

The Ripple Effects of the Adolescent Behavioral Health Crisis

Recent Trends and Impacts on American Adolescents, Families, and Society



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Contents

| | |
|---|----|
| Introduction | 2 |
| Key Definitions | 4 |
| Figures | |
| Figure 1. Prevalence of behavioral health conditions among adolescents in the United States and New York State, 2022 | 5 |
| Figure 2. Increasing prevalence of mental health issues among adolescents in the United States, 2010 to 2022 | 6 |
| Figure 3. Increasing prevalence of persistent sadness and hopelessness among high schoolers, 2011 to 2021, breakdown by region | 7 |
| Figure 4. Co-occurrence of negative mental health symptoms and risky and health-threatening behaviors among high schoolers in the United States, 2021 | 8 |
| Figure 5. Suicidality among high schoolers in the United States, 2011 to 2021, breakdown by race | 9 |
| Figure 6. Depressive symptoms and suicidality among high schoolers in New York City, 2019 and 2021, breakdown by race | 10 |
| Figure 7. Depressive symptoms and suicidality among adolescents in the United States, 2021, breakdown by sex | 11 |
| Figure 8. Depressive symptoms and suicidality among high schoolers in the United States, 2021, breakdown by sexual orientation | 12 |
| Figure 9. Adolescents in the United States reporting symptoms of anxiety and depression versus receiving a clinical diagnosis, 2022 | 13 |
| Figure 10. Adolescents in the United States experiencing versus receiving care for a major depressive episode, 2010 to 2021 | 14 |
| Figure 11. Adolescents in the United States not receiving care for a major depressive episode, 2010 to 2021, breakdown by race | 15 |
| Figure 12. National map of availability of behavioral health prescribers for children and adolescents, 2021 | 16 |
| Figure 13. Adolescents in New York State experiencing versus receiving care for one or more behavioral health conditions, 2022 | 17 |
| Figure 14. National ripple effects of adolescent behavioral health conditions on education and family economics | 18 |
| Figure 15. National ripple effects of adolescent behavioral health conditions on health and productivity | 19 |
| Figure 16. Barriers to adolescent behavioral health care | 20 |
| Conclusion | 21 |
| Appendix | 23 |

Introduction

Over the past decade, national surveys of youth have shown an increase in the prevalence of behavioral health conditions. More specifically, among all age groups, adolescents ages 12-17 have experienced the highest year-over-year (YoY) increase in having a major depressive episode (MDE) since 2010. To highlight the gravity of this trend, in 2021, the United States Surgeon General declared a behavioral health crisis among our youth. While the COVID-19 pandemic contributed to the increased prevalence of behavioral health conditions among adolescents, worsening trends existed before March 2020.

In 2022, 6.7 million adolescents in the United States reported suffering from one or more behavioral health conditions, and in New York State, 340,000 adolescents were affected. Disparities in prevalence vary by location, race, sex, and sexual orientation. Moreover, a widening gap exists between the number of adolescents experiencing symptoms and the number who receive appropriate and timely care.

The adolescent behavioral health crisis is inherently complex and encompasses numerous barriers, including workforce shortages, stigma surrounding

behavioral health, siloed systems, and a lack of funding. Furthermore, it can be challenging to pinpoint areas for prevention because a combination of factors can contribute to the development of behavioral health symptoms in adolescence, including but not limited to systemic racism, sexual or domestic violence, and trauma.

To assess the impact of this crisis, United Hospital Fund (UHF) partnered with Boston Consulting Group (BCG) to:

1. Develop a baseline analysis of how many adolescents in the United States, New York State, and New York City have a behavioral health condition and which groups are disproportionately affected.
2. Calculate the burden of unmet need for behavioral health care among adolescents and characterize the resulting impacts on the individual, family, and society.

This analysis integrates data from multiple nationally administered surveys, leverages local perspectives obtained through key informant interviews, identifies the ripple effects of this crisis, and outlines potential avenues for intervention to reduce the burden of behavioral health conditions on adolescents.

Key Findings

IN THE UNITED STATES:

Adolescents were less likely to receive care for major depressive episodes (MDE) than adults—**only 39% of adolescents received care** in 2021 vs. 56% of adults.



Based on the 2022 prevalence of adolescent behavioral health conditions and symptoms, the ripple effects of the adolescent behavioral crisis are estimated at **up to \$185 billion in lifetime medical costs and \$3 trillion in lifetime lost productivity and wages.**

IN NEW YORK STATE:



An estimated **1 in 4 adolescents** experienced a behavioral health condition in 2022.

Black and Hispanic high school students were **nearly twice as likely to attempt suicide** compared to white high schoolers from 2019 to 2021.

IN NEW YORK CITY:



From 2011 to 2021, there was a **42% increase** in the rate of adolescents who reported experiencing feelings of **persistent sadness and hopelessness.**

When compared with heterosexual students, students identifying as **lesbian, gay, or bisexual were over 4x more likely to attempt suicide** in 2021.

Key Definitions

This analysis primarily focuses on the adolescent behavioral health crisis. **Behavioral health** is an umbrella term that encompasses both mental health and substance use. Behavioral health conditions may include depression, anxiety, substance use disorder, disordered eating, behavior problems, and ADD/ADHD.

Throughout this analysis, three different age ranges are included to maximally aggregate data and better characterize trends in behavioral health. While the analysis centers adolescents, high schoolers and children are also cited.

- **Adolescents** are defined as individuals between the ages of 12 and 17.
- **High schoolers** are defined as individuals between the ages of 14 and 18.
- **Children** are defined as individuals between the ages of 0 and 12.

Multiple behavioral health conditions are referenced throughout this analysis. Questions and definitions from the surveys used to generate each figure are listed in the Appendix.

- **Clinically diagnosed depression** indicates that an individual was determined by a clinician to meet the criteria for major depressive disorder based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which is published by the American Psychiatric Association.¹
- **Major depressive episode (MDE)** is defined as having depressive symptoms nearly every day in the same two-week period, where at least one of the symptoms is a depressed mood or loss of interest or pleasure in daily activities. In the National Survey on Drug Use and Health, individuals are classified as having had an MDE in their lifetime if they had at least five of the nine symptoms for major depressive disorder as described in the DSM-5 criteria.²
- **Clinically diagnosed anxiety** indicates that an individual was determined by a clinician to meet the criteria for an anxiety disorder based on DSM-5 criteria.

1 Substance Abuse and Mental Health Services Administration, “DSM-5 Changes: Implications for Child Serious Emotional Disturbance.” (2016).

2 Voelker et al., “United States national trends in prevalence of major depressive episode and co-occurring suicidal ideation and treatment resistance among adults.” (2021).

Millions of adolescents in U.S. suffer from behavioral health conditions

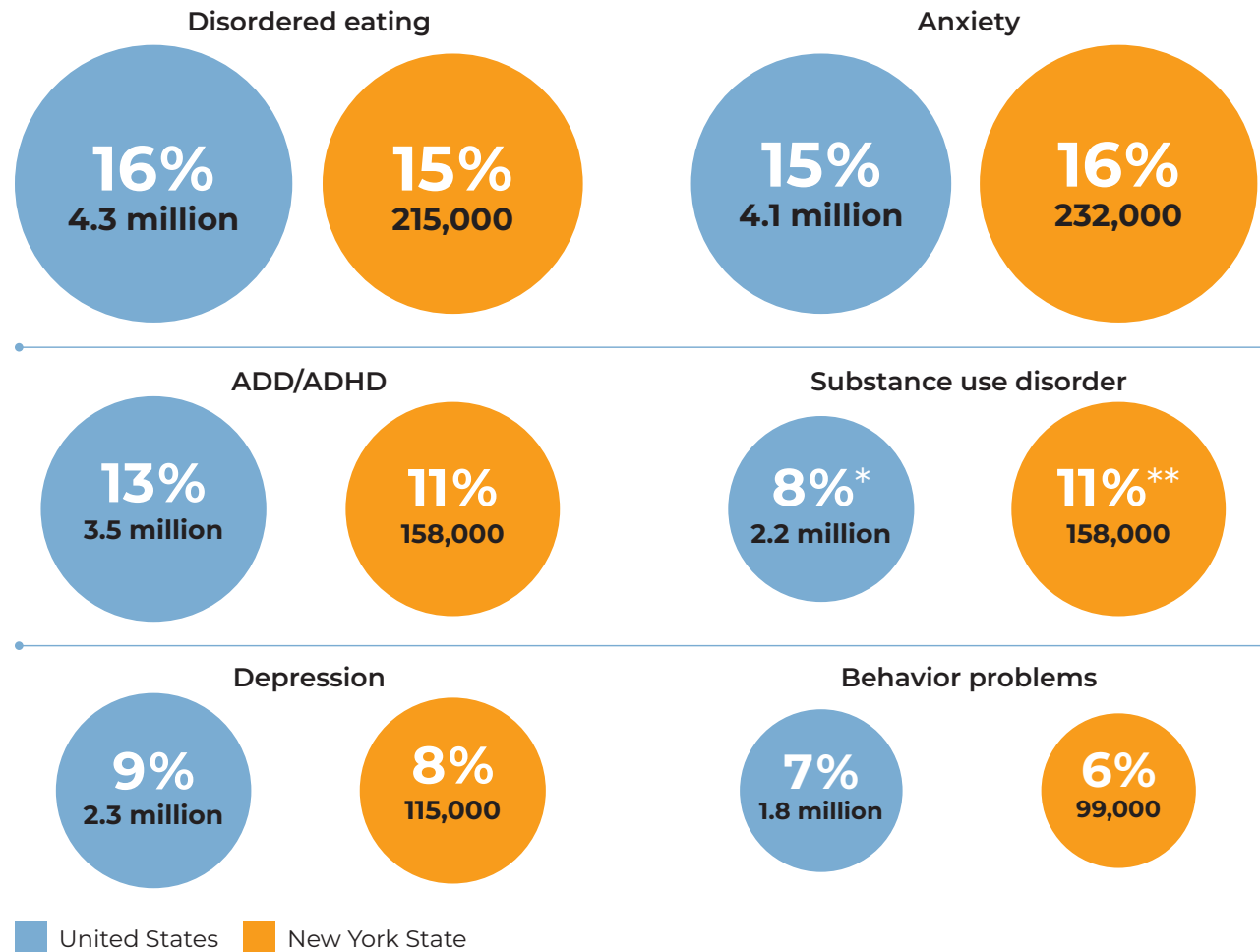
Millions of adolescents in the United States suffered from one or more behavioral health conditions in 2022. Of the nearly 6.7 million adolescents who reported currently having depression, anxiety, ADD/ADHD, or behavior problems, over half reported co-occurring conditions. In New York State, an estimated 1 in 4 adolescents experienced a behavioral health condition. This is a major concern because co-occurring disorders may be more challenging to diagnose and treat. Co-occurrence of behavioral health conditions can be associated with increased risk of suicide and poor school performance.

