

Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health



SAMHSA
Substance Abuse and Mental Health
Services Administration

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U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Center for Behavioral Health Statistics and Quality
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Summary

This report summarizes key findings from the 2018 National Survey on Drug Use and Health (NSDUH) for national indicators of substance use and mental health among people aged 12 or older in the civilian, noninstitutionalized population of the United States. Results are provided for the overall category of people aged 12 or older and by age subgroups.

Substance Use

In 2018, an estimated 164.8 million people aged 12 or older in the United States (60.2 percent) were past month substance users (i.e., tobacco, alcohol, or illicit drugs). About 2 out of 5 people aged 12 or older (108.9 million, or 39.8 percent) did not use substances in the past month. The 164.8 million past month substance users in 2018 include 139.8 million people who drank alcohol, 58.8 million people who used a tobacco product, and 31.9 million people who used an illicit drug.

Tobacco Use

In 2018, an estimated 47.0 million people aged 12 or older were past month cigarette smokers, including 27.3 million people who were daily cigarette smokers and 10.8 million daily smokers who smoked approximately a pack or more of cigarettes per day. Fewer than 1 in 6 people aged 12 or older in 2018 were past month cigarette smokers. Cigarette use generally declined between 2002 and 2018 across all age groups. Some of this decline may reflect the use of electronic vaporizing devices (“vaping”), such as e-cigarettes, as a substitute for delivering nicotine. NSDUH does not currently ask separate questions about the vaping of nicotine.

Alcohol Use

In 2018, about 139.8 million Americans aged 12 or older were past month alcohol users, 67.1 million were binge drinkers in the past month, and 16.6 million were heavy drinkers in the past month.¹ About 2.2 million adolescents aged 12 to 17 drank alcohol in the past month, and 1.2 million of these adolescents binge drank in that period. Although the percentage of adolescents who drank alcohol decreased between 2002 and 2018, about 1 in 11 adolescents in 2018 were past month alcohol users.

¹ NSDUH collects information on past month alcohol use, binge alcohol use, and heavy alcohol use. For men, binge alcohol use is defined in NSDUH as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days. For women, binge drinking is defined as drinking four or more drinks on the same occasion on at least 1 day in the past 30 days. Heavy alcohol use is defined as binge drinking on 5 or more days in the past 30 days.

Illicit Drug Use

In 2018, nearly 1 in 5 people aged 12 or older (19.4 percent) used an illicit drug in the past year, which is a higher percentage than in 2015 and 2016. The estimate of past year illicit drug use for 2018 was driven primarily by marijuana use, with 43.5 million past year marijuana users. The percentage of people aged 12 or older in 2018 who used marijuana in the past year (15.9 percent) was higher than the percentages in 2002 to 2017. This increase in past year marijuana use for people aged 12 or older reflects increases in marijuana use among both young adults aged 18 to 25 and adults aged 26 or older. In contrast, past year marijuana use among adolescents aged 12 to 17 did not increase between 2014 and 2018.

Prescription pain reliever misuse was the second most common form of illicit drug use in the United States in 2018, with 3.6 percent of the population misusing pain relievers. For people aged 12 or older and for young adults aged 18 to 25, the percentages who misused prescription pain relievers in the past year were lower in 2018 than in 2015 to 2017. Similar decreases in pain reliever misuse were observed for adolescents aged 12 to 17 and adults aged 26 or older in 2018 compared with 2015 and 2016 but not when compared with 2017. Among people aged 12 or older in 2018 who misused pain relievers in the past year, the most common main reason for their last misuse of a pain reliever was to relieve physical pain (63.6 percent). More than half (51.3 percent) of people who misused pain relievers in the past year obtained the last pain reliever they misused from a friend or relative.

NSDUH also allows for estimation of opioid misuse, which is defined as the use of heroin or the misuse of prescription pain relievers. In 2018, an estimated 10.3 million people aged 12 or older misused opioids in the past year, including 9.9 million prescription pain reliever misusers and 808,000 heroin users. Approximately 506,000 people misused prescription pain relievers and used heroin in the past year. The percentage of people aged 12 or older in 2018 who were past year opioid misusers was lower than the percentages between 2015 and 2017, which was largely driven by declines in pain reliever misuse rather than by changes in heroin use.

Substance Use Initiation

In 2018, the substances with the largest number of recent (i.e., past year) initiates of use or misuse were alcohol (4.9 million new users), marijuana (3.1 million new users),

prescription pain relievers (1.9 million new misusers), and cigarettes (1.8 million new users). Although the number of marijuana initiates aged 12 or older in 2018 was higher than the numbers in 2002 to 2016, it was similar to that in 2017. The number of people aged 12 or older in 2018 who initiated the misuse of prescription pain relievers was similar to the numbers in 2015 to 2017. In 2018, among adolescents aged 12 to 17 and young adults aged 18 to 25, however, the numbers of new misusers of pain relievers were lower than the numbers in 2015 and 2016.

Perceived Risk from Substance Use

In 2018, more than 4 out of 5 people aged 12 or older perceived great risk of harm from weekly use of cocaine or heroin (86.5 and 94.3 percent, respectively), while less than one third of people (30.6 percent) perceived great risk of harm from weekly marijuana use. About 2 out of 3 people (68.5 percent) perceived great risk from daily binge drinking, and nearly 3 out of 4 people (71.8 percent) perceived great risk from smoking one or more packs of cigarettes per day. Perceptions of risk from this level of daily cigarette use or weekly marijuana and cocaine use among people were lower in 2018 than in 2015. However, the percentages of people in 2018 who perceived great risk from weekly heroin use or daily binge drinking were similar to the corresponding percentages in 2015 to 2017. Among adolescents aged 12 to 17 in 2018, there were declines in the percentages who perceived great risk from this level of daily cigarette use (smoking one or more packs per day) and weekly marijuana use, but the percentages who perceived great risk from daily binge drinking, weekly cocaine use, or weekly heroin use were similar to prior years.

