20 and over within all racial groups assessed (Figure 9).
- ◆ **Females by race.** In 2022, among females age 20 and over, the rate of suicide deaths was lower for Asian (4.8 per 100,000 population), Black (3.9 per 100,000 population), and multiracial (5.5 per 100,000 population) females than for White females (8.2 per 100,000 population). The rate of suicide deaths among females age 20 and over was higher for American Indian/Alaska Native females (10.6 per 100,000 population) than for White females (8.2 per 100,000 population).
- ◆ **Males by race.** In 2022, among males age 20 and over, the rate of suicide deaths was lower for American Indian/Alaska Native (30.2 per 100,000 population), Asian (12.6 per 100,000 population), Black (18.6 per 100,000 population), Native Hawaiian/Pacific Islander (22.3 per 100,000 population), and multiracial (20.1 per 100,000 population) males than for White males (33.7 per 100,000 population).

Discussion and Conclusions

The need for mental health treatment exceeds the healthcare system's capacity and the COVID-19 pandemic exacerbated this need. Some efforts have been made to increase the mental health workforce, such as increased training for various levels of providers (e.g., social workers, nurse practitioners, physician assistants). However, more providers are needed, particularly for historically marginalized populations.³³

In addition to a lack of providers, stigma around mental health issues and lack of awareness persist. Culturally and linguistically appropriate and relevant public campaigns are needed to reduce stigma and increase awareness among the general population and within specific subpopulations.

Screening programs have increased overall screening rates and reduced disparities in screening.³⁴ However, the current rate of screening is low and shows notable disparities by gender, race and ethnicity, income, age, and geographic location. Thus, increased universal mental health screening is warranted.

Opportunities to educate medical providers should also be leveraged to ensure providers are checking for mental health issues and referring patients to appropriate providers. In addition, integration of behavioral health care into primary care and physical health care should continue to be explored. Distrust of the mental health and general medical system, as well as cultural and language barriers, should be considered when creating messages about diagnosis and care for mental health issues.

Gender, sex, racial/ethnic, income, age, and location disparities shown in this data spotlight and other studies should also be considered when educating, identifying, and treating individuals. Higher suicide rates in males, especially American Indian/Alaska Native and White males, should also be addressed.

The cost of and payment for care are also important considerations as we look to improve access to mental health treatment. Insurance coverage is often not sufficient to meet the ongoing need for mental health treatment. People with mental health issues often have high out-of-pocket costs for mental and non-mental health treatment. High cost of care is a common burden that often falls more heavily on lower income individuals and families.

Finally, policies related to increased use of telehealthcare services (e.g., reimbursement at the same rate as in-person services) were enacted during the COVID-19 pandemic. Many of these policy changes succeeded in changing the way people receive mental health care. For example, the percentage of telehealthcare visits for mental health and substance use more than tripled from 11% in March-August 2019 to 39% during the same period in 2021.^{viii, 36}

Although the rates of telehealthcare have decreased since 2021, the current rates remain notably higher than prepandemic rates.³⁷ Despite increased uptake of mental health telehealthcare services, barriers specific to telehealthcare arose, such as lack of a private physical space to safely share with a therapist, limited internet bandwidth, and lack of compatible devices. Therefore, additional policies related to increasing broadband access and device loans can improve access to mental health treatment.³⁸ Benefits and challenges related to pre- and postpandemic virtual care are discussed further in the Telehealthcare section of the 2023 NHQDR.

^{viii}The percentage of all outpatient visits (i.e., virtual and in person) that were for behavioral health doubled from 4% in March-August 2019 to 8% during the same period in 2021, indicating virtual behavioral health visits increased more than in-person behavioral health visits.

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