“Depression doesn’t care if everything is going well in life. It doesn’t matter if you have great friends, a stable job, a strong relationship with your partner. **That all means nothing in the face of the abyss.**”

—Isaac Rivera, 17-year-old from Denver
Teen Suicide Mental Health Portraits;
The Denver Post

Figure 1

Prevalence of behavioral health conditions among adolescents in the United States and New York State, 2022



Source: National Survey of Children's Health 2022.

* Data on substance use disorder for adolescents in the United States comes from the National Survey on Drug Use and Health 2022.

** Data on substance use disorder for adolescents in New York State is a preliminary estimate from the National Survey on Drug Use and Health 2021.

Rates of behavioral health conditions among adolescents have increased measurably over past 5-10 years

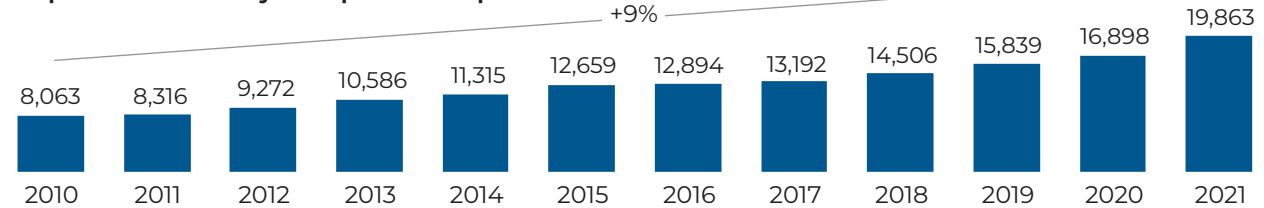
Adolescents are disproportionately affected by the behavioral health crisis. Across all age groups, adolescents have experienced the highest YoY increase in MDE since 2010. In addition, a survey conducted in 2021 revealed that, while adolescents made up only 9% of the survey population, they accounted for 20% of those experiencing MDE. There is a notable discrepancy between the number of adolescents reporting depressive symptoms and the number of those with a clinical diagnosis of depression or anxiety; this gap may be reflective of the lack of access to care or issues around stigma.

Figure 2

Increasing prevalence of mental health issues among adolescents in the United States, 2010 to 2022

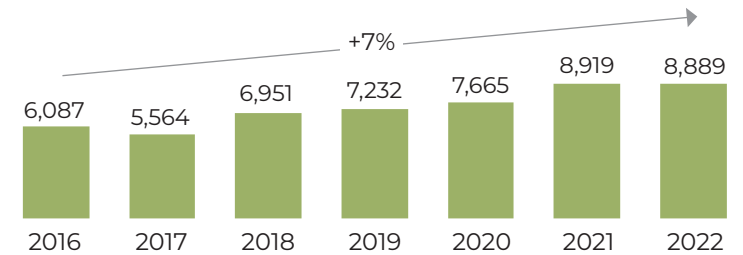
Rate per 100,000

Experienced a major depressive episode



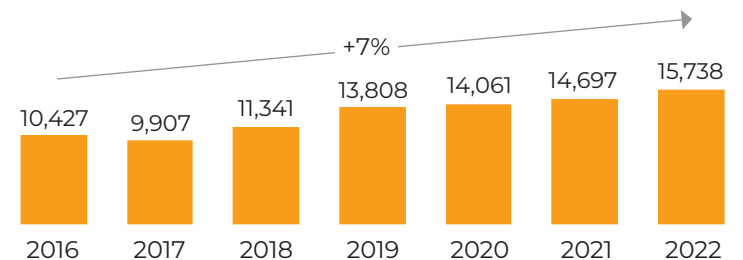
Source: National Survey of Drug Use and Health 2010–2021.

Clinically diagnosed depression



Source: National Survey of Children’s Health 2016–2022.

Clinically diagnosed anxiety



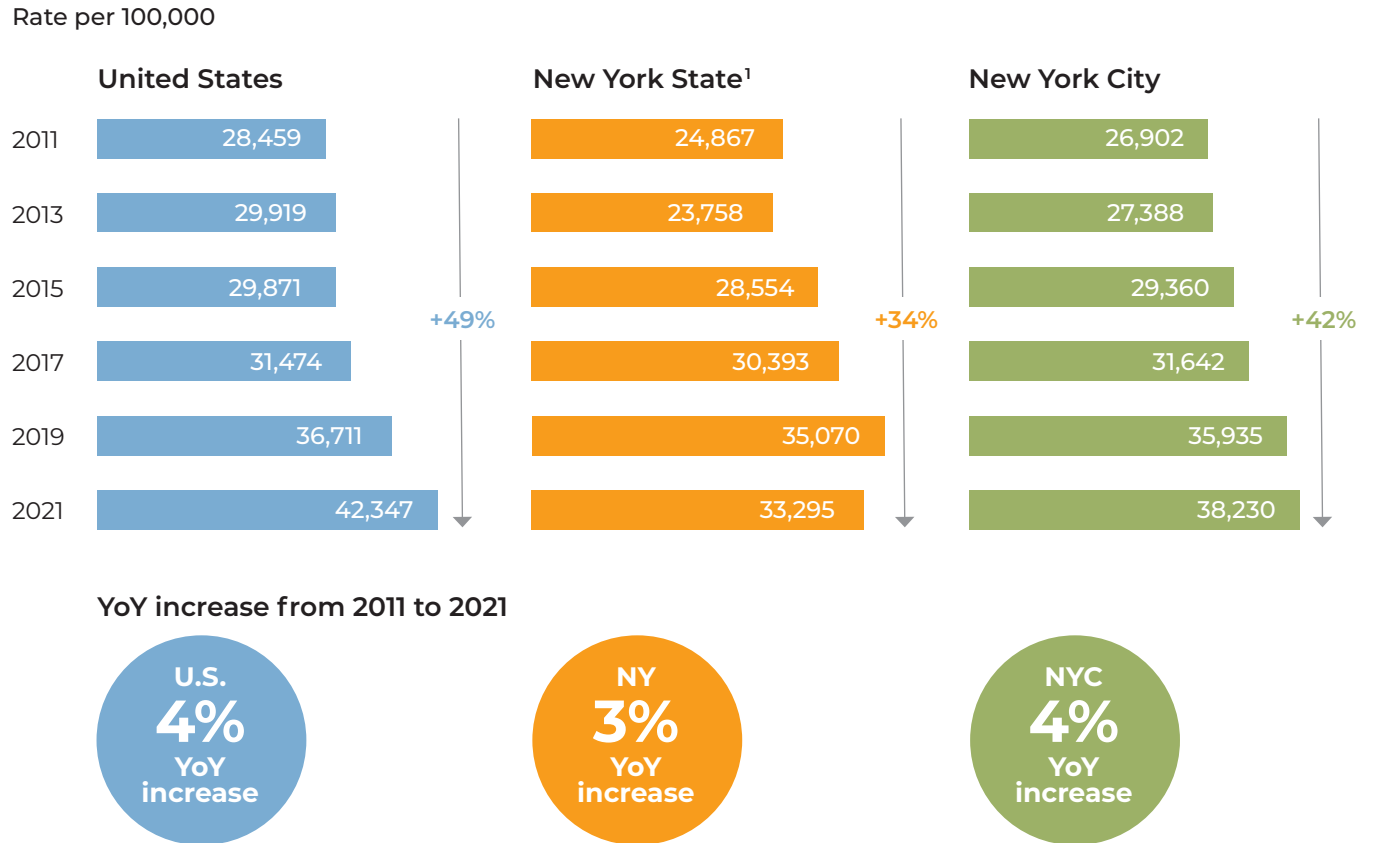
Source: National Survey of Children’s Health 2016–2022.

Across U.S., NY, and NYC, high schoolers increasingly report persistent sadness and hopelessness

Figure 3

Increasing prevalence of persistent sadness and hopelessness among high schoolers, 2011 to 2021, breakdown by region

In the United States, New York State, and New York City, the proportion of high schoolers feeling persistent sadness and hopelessness has increased dramatically from 2011 to 2021. While the increase in New York State (34%) and New York City (42%) is slightly lower than the national number (49%), it is still notable that the rate of persistent sadness and hopelessness continues to rise across all three geographies.



Source: Youth Risk Behavior Survey 2011–2021.

NOTE:

1. New York State is inclusive of New York City. These numbers represent the rate per 100,000; if a number for New York City is higher than a number for New York State, it is because New York City has a higher prevalence per 100,000.

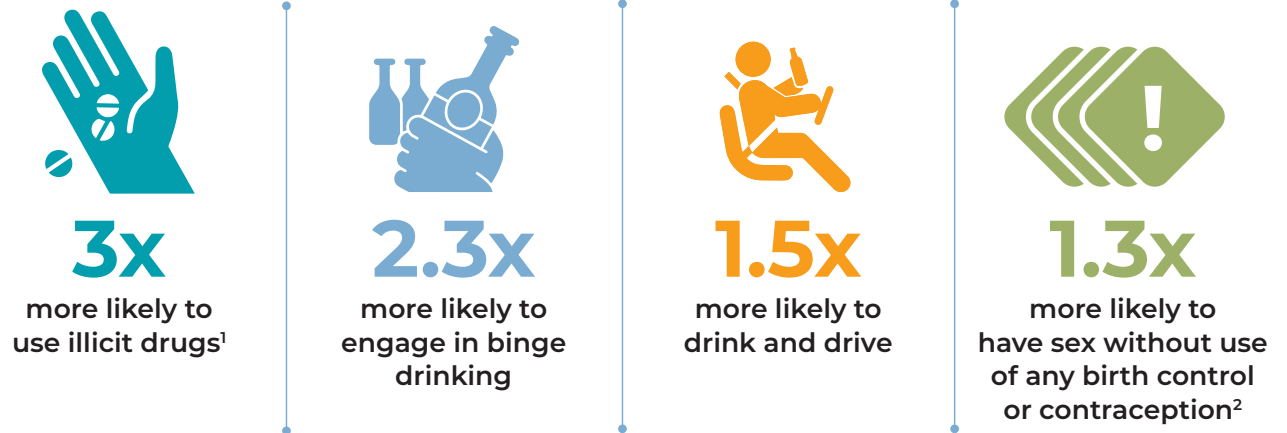
Behavioral health conditions in adolescents often co-occur with other risky behaviors

High schoolers in the United States who report feelings of persistent sadness are more likely to engage in risky and health-threatening behaviors. These behaviors can endanger the adolescent as well as those around them and may lead to long-term ripple effects.