Substance Use Disorders

In 2018, approximately 20.3 million people aged 12 or older had a substance use disorder (SUD) related to their use of alcohol or illicit drugs in the past year, including 14.8 million people who had an alcohol use disorder and 8.1 million people who had an illicit drug use disorder.² The most common illicit drug use disorder was marijuana use disorder (4.4 million people). An estimated 2.0 million people had an opioid use disorder, which includes

1.7 million people with a prescription pain reliever use disorder and 0.5 million people with a heroin use disorder. Although the percentage of people with an SUD in 2018 was similar to the percentages in 2015 to 2017, the corresponding percentages of the population with a pain reliever use disorder, opioid use disorder, or alcohol use disorder were lower than in 2015.

Major Depressive Episode

In 2018, about 1 in 7 adolescents aged 12 to 17 (14.4 percent) had a past year major depressive episode (MDE), or 3.5 million adolescents. About 1 in 10 adolescents (10.0 percent) had a past year MDE with severe impairment, or 2.4 million adolescents.³ The percentage of adolescents in 2018 who had a past year MDE was higher than the percentages in 2004 to 2017.

In 2018, approximately 13.8 percent of young adults aged 18 to 25 (4.6 million) had an MDE during the past year, and 8.9 percent (3.0 million) had a past year MDE with severe impairment. The percentage of young adults in 2018 who had a past year MDE was greater than the percentages in 2005 to 2016, but it was similar to the percentage in 2017.

Mental Illness among Adults

In 2018, an estimated 47.6 million adults aged 18 or older (19.1 percent) had any mental illness (AMI) in the past year. An estimated 11.4 million adults in the nation had serious mental illness (SMI) in the past year, corresponding to 4.6 percent of all U.S. adults.⁴ The percentages of adults aged 18 or older in 2018 with AMI or SMI were similar to the corresponding percentages in 2017, but they were higher than the percentages in most years from 2008 to 2016. Percentages of young adults aged 18 to 25 in 2018 who had AMI or SMI also were greater than the corresponding percentages in each year from 2008 to 2016, but they were similar to the percentages in 2017.

² People who met the criteria for dependence or abuse for alcohol or illicit drugs in the past 12 months based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV), were defined as having an SUD. See the following reference: American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC: Author.

³ People who met the criteria for MDE based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5), were defined as having an MDE. See the following reference: American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (DSM-5) (5th ed.). Arlington, VA: Author.

⁴ Adults with AMI were defined as having any mental, behavioral, or emotional disorder in the past year that met DSM-IV criteria (excluding developmental disorders and SUDs). Adults with AMI were defined as having SMI if they had any mental, behavioral, or emotional disorder that substantially interfered with or limited one or more major life activities. See [footnote 2](#) for the reference for the DSM-IV criteria.

Co-Occurring Mental Health Issues and Substance Use Disorders

Approximately 358,000 adolescents (1.5 percent of all adolescents) had an SUD and an MDE in the past year, including 288,000 adolescents (1.2 percent of all adolescents) who had an SUD and an MDE with severe impairment. The percentages of adolescents who had an SUD and an MDE or who had an SUD and an MDE with severe impairment remained steady from 2015 to 2018.

In 2018, an estimated 9.2 million adults aged 18 or older (3.7 percent of all adults) had both AMI and at least one SUD in the past year, and 3.2 million adults (1.3 percent of all adults) had co-occurring SMI and an SUD in the past year. The 2018 percentages of adults with both AMI and an SUD and adults with both SMI and an SUD were higher than the corresponding percentages in 2015 and 2016, but they were similar to the percentages in 2017.

Substance Use among People with Mental Health Issues

In 2018, substance use was more common among both adolescents and adults who had a mental health issue than among those who did not have a mental health issue. About 1 in 16 adolescents aged 12 to 17 in 2018 (6.1 percent) with a past year MDE smoked cigarettes in the past month compared with 2.1 percent of those without a past year MDE. In addition, adolescents with an MDE were more likely than those without an MDE to binge drink in the past month (8.5 vs. 4.1 percent) and to use an illicit drug in the past year (32.7 vs. 14.0 percent).

Among adults aged 18 or older in 2018, an estimated 28.1 percent of adults with AMI and 37.2 percent of adults with SMI were cigarette smokers in the past month compared with 16.3 percent of those without any mental illness. In addition, 31.3 percent of adults with AMI and 32.3 percent of adults with SMI were binge drinkers in the past month compared with 25.3 percent of adults with no mental illness. The percentages of adults who used illicit drugs in the past year were higher among those with SMI (49.4 percent) and adults with AMI (36.7 percent) compared with those without any mental illness (15.7 percent).

Suicidal Thoughts and Behavior among Adults

In 2018, an estimated 10.7 million adults aged 18 or older had thought seriously about trying to kill themselves (4.3 percent of adults), 3.3 million had made suicide plans

(1.3 percent), and 1.4 million made a nonfatal suicide attempt (0.6 percent). The percentage of adults aged 18 or older in 2018 who had serious thoughts of suicide was higher than the percentages in 2008 to 2014, but it was similar to the percentages in 2015 to 2017. The percentage of young adults aged 18 to 25 in 2018 with serious thoughts of suicide also was higher than in 2008 to 2016. Similarly, the percentage of adults aged 26 to 49 in 2018 who had serious thoughts of suicide was higher than the percentages in most years between 2008 and 2015. In contrast, the percentage of adults aged 50 or older in 2018 with serious thoughts of suicide was similar to the percentages in most years from 2008 to 2017.

Substance Use Treatment

In 2018, an estimated 21.2 million people aged 12 or older needed substance use treatment.⁵ This number translates to about 1 in 13 people who needed treatment (7.8 percent). About 1 in 26 adolescents aged 12 to 17 (3.8 percent), about 1 in 7 young adults aged 18 to 25 (15.3 percent), and 1 in 14 adults aged 26 or older (7.0 percent) needed treatment. The 2018 percentage of adolescents aged 12 to 17 who needed treatment was lower than in 2015 and 2016, but it was similar to the percentage in 2017. In contrast, percentages of adults in 2018 who needed substance use treatment were similar to the percentages in 2015 to 2017 for young adults aged 18 to 25 and adults aged 26 or older.

In 2018, approximately 1.4 percent of people aged 12 or older (3.7 million people) received any substance use treatment in the past year, and 0.9 percent (2.4 million) received substance use treatment at a specialty facility. The percentages of people aged 12 or older in 2018 who received any substance use treatment and who received substance use treatment at a specialty facility were similar to the percentages in 2015 to 2017. An estimated 11.1 percent of people aged 12 or older who needed substance use treatment received treatment at a specialty facility in the past year. The percentage of people aged 12 or older in 2018 who needed substance use treatment and received treatment at a specialty facility also was similar to the percentages in 2015 and 2017.