Figure 4

Co-occurrence of negative mental health symptoms and risky and health-threatening behaviors among high schoolers in the United States, 2021

Compared to those without negative mental health symptoms, high schoolers who report persistent sadness are...



Source: Youth Risk Behavior Survey 2021.

NOTES:

1. Illicit drug use includes use of cocaine, heroin, meth, MDMA, inhalants, misuse of prescription drugs, and any injected illegal drug.
2. Analysis is limited only to those who have had sex in the last 3 months.

**Impact not felt evenly;
Black high schoolers
have highest rate of
increased suicidality**

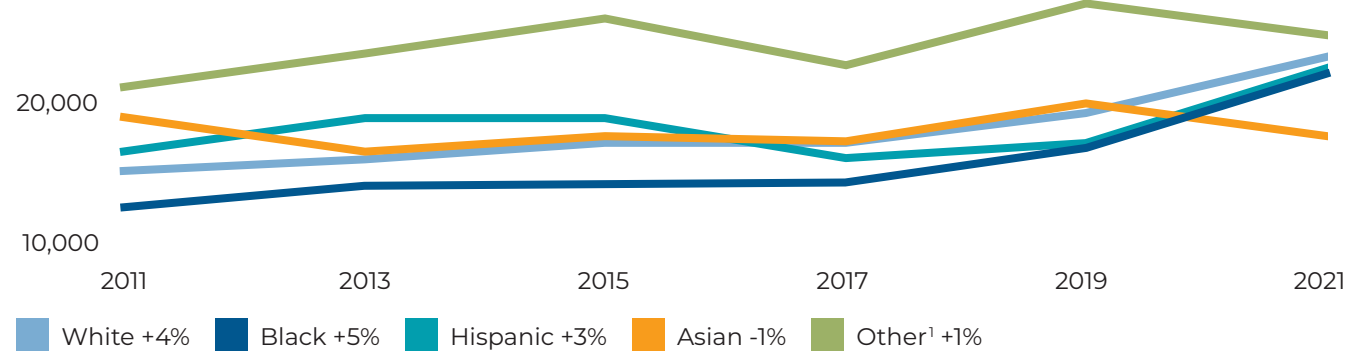
Breaking down suicidality among high schoolers by race demonstrates the disproportionate impacts on certain populations. From 2011 to 2021, Black high schoolers experienced the largest increase in suicidality, with a 65% (5% YoY) increase in the rate of considering suicide and a 76% (6% YoY) increase in the rate of suicide attempts. Moreover, when compared to other racial and ethnic groups, high schoolers identifying as Black and Other have had higher rates of attempted suicide since 2017. This trend can also be seen in New York State. From 2019 to 2021, Black and Hispanic high schoolers had a 1.8x increased likelihood of attempting suicide when compared to white high schoolers.

Figure 5

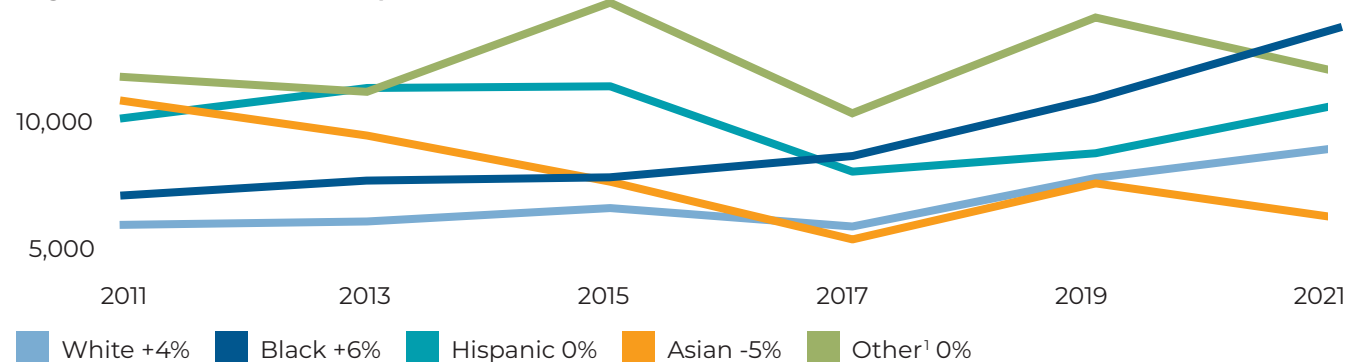
Suicidality among high schoolers in the United States, 2011 to 2021, breakdown by race

Rate per 100,000

High schoolers who seriously considered suicide



High schoolers who attempted suicide



Source: Youth Risk Behavior Survey 2011–2021.

NOTE:

1. Other includes high schoolers who identified as Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and multiracial.

In NYC, non-white high schoolers show a higher likelihood of suicidality

Figure 6

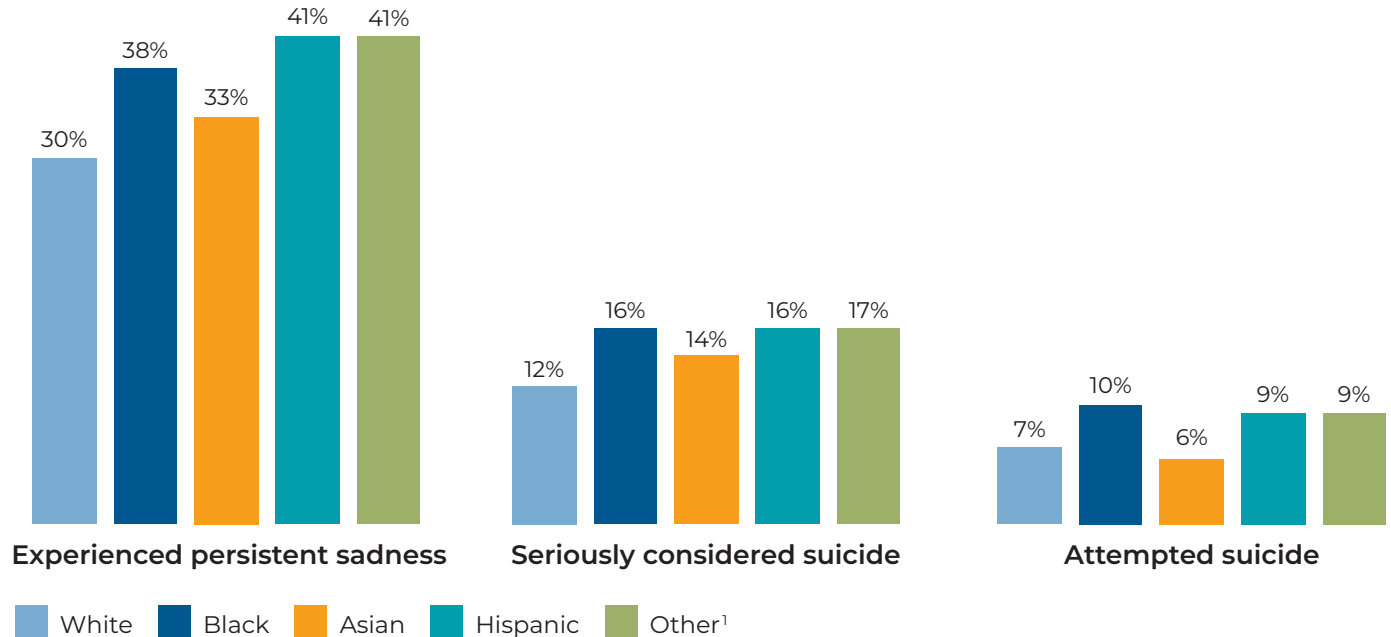
Depressive symptoms and suicidality among high schoolers in New York City, 2019 and 2021, breakdown by race

Similar to the national landscape, non-white high schoolers in New York City face the highest likelihood of depressive symptoms and suicidality. More specifically, Black and Hispanic high schoolers experienced the highest rates of persistent sadness, serious consideration of suicide, and attempted suicide in 2019 and 2021.

“Five years ago, I would be traumatized at the idea that my child is in a suicidal crisis stabilization situation in the emergency department. Now we’ve gotten to the point where **it’s ingrained in our day-to-day lives.**”

—Mike Lipman, father and hospital system administrator

Children in Mental-Health Crisis Surge Into Hospital E.R.s; November 8, 2023; *The Wall Street Journal*



Source: Youth Risk Behavior Survey 2019 & 2021.

NOTE:

- 1. Other includes high schoolers who identified as Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and multiracial.

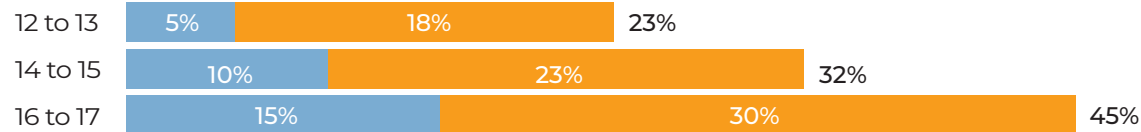
Females ages 14-17 are more likely to have depression and depressive symptoms

Breaking down depressive symptoms and suicidality by sex across multiple age groups demonstrates a disproportionate impact on those who identify as female. In 2021, the proportion of females among those ages 14-17 who experienced an MDE or considered suicide was more than double that of males in the same age group.

Figure 7

Depressive symptoms and suicidality among adolescents in the United States, 2021, breakdown by sex

Experienced a major depressive episode



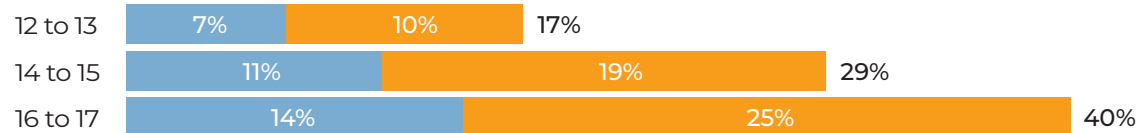
Source: National Survey of Drug Use and Health 2021.

Considered suicide¹



Source: Youth Risk Behavior Survey 2021.

Clinically diagnosed depression³



Source: National Survey of Children's Health 2021.

Male Female

Figure shows distribution of those with depressive symptoms or suicidality across age and sex. The sum of the reported breakdown within each age group may not match the row totals due to rounding.