⁵ For NSDUH, people are defined as needing substance use treatment if they had an SUD in the past year or they received substance use treatment at a specialty facility in the past year. Substance use treatment at a specialty facility refers to treatment at a hospital (only as an inpatient), a drug or alcohol rehabilitation facility (as an inpatient or outpatient), or a mental health center.

In 2018, among the estimated 18.9 million people aged 12 or older who needed substance use treatment but did not receive specialty treatment in the past year, about 964,000 perceived a need for substance use treatment. About 2 in 5 people who needed and perceived a need for treatment but did not receive treatment at a specialty facility were not ready to stop using, and about 1 in 3 had no health care coverage and were not able to afford the cost.

Treatment for Depression

Among the 3.5 million adolescents aged 12 to 17 and the 4.6 million young adults aged 18 to 25 in 2018 who had a past year MDE, 1.4 million adolescents (41.4 percent) and 2.3 million young adults (49.6 percent) received treatment for depression. The percentages of adolescents and young adults in 2018 with a past year MDE who received treatment for their depression were similar to the percentages in most prior years.

Mental Health Service Use among Adults

In 2018, an estimated 37.1 million adults aged 18 or older (15.0 percent of adults) received mental health care during the past 12 months. Among the 47.6 million adults with AMI, 20.6 million (43.3 percent) received mental health services in the past year. The percentage of adults in 2018 with AMI who received mental health care was higher than the percentages in most years from 2008 to 2012, but it was similar to the percentages in 2013 to 2017. About 7.3 million of the 11.4 million adults with past year SMI (64.1 percent) received mental health services in the past year. The percentage of adults in 2018 with SMI who received mental health care was similar to the percentages in 2008 to 2012 and 2015 to 2017, but it was lower than the percentages in 2013 and 2014. However, about one third of adults with SMI in any given year did *not* receive mental health services.

In 2018, an estimated 11.2 million adults aged 18 or older with past year AMI and 5.1 million adults with past year SMI had a perceived unmet need for mental health care at

any time in the past year. The percentage of adults in 2018 with AMI who perceived an unmet need for mental health care in the past year was higher than the percentages in most years from 2008 to 2017. The percentage of adults in 2018 with SMI who perceived an unmet need for mental health care in the past year was higher than the percentages in 2015 and 2016, but it was similar to the percentages in 2017 and in most years from 2008 to 2014. In 2018, about 2 out of 5 adults with AMI (45.2 percent) and slightly more than half of those with SMI (54.7 percent) who perceived an unmet need for mental health services did not receive services because they could not afford the cost of care.

Receipt of Services among People with Co-Occurring Mental Illness and Substance Use Disorder

In 2018, among adolescents aged 12 to 17 who had a co-occurring MDE and an SUD in the past year, 65.7 percent received either substance use treatment at a specialty facility or mental health services in the past year. An estimated 5.4 percent of adolescents with a co-occurring MDE and an SUD received both mental health care and specialty substance use treatment, 59.5 percent received only mental health care, and 0.8 percent received only specialty substance use treatment.

In 2018, about half of the adults aged 18 or older with co-occurring AMI and an SUD in the past year (51.4 percent) received either mental health care or specialty substance use treatment, and 48.6 percent received neither type of care. An estimated 69.5 percent of adults with co-occurring SMI and an SUD received either type of care, and about 1 in 3 (30.5 percent) received neither type of care. The percentage of adults in 2018 with co-occurring AMI and an SUD who received mental health care or specialty substance use treatment was similar to the percentages in all years from 2015 to 2017. For adults with SMI and an SUD, the percentage of those who received either type of care was higher than the percentage in 2015, but it was similar to the percentages in 2016 and 2017.

Introduction

Substance use and mental health issues affect millions of adolescents and adults in the United States and contribute heavily to the burden of disease in the nation.^{1,2,3,4} The National Survey on Drug Use and Health (NSDUH) is the primary source for statistical information on illicit drug use, alcohol use, substance use disorders (SUDs), and mental health issues for the civilian, noninstitutionalized population of the United States. Information on mental health and substance use allows the Substance Abuse and Mental Health Services Administration (SAMHSA) and other policymakers to gauge progress toward improving the health of the nation.

This report summarizes findings for key substance use and mental health indicators from the 2018 National Survey on Drug Use and Health (NSDUH).

This report contains findings from the 2018 NSDUH for key substance use and mental health indicators in the United States. Comprehensive 2018 NSDUH detailed tables showing additional substance use and mental health-related outcomes, including data for various subpopulations covered in NSDUH, are available separately at <https://www.samhsa.gov/data/>.⁵

Survey Background

NSDUH is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 or older.⁶ The survey is sponsored by SAMHSA within the U.S. Department of Health and Human Services (HHS). The survey covers residents of households and individuals in noninstitutional group quarters (e.g., shelters, boarding houses, college dormitories, migratory workers' camps, halfway houses). The survey excludes people with no fixed address (e.g., people who are homeless and not in shelters), military personnel on active duty, and residents of institutional group quarters, such as jails, nursing homes, mental institutions, and long-term care hospitals.

NSDUH employs a stratified multistage area probability sample designed to be representative of both the nation as a whole and for each of the 50 states and the District of Columbia. The 2018 NSDUH annual target sample size of 67,500 interviews was distributed across three age groups, with 25 percent allocated to adolescents aged 12 to 17, 25 percent allocated to young adults aged 18 to 25, and 50 percent allocated to adults aged 26 or older.⁷

NSDUH is a face-to-face household interview survey conducted in two phases: the screening phase and the interview phase. The interviewer conducts a screening of the sampled household with an adult resident (aged 18 or older) in order to determine whether zero, one, or two residents aged 12 or older should be selected for the interview. NSDUH collects data using audio computer-assisted self-interviewing (ACASI) in which respondents read or listen to the questions on headphones, then enter their answers directly into a NSDUH laptop computer. ACASI is designed for accurate reporting of information by providing respondents with a highly private and confidential mode for responding to questions about illicit drug use, mental health, and other sensitive behaviors. NSDUH also uses computer-assisted personal interviewing (CAPI) in which interviewers read less sensitive questions to respondents and enter the respondents' answers into a NSDUH laptop computer.