NOTES:

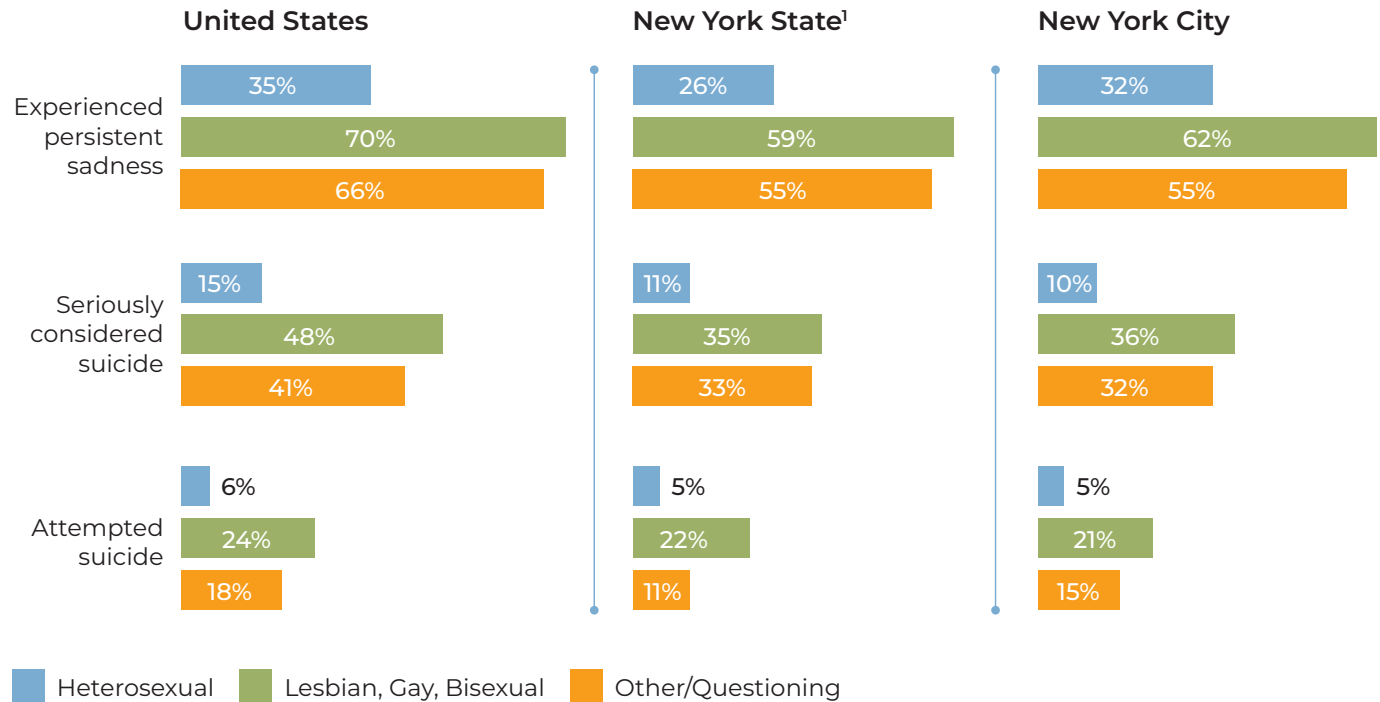
1. For comparability across data sources, survey respondents age 18 who reported considering suicide are not shown in this figure. 6% of survey respondents age 18 reported considering suicide.
2. The data on adolescents considering suicide comes from the Youth Risk Behavior Survey, which is administered to students in grades 9-12. Since very few high school students are ages 12-13, the sample size for individuals ages 12-13 considering suicide is small; thus, these numbers may not fully reflect the prevalence of individuals ages 12-13 who have considered suicide.
3. For comparability across data sources, survey respondents ages 6 to 11 who reported having clinically diagnosed depression are not shown in this figure. 14% of survey respondents ages 6 to 11 reported having clinically diagnosed depression.

LGB high schoolers face higher likelihood of depression and depressive symptoms

Breaking down depressive symptoms and suicidality by sexual orientation across multiple regions consistently demonstrates a disproportionate impact on those who identify as lesbian, gay, or bisexual (LGB) when compared to those who identify as heterosexual. In 2021, across all three geographies, when compared with heterosexual students, LGB students were around 2x as likely to feel persistent sadness, over 3x more likely to consider suicide, and over 4x more likely to attempt suicide. Students identifying as Other or Questioning also experienced heightened rates of depressive symptoms and suicidality, though at a slightly lesser degree than students identifying as LGB.

Figure 8

Depressive symptoms and suicidality among high schoolers in the United States, 2021, breakdown by sexual orientation



The data source only addresses differences based on sexual orientation. Data reflecting varying gender identities (e.g., cisgender, transgender, nonbinary) were not captured in this analysis.

Source: Youth Risk Behavior Survey 2021.

NOTE:

- 1. New York State is inclusive of New York City. These numbers represent the rate per 100,000; if a number for New York City is higher than a number for New York State, it is because New York City has a higher prevalence per 100,000.

“My concern was: **Am I going to survive this next day?** Am I going to ever feel this weight off of my chest?”

—Esmée Silverman, college junior on their coming-out story

LGBTQ+ Student Perspective: ‘My School’s GSA Saved My Life’; October 16, 2023; *Education Week*

Fully understanding
scale of crisis requires
looking beyond
diagnosed disorders

More than twice as many adolescents experience daily, weekly, or monthly feelings of depression or anxiousness as the number of adolescents who have actually received a clinical diagnosis of depression or anxiety. As the gap between reported mental health needs and service utilization continues to widen, it is essential to address factors contributing to this disparity.

Figure 9

Adolescents in the United States reporting symptoms of anxiety and depression versus receiving a clinical diagnosis, 2022

Anxiety



For every 20 adolescents reporting symptoms of anxiety, **only 9** were clinically diagnosed with anxiety.

Depression



For every 20 adolescents reporting symptoms of depression, **only 10** were clinically diagnosed with depression.

Calculations were made by taking the rate per 100,000 of adolescents clinically diagnosed with anxiety or depression, according to the National Survey of Children's Health 2022, and dividing it by the rate per 100,000 of adolescents reporting symptoms of anxiety or depression, according to the National Health Interview Survey 2022.

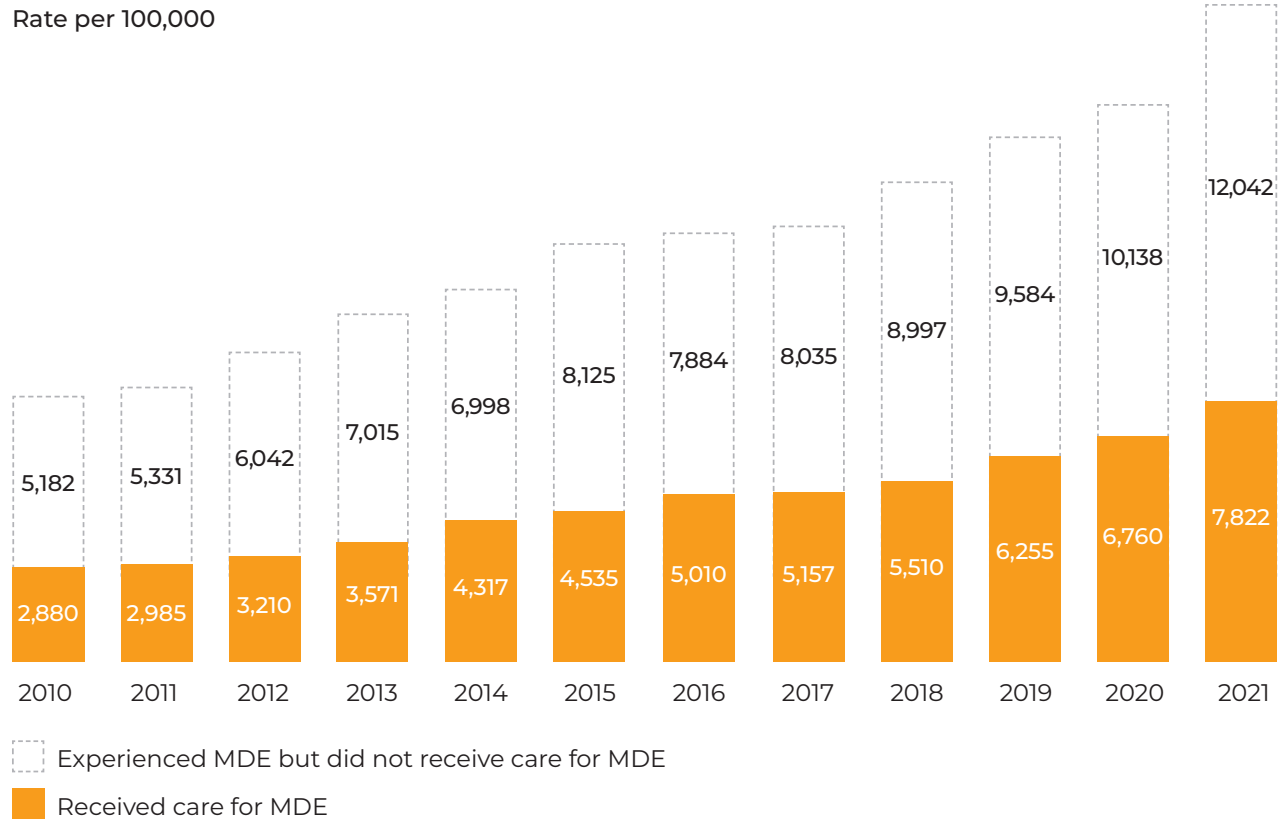
Sources: National Health Interview Survey 2022, National Survey of Children's Health 2022.

As rates increase, gaps in access persist; less than 40% who need care get it

Figure 10

Adolescents in the United States experiencing versus receiving care for a major depressive episode, 2010 to 2021

The rates of adolescents experiencing MDE has continued to increase from 2010 to 2021, and large gaps in access to care persist. Only 39% of those in need of mental health care for MDE were able to access care in 2021.