This report is based on data from 67,791 completed interviews from 2018 NSDUH respondents aged 12 or older.

In 2018, screening was completed at 141,879 addresses, and 67,791 completed interviews were obtained, including 16,852 interviews from adolescents aged 12 to 17 and 50,939 interviews from adults aged 18 or older. Weighted response rates for household screening and for interviewing were 73.3 and 66.6 percent, respectively, for an overall response rate of 48.8 percent for people aged 12 or older. The weighted interview response rates were 73.9 percent for adolescents and 65.8 percent for adults.⁸ Further details about the 2018 NSDUH design and methods can be found on the web at <https://www.samhsa.gov/data/>.²

Data Presentation and Interpretation

This report focuses on substance use and mental health in the United States based on NSDUH data from 2018 and earlier years.¹⁰ Estimates of substance use and substance use treatment are presented for people aged 12 or older, adolescents, and adults.¹¹ However, estimates of mental health issues and mental health service use are not presented jointly for people aged 12 or older. Rather, these estimates are presented separately for adolescents aged 12 to 17 and adults aged 18 or older because adolescents and adults completed different sets of questions regarding mental health and mental health service utilization. All estimates

(e.g., percentages and numbers) presented in the report are derived from survey data that are subject to sampling errors. The estimates have met the criteria for statistical precision. Estimates not meeting these criteria have been suppressed and are not shown.¹²

One of NSDUH's strengths is the stability in the sample and survey design. This stability allows for the examination of trends across time. However, the benefit of using NSDUH data to assess trends has to be balanced with the periodic need to revise or add content to address changes in society and emerging issues.¹³ Consequently, the number of years for which comparisons can be made varies across measures depending on when content was revised or added for NSDUH. For example, the perceived recovery items were added in 2018; as a result, these items will establish a baseline that starts in 2018 (Table A.4 in Appendix A). The prescription drug misuse items revised in 2015 have 4 years of trend data for 2015 to 2018 (Table A.1B), and the marijuana use items have 17 years of trend data for 2002 to 2018 (Table A.1B). All trends in the report present 2018 estimates and comparable estimates from 3 or more prior years.

Most trend analyses are presented for percentages because the percentages take into account any change in the size of the total population and facilitate the comparison of estimates across years.¹⁴ However, trend analyses for the initiation of substance use present the *number* of people who initiated substance use in the past year rather than percentages. Therefore, care should be taken in interpreting increases over time in the estimated number of past year initiates because some of these increases could reflect growth in the size of the population. Percentages of the population who initiated substance use in the past year are available in the 2018 NSDUH detailed tables, such as Detailed Table (DT) 4.4 at <https://www.samhsa.gov/data/>.

Analyses of trends in this report focus on long-term trends in substance use and mental health issues. Trends for 2015 to 2018 also are presented for selected measures.

Statistical tests have been conducted for comparisons appearing in the text of the report. Statistically significant differences are described using terms such as “higher,” “lower,” “increased,” or “decreased.” Statements use terms such as “similar,” “remained steady,” or “stable” when a difference is not statistically significant. Analyses of long-term trends in this report involving more than 4 years of data summarize

whether the 2018 estimates differ from or are similar to estimates in most or all previous years,¹⁵ while minimizing discussion of anomalous differences between any 2 years that can occur due to these estimates being based on samples.¹⁶

Substance Use in the Past Month

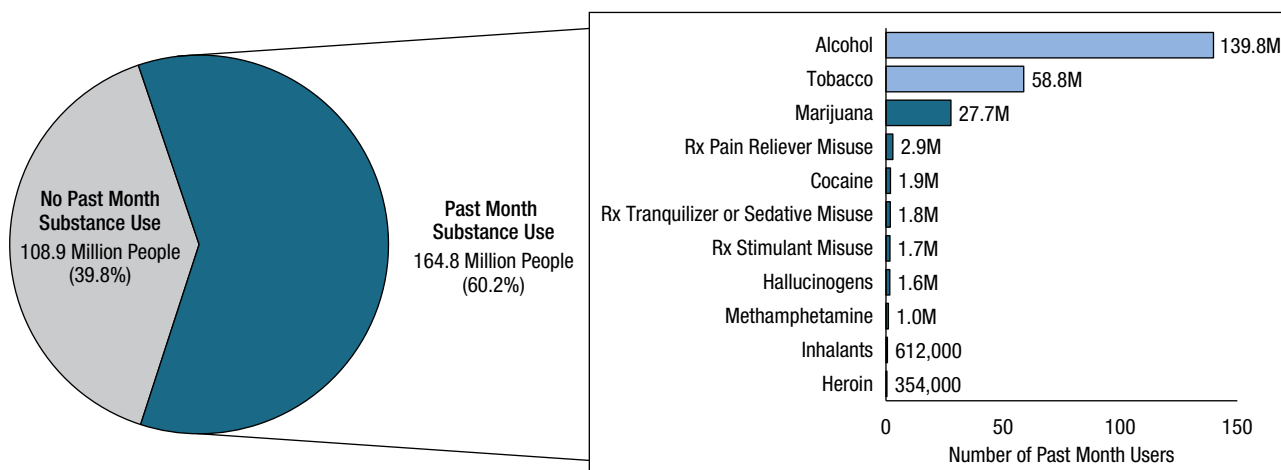
Tobacco products, alcohol, and illicit drugs are the three categories of substances measured in NSDUH. This section provides an overview of whether respondents aged 12 or older have used any of these substances in the 30 days before the interview (i.e., in the past month, also referred to as “current use”). Additional details on the use of tobacco products, alcohol, and illicit drugs are provided in other sections of this report.

Past month tobacco use includes any use of the four tobacco products in NSDUH: cigarettes, smokeless tobacco (such as snuff, dip, chewing tobacco, or snus), cigars, and pipe tobacco.¹⁷ Alcohol use in the past month refers to having more than a sip or two from any type of alcoholic drink (e.g., can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it). In NSDUH, illicit drug use in the past month includes any use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine, as well as misuse of prescription stimulants, tranquilizers or sedatives (including benzodiazepines), or pain relievers. (See the section on the [Misuse of Psychotherapeutic Drugs](#) for the definition of “misuse.”)

In 2018, an estimated 164.8 million people aged 12 or older used a substance (i.e., tobacco, alcohol, or an illicit drug) in the past month (Figure 1). This number of current substance users corresponds to 60.2 percent of the population. About 2 out of 5 people aged 12 or older (108.9 million, or 39.8 percent) did not use substances in the past month. The 164.8 million current substance users in 2018 include 139.8 million people who drank alcohol, 58.8 million people who used a tobacco product, and 31.9 million people who used an illicit drug (2018 DT 7.3). These numbers are not mutually exclusive because respondents could have used more than one type of substance (e.g., tobacco products and alcohol) in the past month.

Although about half of the people aged 12 or older (51.1 percent) drank alcohol in the past month and 1 in 5 (21.5 percent) used a tobacco product, use of illicit drugs was less common (Table A.1B). About 1 in 9 people aged 12 or older (11.7 percent) used an illicit drug in the

Figure 1. Past Month Substance Use among People Aged 12 or Older: 2018



Rx = prescription.

Note: The estimated numbers of current users of different substances are not mutually exclusive because people could have used more than one type of substance in the past month.

past month. Given that illicit drug use was less prevalent than the use of either tobacco or alcohol, the remainder of this report presents past year estimates of illicit drug use to allow presentation of estimates for low prevalence drugs, such as heroin. In contrast, the higher prevalence of tobacco and alcohol use makes it possible to present estimates not only for any past month use of these substances, but also for the intensity of their use in the past month (e.g., daily cigarette use, binge alcohol use).

Tobacco Use in the Past Month

NSDUH data can be used to estimate the percentage of people who currently use tobacco products and to monitor changes in tobacco use over time. As noted in the section on [Substance Use in the Past Month](#), NSDUH asks respondents aged 12 or older about their tobacco use in the 30 days before the interview. Tobacco products include cigarettes, smokeless tobacco (such as snuff, dip, chewing tobacco, or snus), cigars, and pipe tobacco.¹⁷ Cigarette use is defined as smoking “part or all of a cigarette.” A discussion of the estimates for daily cigarette smoking follows a presentation of the estimates for any cigarette smoking in the past month.

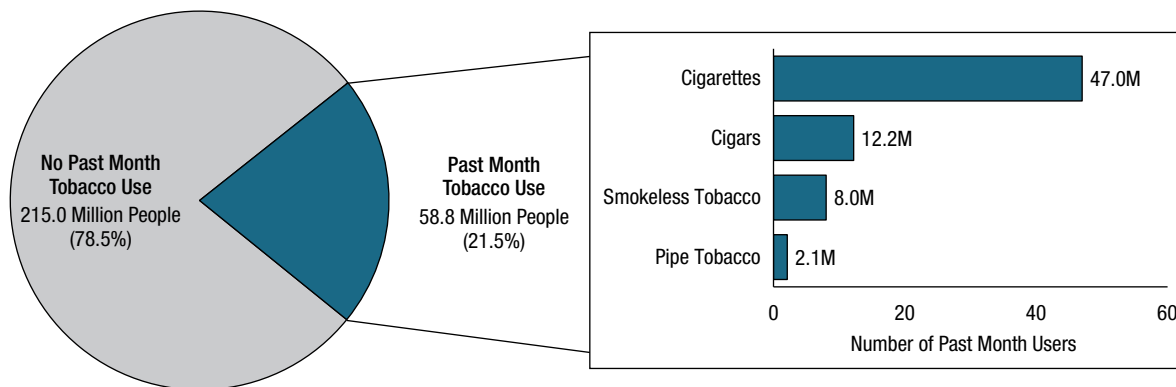
The majority of the 58.8 million current (i.e., past month) tobacco users in 2018 were current cigarette smokers ([Figure 2](#)), as has been the case historically.¹⁸ Specifically, 47.0 million people aged 12 or older in 2018 were current cigarette smokers, 12.2 million people were current cigar smokers, 8.0 million people were current users of smokeless tobacco, and 2.1 million people currently smoked pipe tobacco.

Among current users of any tobacco product who were aged 12 or older, 65.5 percent smoked cigarettes but did not use other tobacco products, 14.4 percent smoked cigarettes and used some other type of tobacco product, and 20.1 percent used other tobacco products but not cigarettes ([Table A.2B](#)). This same pattern was observed in 2018 among young adults aged 18 to 25 and adults aged 26 or older, with most current tobacco users smoking only cigarettes. Specifically, more than half of young adults (50.3 percent) and more than two thirds of adults aged 26 or older (68.9 percent) who were current tobacco users smoked only cigarettes in the past month.

Among adults who were current users of tobacco products, 25.9 percent of those aged 18 to 25 and 18.7 percent of those aged 26 or older did not smoke cigarettes. In contrast, among adolescents who were current tobacco users, 36.1 percent used tobacco products other than cigarettes but did not smoke cigarettes. In addition, 26.5 percent of adolescents and 23.8 percent of young adults aged 18 to 25 who were current tobacco users smoked cigarettes and used other tobacco products. Among adults aged 26 or older who were current tobacco users, about 1 in 8 (12.4 percent) were current cigarette smokers and current users of other tobacco products.

The remainder of this section on tobacco use focuses on cigarette smoking because most current tobacco users were cigarette smokers. More information on the use of cigars, pipe tobacco, and smokeless tobacco in the past month by people aged 12 or older can be found in [Table A.1B](#) and in the 2018 detailed tables by age groups (i.e., DT 7.6, DT 7.12, and DT 7.15, respectively).

Figure 2. Past Month Tobacco Use among People Aged 12 or Older: 2018



Note: The estimated numbers of current users of different tobacco products are not mutually exclusive because people could have used more than one type of tobacco product in the past month.

Cigarette Use

As noted previously, an estimated 47.0 million people aged 12 or older in 2018 were current cigarette smokers (Figure 2). This number of current cigarette smokers correspond to 17.2 percent of the population (Figure 3). The percentage of the population who smoked cigarettes in the past month was lower in 2018 than in 2002 to 2017. Stated another way, fewer than 1 in 6 people aged 12 or older in 2018 were current cigarette smokers. In comparison, about 1 in 4 people were current cigarette smokers in 2002 to 2008 (ranging from 24.0 to 26.0 percent).