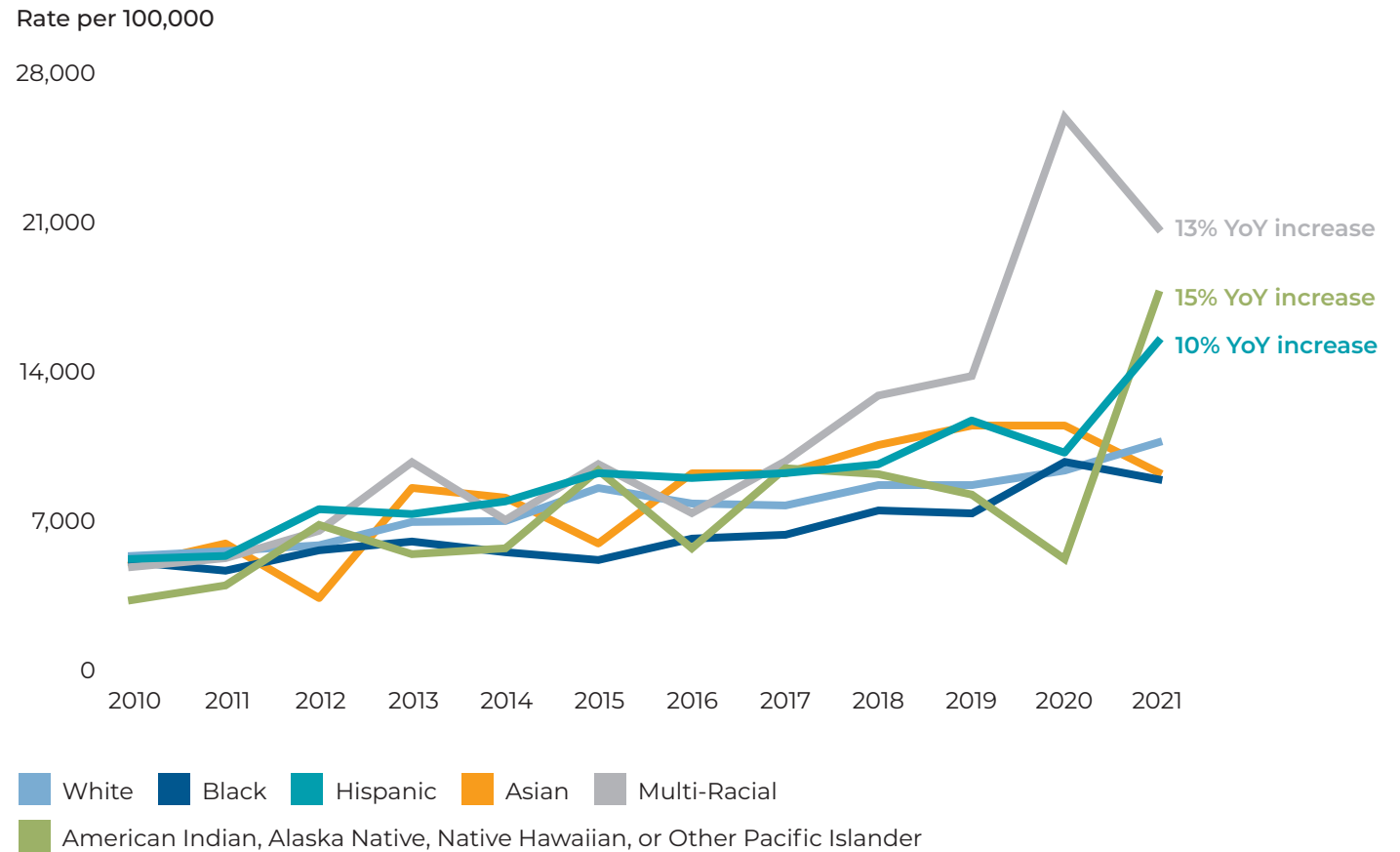
Source: National Survey of Drug Use and Health 2010–2021.

Trends in access to care are worse for certain racial groups

Figure 11

Adolescents in the United States not receiving care for a major depressive episode, 2010 to 2021, breakdown by race

Every year from 2010 to 2021, less than 40% of adolescents who experienced MDE received care for MDE. In fact, during this time period, the number of adolescents experiencing MDE but not receiving care increased by 8% YoY. Breaking the data down by race demonstrates a disproportionate impact on adolescents identifying as American Indian, Alaska Native, Native Hawaiian, or Other Pacific Islander (15% YoY increase).



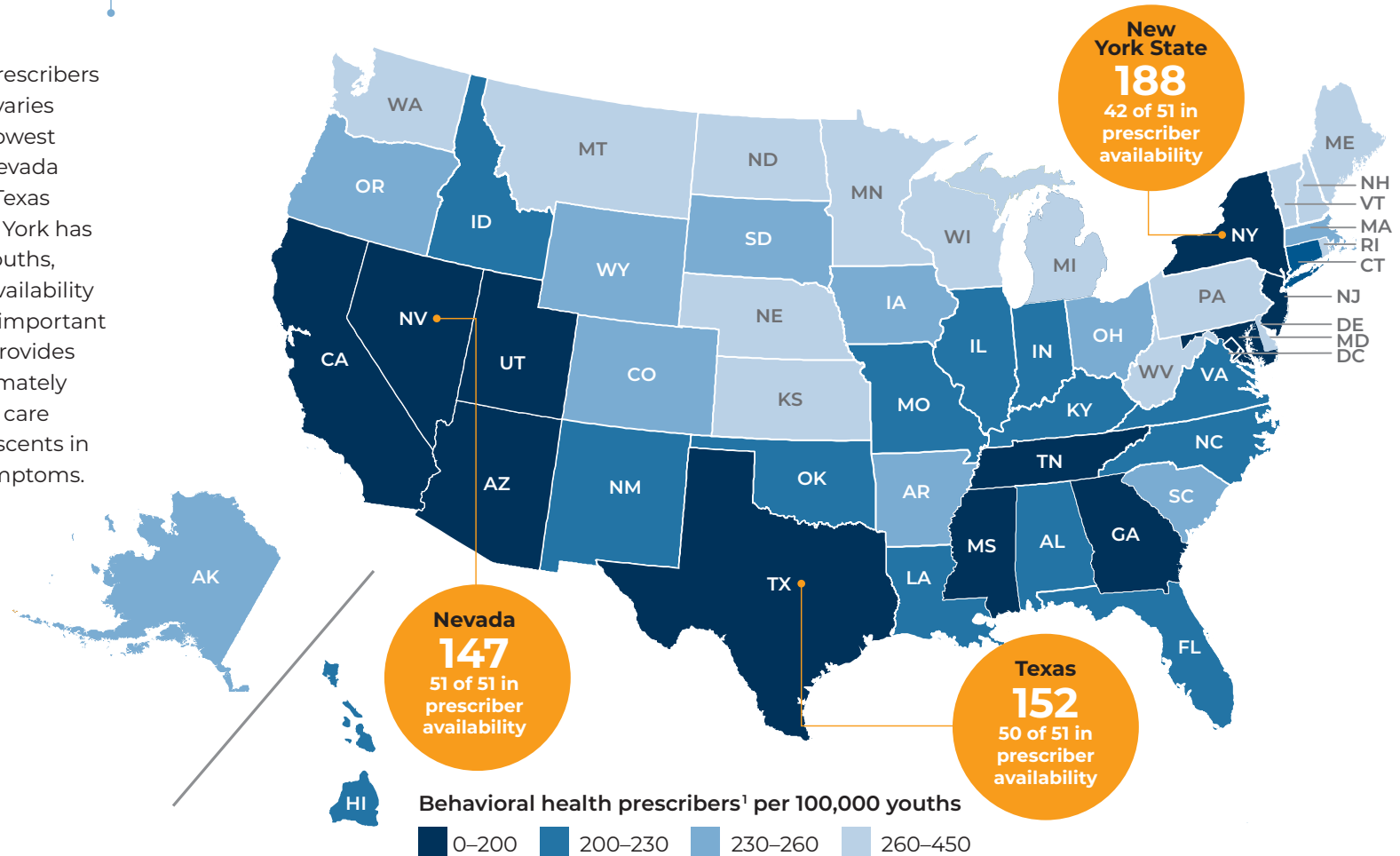
Source: National Survey of Drug Use and Health 2021-2021.

Access to care and availability of providers differ between states

Access to behavioral health prescribers for children and adolescents varies from state to state, with the lowest availability of prescribers in Nevada (147 per 100,000 youths) and Texas (152 per 100,000 youths). New York has 188 prescribers per 100,000 youths, which is below the national availability (207 per 100,000 youths). It is important to note that, while this map provides a look at access to care, it ultimately does not fully encompass the care continuum available to adolescents in treating behavioral health symptoms.

Figure 12

National map of availability of behavioral health prescribers for children and adolescents, 2021



Sources: Behavioral Health Workforce Dataset from Fitzhugh Mullan Institute for Health Workforce Equity 2021, U.S. Census ACS 2021.

NOTE:

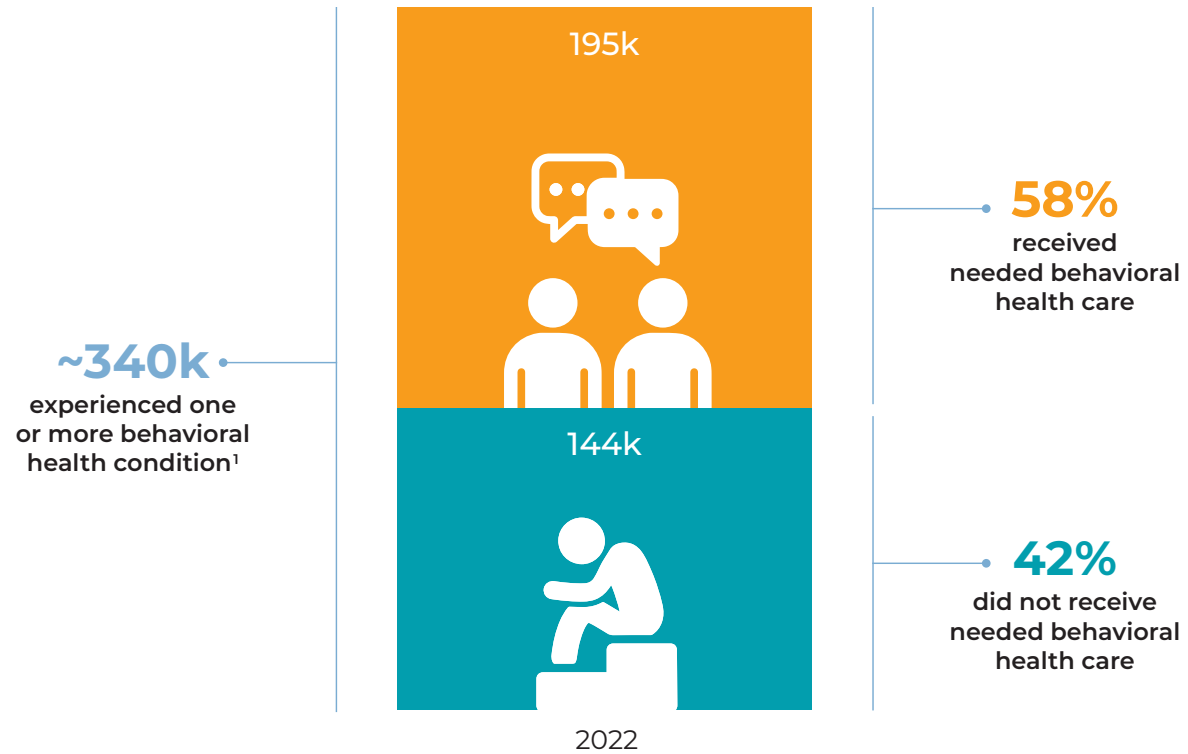
- Behavioral health prescribers for children and adolescents were defined in the data source as child and adolescent psychiatrists, family medicine physicians, and pediatricians who wrote at least 11 behavioral health prescriptions in the selected year. Because these prescribers provided services to individuals ages 0-18, this map displays prescribers available to both children and adolescents.