Although cigarette smoking declined, some of this decline may reflect a rise in the use of electronic vaporizing devices (“vaping”), such as e-cigarettes, as a substitute for delivering nicotine. NSDUH does not currently ask separate questions about the vaping of nicotine. The measurement of both cigarette use and the vaping of nicotine may be needed to understand tobacco use trends.¹⁹

Aged 12 to 17

In 2018, an estimated 672,000 adolescents aged 12 to 17 smoked cigarettes in the past month. This number of adolescents who were current cigarette smokers corresponds to 2.7 percent of adolescents (Figure 3). The percentage of adolescents who were past month cigarette smokers declined from 13.0 percent in 2002 (or about 1 in 8 adolescents) to 2.7 percent in 2018 (or about 1 in 37). The percentage of adolescents who were current cigarette smokers in 2018 was lower than the percentages in each year from 2002 to 2017.

Aged 18 to 25

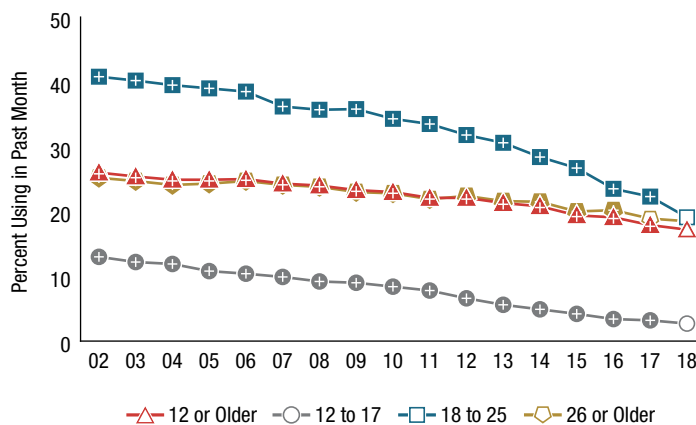
In 2018, an estimated 6.5 million young adults aged 18 to 25 smoked cigarettes in the past month. This number of young

adults who were current cigarette smokers corresponds to about one fifth of young adults (19.1 percent) (Figure 3). The percentage of young adults who were current cigarette smokers in 2018 was lower than the percentages in 2002 to 2017.

Aged 26 or Older

In 2018, an estimated 39.8 million adults aged 26 or older smoked cigarettes in the past month. Stated another way, about 1 in 5 adults aged 26 or older (18.5 percent) were

Figure 3. Past Month Cigarette Use among People Aged 12 or Older: 2002-2018



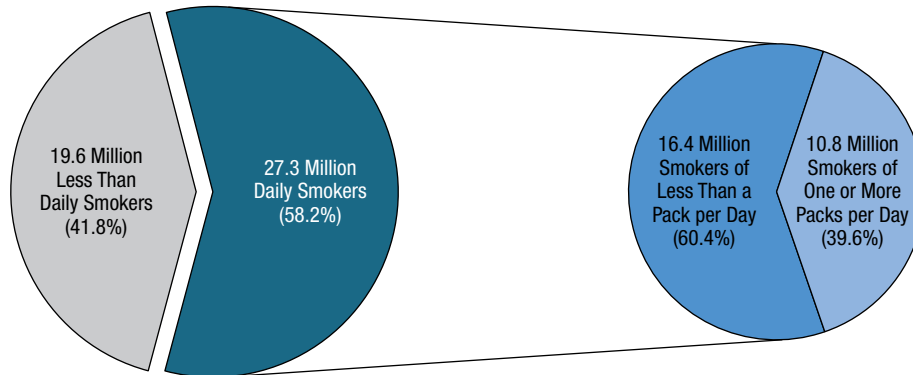
* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 3 Table. Past Month Cigarette Use among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	26.0*	25.4*	24.9*	24.9*	25.0*	24.3*	24.0*	23.3*	23.0*	22.1*	22.1*	21.3*	20.8*	19.4*	19.1*	17.9*	17.2
12-17	13.0*	12.2*	11.9*	10.8*	10.4*	9.9*	9.2*	9.0*	8.4*	7.8*	6.6*	5.6*	4.9*	4.2*	3.4*	3.2*	2.7
18-25	40.8*	40.2*	39.5*	39.0*	38.5*	36.2*	35.7*	35.8*	34.3*	33.5*	31.8*	30.6*	28.4*	26.7*	23.5*	22.3*	19.1
≥26	25.2*	24.7*	24.1*	24.3*	24.7*	24.1*	23.8*	23.0*	22.8*	21.9*	22.4*	21.6*	21.5*	20.0*	20.2*	18.9	18.5

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 4. Daily Cigarette Use among Past Month Cigarette Smokers Aged 12 or Older and Smoking of One or More Packs of Cigarettes per Day among Current Daily Smokers: 2018



Note: Current daily smokers with unknown data about the number of cigarettes smoked per day were excluded from the pie graph on the right.

current cigarette smokers in 2018 (Figure 3). The 2018 estimate for current cigarette smoking among adults aged 26 or older was lower than the estimates from 2002 to 2016, but it was similar to the 2017 estimate.

Daily Cigarette Use

Among the 47.0 million current cigarette smokers aged 12 or older in 2018, 27.3 million were daily cigarette smokers. The 27.3 million daily smokers correspond to 58.2 percent of current cigarette smokers (Figure 4). Thus, nearly three fifths of current cigarette smokers in 2018 smoked cigarettes daily. The percentage of current smokers in 2018 who smoked cigarettes daily was lower than the percentages in most years from 2002 to 2012, but it was similar to the percentages in 2013 to 2017 (2018 DT 7.26).

Among the 27.3 million daily smokers aged 12 or older in 2018, 10.8 million smoked 16 or more cigarettes per day (i.e., approximately one pack or more per day). Stated another way, about 2 out of 5 daily smokers (39.6 percent) smoked a pack or more of cigarettes per day (Figures 4 and 5). The percentage of daily smokers who smoked one or more packs of cigarettes per day was lower in 2018 than in 2002 to 2011, but it was similar to the percentages in 2012 to 2017.

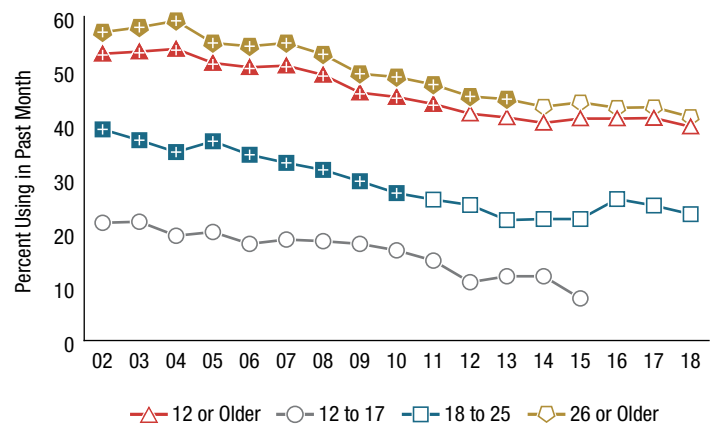
Aged 12 to 17

In 2018, about 99,000 adolescents aged 12 to 17 smoked cigarettes every day in the past month. This number corresponds to about 1 in 7 adolescent current smokers (14.7 percent) (2018 DT 7.27). The 2018 percentage was lower than the percentages in most years from 2002 to 2014, but it was similar to the percentages in 2015 to 2017. The percentage of adolescent daily smokers who smoked one or more packs of cigarettes per day was not reported for 2018 due to low precision.¹²

Aged 18 to 25

About 2.4 million young adults aged 18 to 25 in 2018 were daily cigarette smokers in the past month, or 37.4 percent of young adults who were current cigarette smokers (2018 DT 7.29). Thus, nearly 2 in 5 young adults in 2018 who were current cigarette users smoked cigarettes daily. The percentage of young adult current smokers in 2018 who smoked

Figure 5. Smokers of One or More Packs of Cigarettes per Day among Past Month Daily Cigarette Smokers Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 5 Table. Smokers of One or More Packs of Cigarettes per Day among Past Month Daily Cigarette Smokers Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	53.1*	53.5*	54.0*	51.4*	50.6*	50.9*	49.2*	45.9*	45.1*	43.8*	42.0	41.3	40.3	41.1	41.1	41.2	39.6
12-17	21.8	22.0	19.4	20.1	17.9	18.7	18.4	17.9	16.7	14.8	10.8	11.9	11.9	7.8	*	*	*
18-25	39.1*	37.1*	34.9*	36.9*	34.4*	32.9*	31.6*	29.5*	27.3*	26.1	25.1	22.3	22.5	22.5	26.2	25.0	23.4
≥26	57.1*	58.0*	59.2*	55.1*	54.5*	55.1*	53.0*	49.4*	48.8*	47.4*	45.2*	44.7*	43.3	44.1	43.1	43.2	41.4

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

* Low precision; no estimate reported.

cigarettes daily was lower than the percentages in 2002 to 2015, but it was similar to the percentages in 2016 and 2017. The percentage of young adult daily smokers in 2018 who smoked one or more packs of cigarettes per day (23.4 percent) was lower than the percentages in 2002 to 2010, but it was similar to the percentages in 2011 to 2017 (Figure 5).

Aged 26 or Older

In 2018, about 24.8 million adults aged 26 or older smoked cigarettes every day in the past month, which corresponds to 62.3 percent of the current smokers in this age group (2018 DT 7.30). The percentage of current smokers in this age group in 2018 who smoked cigarettes every day was lower than the percentages in 2002 to 2013, but it was similar to the percentages in 2014 to 2017. Despite the decline since 2002, when nearly 70 percent of current smokers aged 26 or older were daily smokers, about three fifths of current smokers in this age group in 2018 were daily smokers. Among daily smokers aged 26 or older, the percentage in 2018 who smoked one or more packs of cigarettes per day (41.4 percent) was lower than in 2002 to 2013. However, the percentage was stable from 2014 to 2018 (Figure 5).

Alcohol Use in the Past Month

As noted in the section on [Substance Use in the Past Month](#), NSDUH asks respondents aged 12 or older about their alcohol use in the 30 days before the interview. Current alcohol use is defined as any use of alcohol in the past 30 days. In addition to asking about any alcohol use, NSDUH collects information on binge alcohol use and heavy alcohol use. Binge drinking for males is defined as drinking five or more drinks²⁰ on the same occasion on at least 1 day in the past 30 days, which is unchanged from the threshold prior to 2015. Since 2015, binge alcohol use for females has been defined as drinking four or more drinks on the same occasion on at least 1 day in the past 30 days.²¹ This definition of binge alcohol use is consistent with federal definitions.²² Heavy alcohol use is defined as binge drinking on 5 or more days in the past 30 days based on the thresholds described previously for males and females. Any alcohol use, binge drinking, and heavy drinking are not mutually exclusive categories of use; heavy use is included in estimates of binge and current use, and binge use is included in estimates of current use (Figure 6).

In 2018, an estimated 139.8 million Americans aged 12 or older were current alcohol users, 67.1 million were binge drinkers in the past month, and 16.6 million were heavy drinkers in

the past month (Figure 6). Thus, nearly half of current alcohol users were binge drinkers (48.0 percent), and 1 in 8 current alcohol users were heavy drinkers (11.8 percent). Among binge drinkers, about 1 in 4 (24.7 percent) were heavy drinkers.²³

Any Alcohol Use

The estimate of 139.8 million current alcohol users aged 12 or older in 2018 (Figure 6) corresponds to past month use by slightly more than half of the people in the population (51.1 percent) (Figure 7). The 2018 estimate of past month alcohol use was similar to the estimates in most years from 2002 to 2017.

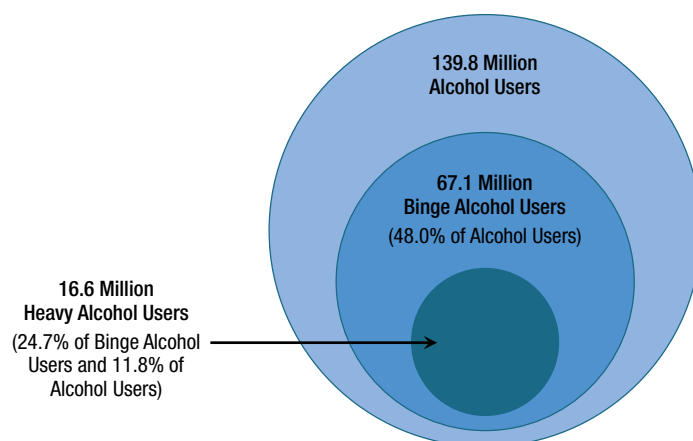
Aged 12 to 17

An estimated 9.0 percent of adolescents aged 12 to 17 in 2018 were current alcohol users (Figure 7), which corresponds to 2.2 million adolescents who drank alcohol in the past month. The percentage of adolescents who were current alcohol users in 2018 was lower than the percentages in most years from 2002 through 2017. Although the estimate of current alcohol use among adolescents decreased between 2002 and 2018, about 1 in 11 adolescents were current alcohol users in 2018.