In NY, over 40% of adolescents with one or more behavioral health conditions lacked access to care

Figure 13

Adolescents in New York State experiencing versus receiving care for one or more behavioral health conditions, 2022

Consistent with national gaps in access to care, 42% of the roughly 340,000 adolescents in New York State who had one or more behavioral health conditions in 2022 did not receive the behavioral health care they needed.



Source: National Survey of Children's Health 2022.

NOTE:

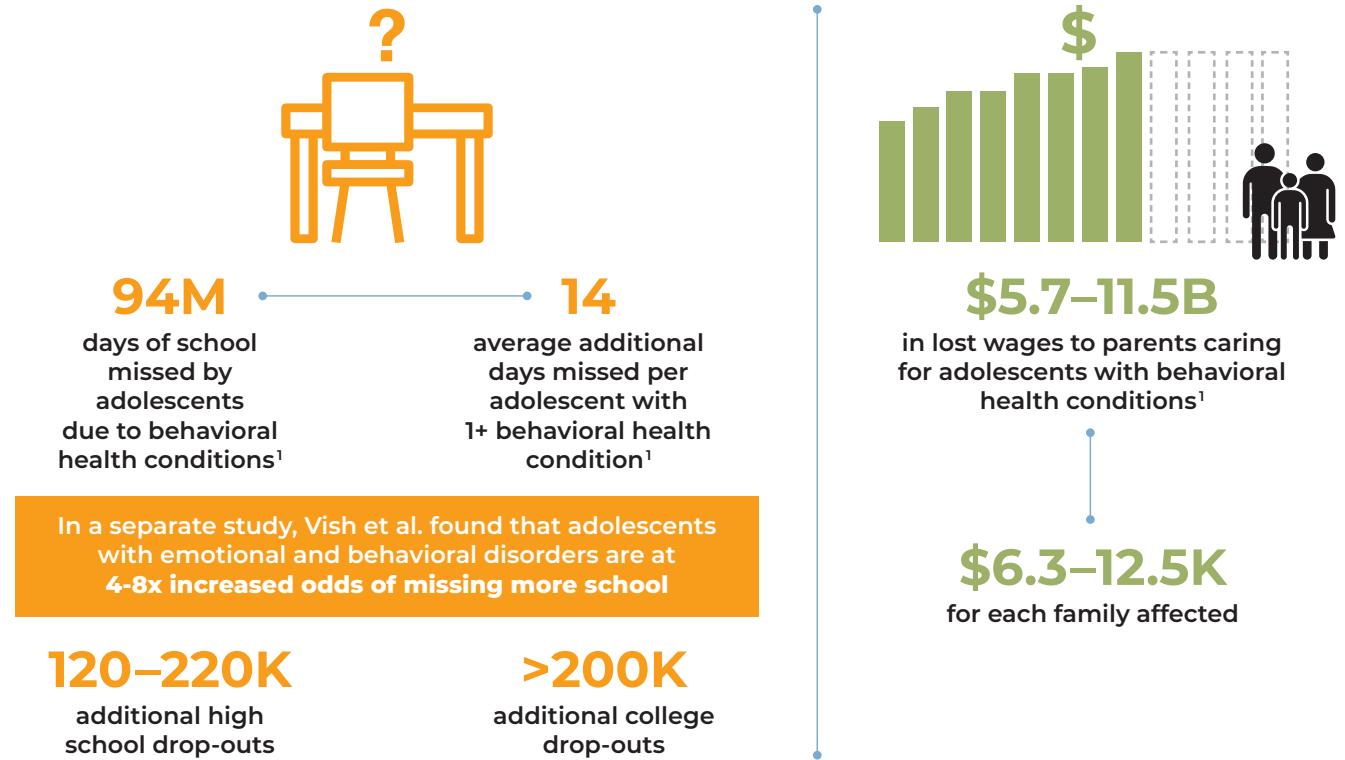
1. Behavioral health conditions include depression, anxiety, ADD/ADHD, and behavior problems.

Adolescent behavioral health conditions reverberate in annual education loss and economic impacts to families

When adolescents suffer from behavioral health conditions, it leads to missed days of school, which can then result in students dropping out of high school and college. In addition, families are economically affected because they lose wages when taking time to care for adolescents with behavioral health conditions.

Figure 14

National ripple effects of adolescent behavioral health conditions on education and family economics



Sources: National Survey of Children’s Health 2022; NCES Table 219.10; Busch et al., “Mental health disorders in childhood: Assessing the burden on families.” (2007); Lawrence et al., “Impact of mental disorders on attendance at school.” (2019); Mojtabai et al., “Long-term effects of mental disorders on educational attainment in the National Comorbidity Survey ten-year follow-up.” (2015); Vish et al., “Relationship of Children’s Emotional and Behavioral Disorders With Health Care Utilization and Missed School.” (2020).

NOTE:

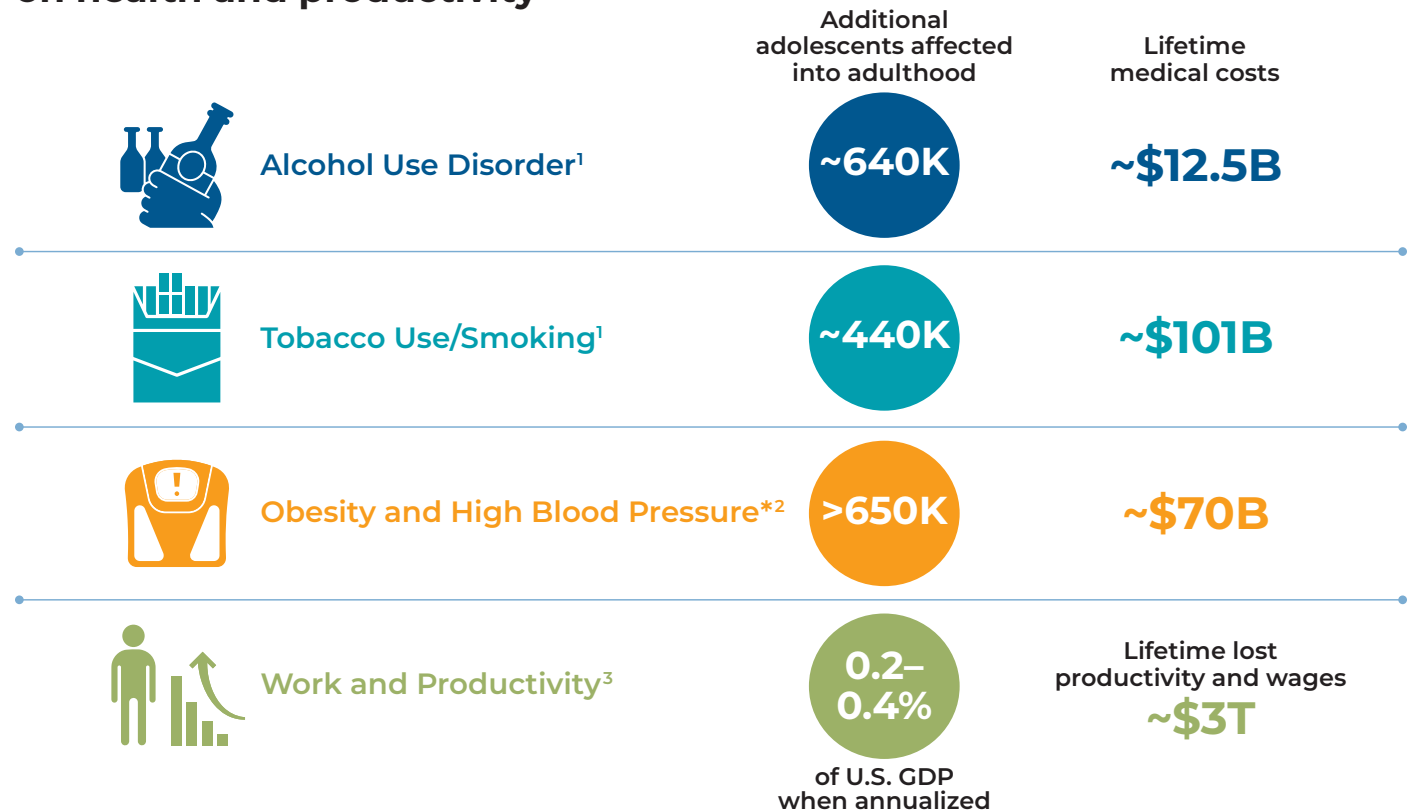
1. Behavioral health conditions used for calculations include depression, anxiety, ADD/ADHD, and behavior problems.

Impacts of adolescent behavioral health conditions continue through adulthood in lifelong health and productivity outcomes

Based on the 2022 prevalence of behavioral health conditions and symptoms, lifetime medical costs associated with those who go on to develop alcohol use disorder, engage in tobacco use and smoking, or have obesity and high blood pressure in adulthood are estimated at up to \$185 billion. These are just a few of the possible long-term effects on health. There are also profound impacts on work and productivity, which amount to an estimated \$3 trillion in lifetime lost productivity and wages.

Figure 15

National ripple effects of adolescent behavioral health conditions on health and productivity



Sources: National Survey of Children’s Health 2022; Farmer et al., “Internalizing and externalizing disorders as predictors of alcohol use disorder onset during three developmental periods.” (2016); Green et al., “Mental health problems and onset of tobacco use among 12- to 24-year-olds.” (2018); Srinivas et al., “Self-reported depressive symptoms in adolescence increase the risk for obesity and high BP in adulthood.” (2018); Fletcher, “The effects of childhood ADHD on adult labor market outcomes.” (2014); Fletcher, “Adolescent depression and adult labor market outcomes.” (2013).

* Data on behavioral health conditions used for obesity and high blood pressure calculations comes from the National Survey on Drug Use and Health 2021.

NOTES:

- Behavioral health conditions used for alcohol use disorder and tobacco use/smoking calculations include depression, anxiety, ADD/ADHD, and behavior problems.
- Behavioral health conditions used for obesity and high blood pressure calculations include experience of MDE.
- Behavioral health conditions used for work and productivity calculations include depression and ADD/ADHD.

Figure 16

Barriers to adolescent behavioral health care

CO-OCCURRING OBSTACLES



“Communities with greater mental health challenges are also worse off in getting proper health care, with priorities like food stamps and other social services.”

—Pediatrician and Director at a children’s medical center

EDUCATIONAL IMPLICATIONS



“A major barrier is logistics – if you don’t have services at school, the student has to leave the premises and miss substantial class time. This can lead to worse educational outcomes.”

—Dr. Angela Diaz, Director, Mount Sinai Adolescent Health Center

STIGMA



“Individuals harbor stigma around help that prevents them from seeking it, and they often lack the mechanisms to identify issues.”

—Mental health professor at a leading school of public health

LACK OF COORDINATED CARE



“Siloed services and systems that each deal with a ‘primary’ issue make it difficult to tailor care, especially when there are comorbidities.”

—Professor of psychiatry and pediatrics

ROLE OF COMMUNITY



“Addressing mental health requires building trust within the community...having teachers, administrations, parents, providers all walk together.”

—Dr. Rosy Chhabra, Director, Montefiore School Health Program

WORKFORCE SHORTAGE



“More than a third of the U.S. population...live in areas that have a dearth of mental-health workers.”

—Wall Street Journal

Conclusion

As evidenced by the data in this analysis, the toll of the adolescent behavioral health crisis in the United States is vast, complex, and growing. The consequences are especially profound for communities experiencing the greatest disadvantages and those that have been historically and intentionally excluded. Addressing the shortage of

trained behavioral health clinicians is clearly of paramount importance, but remedying the problem will take time and new resources. Despite these considerable challenges, a spectrum of promising initiatives exists that may help address adolescent behavioral health needs in tandem with traditional clinical behavioral health interventions.

EMPOWERING NON-CLINICAL STAFF

These interventions leverage non-clinical staff to connect with individuals experiencing minimal to mild behavioral health conditions. When an intervention is made earlier, the likelihood that a condition does not escalate is increased. These initiatives also play a crucial role in alleviating the workload of clinical staff, enabling them to focus on patients needing intensive care.

The Ballmer Institute for Children's Behavioral Health

at the University of Oregon is one of the very few specialized training programs that offer an undergraduate degree in child behavioral health, with training in early identification and behavioral health promotion and supervised practice in schools and community settings. While training and experience is usually reserved for graduate-level studies, this program provides similar training and experience to undergraduate students, allowing a larger number

of people to become children's behavioral health specialists at an earlier stage in their career. Widening the pipeline of trained behavioral health specialists is crucial for addressing the workforce shortage.



REDUCING STIGMA THROUGH STORYTELLING

Encouraging adolescents to share their own stories can be a powerful tool in the fight against stigma surrounding behavioral health. It can lessen feelings of isolation and help break down the barriers associated with behavioral health care and treatment. Storytelling can, in fact, motivate adolescents and their peers to seek treatment, foster empathy, promote acceptance, and prioritize their mental and emotional well-being.

Find Your Words is a national public awareness campaign that encourages talking about depression and offers advice on self-support and finding support. This type of program can address the adolescent behavioral health crisis by closing the gap in untreated conditions outlined by this analysis. By breaking down stigma and encouraging understanding of behavioral health conditions, and by encouraging adolescents to seek the support they may need, earlier intervention may be achieved.



CREATING DIALOGUE BETWEEN FAMILIES, SCHOOLS, AND COMMUNITIES

Fostering communication between stakeholders can cultivate trust and lead to a more supportive and interconnected environment. The forging of connections helps to share resources, strategies, and support systems that can positively influence adolescents' behavioral health outcomes. It also addresses underlying systemic factors that can contribute to behavioral health challenges.

The Montefiore School Health Program in New York is the largest and most comprehensive school-based health program in the country, providing coordinated primary and preventive health care to public elementary, middle, and high school students within their schools. This multidisciplinary approach that combines medical, mental health, dental, and community health services creates meaningful dialogue among different stakeholders and builds trust among families. This integrated program ultimately equips the community in helping and supporting adolescents facing behavioral health challenges.



Any initiative to address adolescent behavioral health needs runs the risk of exacerbating the gap between experiencing behavioral health symptoms and receiving appropriate treatment. For example, educating adolescents about the spectrum of behavioral health symptoms and diagnoses without providing effective access to appropriate support or services might increase their anxiety. Interventions should always consider potential unintended consequences and be pursued in a deliberate, effective, and thoughtful manner.

The barriers that influence these and other promising interventions are similar to those affecting the whole of the behavioral health ecosystem. Other factors beyond core workforce challenges—including stigma,

intersectional physical health and social needs, the litany of often disconnected systems serving adolescents, and the need for community-wide engagement—can hinder the effectiveness of adolescent behavioral health initiatives. Addressing these barriers requires a broad mix of public education, community action, practice transformation, and interventions designed from a holistic perspective centered on the unique needs of adolescents and their communities. Ultimately, an all-hands-on-deck approach is critical to paving the way for a more coordinated behavioral health ecosystem for adolescents—all disciplines and fields must come together to help adolescents caught in the grip of this crisis.

Appendix

* Any question marked with an asterisk has the answer options of “Yes” and “No.”

| SOURCE | INDICATOR | SURVEY QUESTIONS AND DEFINITIONS |
|---|------------------------|--|
| Figure 1 | | |
| National Survey of Children's Health 2022 | Disordered eating | <p>DURING THE PAST 12 MONTHS, did this child engage in any of the following? Mark (X) Yes or No for EACH item.</p> <ul style="list-style-type: none"> – Skipping meals or fasting (Do NOT include skipping meals or fasting for religious reasons) – Binge eating – Purging or vomiting after eating – Not eating due to fear of vomiting or choking |
| | Anxiety | <p>* Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition?</p> |
| | ADD/ADHD | <p>* Has a doctor or other health care provider EVER told you that this child has Attention Deficit Disorder or Attention-Deficit/Hyperactivity Disorder, that is, ADD or ADHD? * If yes, does this child CURRENTLY have the condition?</p> |
| | Depression | <p>* Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition?</p> |
| | Behavior problems | <p>* Has a doctor, other health care provider, or educator (examples of educators are teachers and school nurses) EVER told you that this child has Behavioral or Conduct Problems? * If yes, does this child CURRENTLY have the condition?</p> |
| National Survey of Drug Use and Health 2021 | Substance use disorder | <p>Respondents were classified as having a substance use disorder (SUD) in the past year if they met criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition.</p> <p>Respondents who used marijuana, cocaine, heroin, hallucinogens, inhalants, methamphetamine, or prescription psychotherapeutic drugs were classified as having a drug use disorder (DUD) if they had a disorder related to any of these substances that they used in the past year.</p> <p>Respondents were classified as having an opioid use disorder (OUD) if they had a disorder related to their use of heroin or prescription pain relievers in the past year.</p> <p>Respondents who used alcohol in the past year were classified as having an alcohol use disorder (AUD) if they met criteria for an AUD in the past year.</p> |

SOURCE INDICATOR SURVEY QUESTIONS AND DEFINITIONS

| Figure 2 | | |
|--|---------------------------------|---|
| National Survey of Drug Use and Health 2010-2021 | Experienced MDE | Respondents were classified as having a major depressive episode (MDE) in the past 12 months if (1) they had at least one period of 2 weeks or longer in the past year when for most of the day nearly every day they felt depressed or lost interest or pleasure in daily activities; and (2) they also had problems with sleeping, eating, energy, concentration, self-worth, or having recurrent thoughts of death or recurrent suicidal ideation. The MDE questions are based on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition. |
| National Survey of Children's Health 2016-2022 | Clinically diagnosed depression | * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? |
| | Clinically diagnosed anxiety | * Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition? |

| Figure 3 | | |
|--------------------------------------|-------------------------------------|--|
| Youth Risk Behavior Survey 2011-2021 | Persistent sadness and hopelessness | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? |

| Figure 4 | | |
|---------------------------------|------------------|--|
| Youth Risk Behavior Survey 2021 | Illicit drug use | <p>During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?</p> <ul style="list-style-type: none"> – 0 times – 1 or 2 times – 3 to 9 times – 10 to 19 times – 20 to 39 times – 40 or more times <p>During your life, how many times have you used heroin (also called smack, junk, or China White)?</p> <ul style="list-style-type: none"> – 0 times – 1 or 2 times – 3 to 9 times – 10 to 19 times – 20 to 39 times – 40 or more times |

SOURCE

INDICATOR

SURVEY QUESTIONS AND DEFINITIONS

Figure 4 (continued)

Youth Risk
Behavior Survey
2021 (continued)

Illicit drug use
(continued)

During your life, how many times have you used methamphetamines (also called speed, crystal meth, crank, ice, or meth)?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

During your life, how many times have you used ecstasy (also called MDMA or Molly)?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

The next question asks about the use of prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it. For this question, count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet. During your life, how many times have you taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

During your life, how many times have you used a needle to inject any illegal drug into your body?

- 0 times
- 1 time
- 2 or more times

SOURCE

INDICATOR

SURVEY QUESTIONS AND DEFINITIONS

Figure 4 (continued)

| | | |
|---|--|--|
| Youth Risk Behavior Survey 2021 (continued) | Binge drinking | <p>The next 5 questions ask about drinking alcohol. This includes drinking beer, wine, flavored alcoholic beverages, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes. During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row, that is, within a couple of hours (if you are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if you are male)?</p> <ul style="list-style-type: none"> – 0 days – 1 day – 2 days – 3 to 5 days – 6 to 9 days – 10 to 19 days – 20 or more days |
| | Drinking and driving | <p>During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?</p> <ul style="list-style-type: none"> – I did not drive a car or other vehicle during the past 30 days – I drove a car or other vehicle, but not when I had been drinking alcohol – 1 time – 2 or 3 times – 4 or 5 times – 6 or more times |
| | Sex without birth control or contraception | <p>During the past 3 months, with how many people did you have sexual intercourse?</p> <ul style="list-style-type: none"> – I have never had sexual intercourse – I have had sexual intercourse, but not during the past 3 months – 1 person – 2 people – 3 people – 4 people – 5 people – 6 or more people <p>The last time you had sexual intercourse with an opposite-sex partner, what one method did you or your partner use to prevent pregnancy? (Select only one response.)</p> <ul style="list-style-type: none"> – I have never had sexual intercourse with an opposite-sex partner – No method was used to prevent pregnancy – Birth control pills (Do not count emergency contraception such as Plan B or the “morning after” pill.) – Condoms – An IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon) – A shot (such as Depo-Provera), patch (such as Ortho Evra), or birth control ring (such as NuvaRing) – Withdrawal or some other method – Not sure |

SOURCE

INDICATOR

SURVEY QUESTIONS AND DEFINITIONS

Figure 5

| | | |
|--------------------------------------|------------------------------|--|
| Youth Risk Behavior Survey 2011-2021 | Seriously considered suicide | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever seriously consider attempting suicide? |
| | Attempted suicide | The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, how many times did you actually attempt suicide? <ul style="list-style-type: none"> – 0 times – 1 time – 2 or 3 times – 4 or 5 times – 6 or more times |
| | Race | * Are you Hispanic or Latino? What is your race? (Select one or more responses.) <ul style="list-style-type: none"> – American Indian or Alaska Native – Asian – Black or African American – Native Hawaiian or Other Pacific Islander – White |

Figure 6

| | | |
|--|--------------------------------|--|
| Youth Risk Behavior Survey 2019 & 2021 | Experienced persistent sadness | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? |
| | Seriously considered suicide | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever seriously consider attempting suicide? |
| | Attempted suicide | The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, how many times did you actually attempt suicide? <ul style="list-style-type: none"> – 0 times – 1 time – 2 or 3 times – 4 or 5 times – 6 or more times |

SOURCE INDICATOR SURVEY QUESTIONS AND DEFINITIONS

Figure 6 (continued)

| | | |
|--|------|---|
| Youth Risk Behavior Survey 2019 & 2021 (continued) | Race | <p>* Are you Hispanic or Latino?</p> <p>What is your race? (Select one or more responses.)</p> <ul style="list-style-type: none"> – American Indian or Alaska Native – Asian – Black or African American – Native Hawaiian or Other Pacific Islander – White |
|--|------|---|

Figure 7

| | | |
|---|---------------------------------|--|
| National Survey of Drug Use and Health 2021 | Experienced MDE | <p>Respondents were classified as having a major depressive episode (MDE) in the past 12 months if (1) they had at least one period of 2 weeks or longer in the past year when for most of the day nearly every day they felt depressed or lost interest or pleasure in daily activities; and (2) they also had problems with sleeping, eating, energy, concentration, self-worth, or having recurrent thoughts of death or recurrent suicidal ideation. The MDE questions are based on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition.</p> |
| | Sex | <p>Are you male or female?</p> <ul style="list-style-type: none"> – Male – Female |
| Youth Risk Behavior Survey 2021 | Considered suicide | <p>* The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever seriously consider attempting suicide?</p> |
| | Sex | <p>What is your sex?</p> <ul style="list-style-type: none"> – Female – Male |
| National Survey of Children's Health 2021 | Clinically diagnosed depression | <p>* Has a doctor or other health care provider EVER told you that this child has Depression?</p> <p>* If yes, does this child CURRENTLY have the condition?</p> |
| | Sex | <p>What is this child's sex?</p> <ul style="list-style-type: none"> – Male – Female |

| SOURCE | INDICATOR | SURVEY QUESTIONS AND DEFINITIONS |
|---------------------------------|--------------------------------|---|
| Figure 8 | | |
| Youth Risk Behavior Survey 2021 | Experienced persistent sadness | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? |
| | Seriously considered suicide | * The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, did you ever seriously consider attempting suicide? |
| | Attempted suicide | The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. During the past 12 months, how many times did you actually attempt suicide? <ul style="list-style-type: none"> – 0 times – 1 time – 2 or 3 times – 4 or 5 times – 6 or more times |
| | Sexual orientation | Which of the following best describes you? <ul style="list-style-type: none"> – Heterosexual (straight) – Gay or lesbian – Bisexual – I describe my sexual identity some other way – I am not sure about my sexual identity (questioning) – I do not know what this question is asking |

| | | |
|---------------------------------------|----------------------------|---|
| Figure 9 | | |
| National Health Interview Survey 2022 | Report symptoms of anxiety | How often does [your child] seem very anxious, nervous, or worried? Would you say: daily, weekly, monthly, a few times a year, or never? <ul style="list-style-type: none"> – Daily – Weekly – Monthly – A few times a year – Never – Refused – Don't Know |

| SOURCE | INDICATOR | SURVEY QUESTIONS AND DEFINITIONS |
|--------|-----------|----------------------------------|
|--------|-----------|----------------------------------|

Figure 9 (continued)

| | | |
|---|---------------------------------|--|
| National Health Interview Survey 2022 (continued) | Report symptoms of depression | How often does [your child] seem very sad or depressed? Would you say: daily, weekly, monthly, a few times a year, or never? <ul style="list-style-type: none"> – Daily – Weekly – Monthly – A few times a year – Never – Refused – Don't Know |
| National Survey of Children's Health 2022 | Clinically diagnosed anxiety | * Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition? |
| | Clinically diagnosed depression | * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? |

Figure 10

| | | |
|--|-----------------------|---|
| National Survey of Drug Use and Health 2010-2021 | Experienced MDE | Respondents were classified as having a major depressive episode (MDE) in the past 12 months if (1) they had at least one period of 2 weeks or longer in the past year when for most of the day nearly every day they felt depressed or lost interest or pleasure in daily activities; and (2) they also had problems with sleeping, eating, energy, concentration, self-worth, or having recurrent thoughts of death or recurrent suicidal ideation. The MDE questions are based on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition. |
| | Received care for MDE | Respondents responding to a series of questions were considered to have received treatment/counseling for MDE in the past year if (1) they saw or talked to a medical doctor or other professional about depressive feelings; or (2) they used prescription medication for depressive feelings. |

Figure 11

| | | |
|--|----------------------------|--|
| National Survey of Drug Use and Health 2010-2021 | Not receiving care for MDE | Respondents were classified as having a major depressive episode (MDE) in the past 12 months if (1) they had at least one period of 2 weeks or longer in the past year when for most of the day nearly every day they felt depressed or lost interest or pleasure in daily activities; and (2) they also had problems with sleeping, eating, energy, concentration, self-worth, or having recurrent thoughts of death or recurrent suicidal ideation. The MDE questions are based on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition. Respondents responding to a series of questions were considered to have received treatment/counseling for MDE in the past year if (1) they saw or talked to a medical doctor or other professional about depressive feelings; or (2) they used prescription medication for depressive feelings. |
|--|----------------------------|--|

SOURCE INDICATOR SURVEY QUESTIONS AND DEFINITIONS

Figure 11 (continued)

| | | |
|--|------|--|
| National Survey of Drug Use and Health 2010-2021 (continued) | Race | <p>Questions assess multiple options for Hispanic, Latino, or Spanish descent, along with multiple detailed showcard options for race that are recoded into a 7 level race/Hispanicity descriptor.</p> <ul style="list-style-type: none"> – Non-Hispanic White – Non-Hispanic Black / African American – Non-Hispanic Native American / Alaska Native – Non-Hispanic Native Hawaiian / Other Pacific Islander – Non-Hispanic Asian – Non-Hispanic More Than One Race – Hispanic |
|--|------|--|

Figure 13

| | | |
|---|--|--|
| National Survey of Children's Health 2022 | Experience one or more behavioral health condition | <ul style="list-style-type: none"> * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Attention Deficit Disorder or Attention-Deficit/Hyperactivity Disorder, that is, ADD or ADHD? * If yes, does this child CURRENTLY have the condition? * Has a doctor, other health care provider, or educator (examples of educators are teachers and school nurses) EVER told you that this child has Behavioral or Conduct Problems? * If yes, does this child CURRENTLY have the condition? |
| | Receive needed behavioral health care | <p>DURING THE PAST 12 MONTHS, has this child received any treatment or counseling from a mental health professional? Mental health professionals include psychiatrists, psychologists, psychiatric nurses, and clinical social workers.</p> <ul style="list-style-type: none"> – Yes – No, but this child needed to see a mental health professional – No, this child did not need to see a mental health professional |

| SOURCE | INDICATOR | SURVEY QUESTIONS AND DEFINITIONS |
|---|---|--|
| Figure 14 | | |
| National Survey of Children's Health 2022 | Behavioral health conditions used for calculations | <ul style="list-style-type: none"> * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Attention Deficit Disorder or Attention-Deficit/Hyperactivity Disorder, that is, ADD or ADHD? * If yes, does this child CURRENTLY have the condition? * Has a doctor, other health care provider, or educator (examples of educators are teachers and school nurses) EVER told you that this child has Behavioral or Conduct Problems? * If yes, does this child CURRENTLY have the condition? |
| Figure 15 | | |
| National Survey of Children's Health 2022 | Behavioral health conditions used for alcohol use disorder and tobacco use/smoking calculations | <ul style="list-style-type: none"> * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Anxiety Problems? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Attention Deficit Disorder or Attention-Deficit/Hyperactivity Disorder, that is, ADD or ADHD? * If yes, does this child CURRENTLY have the condition? * Has a doctor, other health care provider, or educator (examples of educators are teachers and school nurses) EVER told you that this child has Behavioral or Conduct Problems? * If yes, does this child CURRENTLY have the condition? |
| National Survey of Drug Use and Health 2021 | Behavioral health conditions used for obesity and high blood pressure calculations | Respondents were classified as having a major depressive episode (MDE) in the past 12 months if (1) they had at least one period of 2 weeks or longer in the past year when for most of the day nearly every day they felt depressed or lost interest or pleasure in daily activities; and (2) they also had problems with sleeping, eating, energy, concentration, self-worth, or having recurrent thoughts of death or recurrent suicidal ideation. The MDE questions are based on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition. |
| | Behavioral health conditions used for work and productivity calculations | <ul style="list-style-type: none"> * Has a doctor or other health care provider EVER told you that this child has Depression? * If yes, does this child CURRENTLY have the condition? * Has a doctor or other health care provider EVER told you that this child has Attention Deficit Disorder or Attention-Deficit/Hyperactivity Disorder, that is, ADD or ADHD? * If yes, does this child CURRENTLY have the condition? |



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