Aged 18 to 25

In 2018, an estimated 55.1 percent of young adults aged 18 to 25 were current alcohol users (Figure 7), which corresponds to about 18.8 million young adults. The percentage of young adults in 2018 who drank alcohol in the past month was lower than the percentages in 2002 through 2016, but it was similar to the percentage in 2017. In addition, more than half of young adults were current alcohol users in each year from 2002 to 2018 (ranging from 55.1 to 62.0 percent).

Figure 6. Current, Binge, and Heavy Alcohol Use among People Aged 12 or Older: 2018



Aged 26 or Older

More than half of adults aged 26 or older in 2018 (55.3 percent) were current alcohol users (Figure 7). This percentage corresponds to about 118.8 million adults in this age group who drank alcohol in the past month. In each year between 2002 and 2018, slightly more than half of adults aged 26 or older were current alcohol users (ranging from 52.5 to 56.5 percent).

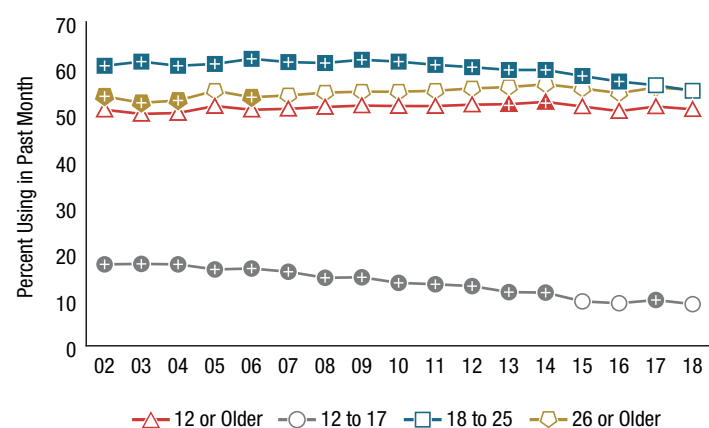
Binge Alcohol Use

In 2018, about 1 in 4 people aged 12 or older (24.5 percent) were current binge alcohol users (Figure 8). This percentage corresponds to about 67.1 million binge drinkers who were aged 12 or older (Figure 6). The percentage of the population who were past month binge alcohol users was stable from 2015 to 2018 (ranging from 24.2 to 24.9 percent).

Aged 12 to 17

About 1.2 million adolescents aged 12 to 17 in 2018 were past month binge drinkers, which corresponds to 4.7 percent of adolescents (Figure 8). Thus, about 1 in 21 adolescents were current binge drinkers. The percentage of adolescents who were current binge drinkers in 2018 was similar to the percentages in 2016 and 2017, but it was lower than the percentage in 2015 (5.8 percent).

Figure 7. Past Month Alcohol Use among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 7 Table. Past Month Alcohol Use among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	51.0	50.1	50.3	51.8	51.0	51.2	51.6	51.9	51.8	51.8	52.1	52.2*	52.7*	51.7	50.7	51.7	51.1
12-17	17.6*	17.7*	17.6*	16.5*	16.7*	16.0*	14.7*	14.8*	13.6*	13.3*	12.9*	11.6*	11.5*	9.6	9.2	9.9*	9.0
18-25	60.5*	61.4*	60.5*	60.9*	62.0*	61.3*	61.1*	61.8*	61.4*	60.7*	60.2*	59.6*	59.6*	58.3*	57.1*	56.3	55.1
≥26	53.9*	52.5*	53.0*	55.1	53.7*	54.1	54.7	54.9	54.9	55.1	55.6	55.9	56.5	55.6	54.6	55.8	55.3

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 18 to 25

An estimated 34.9 percent of young adults aged 18 to 25 in 2018 were binge drinkers in the past month (Figure 8), which corresponds to about 11.9 million young adults. Stated another way, more than a third of young adults in 2018 were current binge drinkers. Nevertheless, the percentage of young adults who were current binge drinkers in 2018 was lower than the percentages in 2015 to 2017 (ranging from 39.0 percent in 2015 to 36.9 percent in 2017).

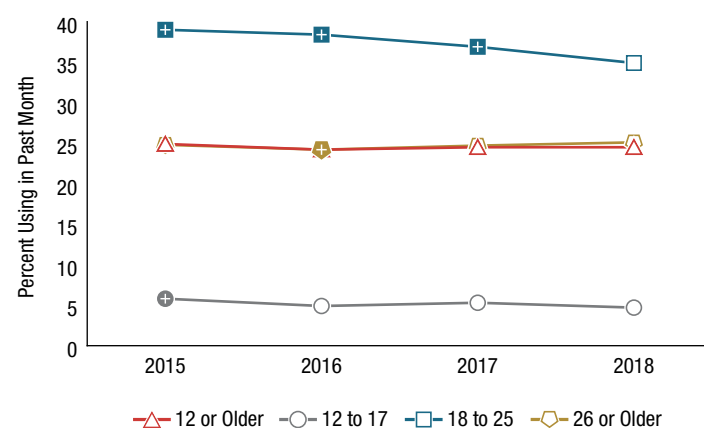
Aged 26 or Older

In 2018, about a quarter (25.1 percent) of adults aged 26 or older were current binge drinkers (Figure 8). This percentage corresponds to about 54.0 million adults in this age group who were binge drinkers. The percentage of adults aged 26 or older who were current binge drinkers in 2018 was higher than the percentage in 2016, but it was similar to the percentages in 2015 and 2017.

Heavy Alcohol Use

The estimate of 16.6 million people aged 12 or older in 2018 who were heavy alcohol users in the past month (Figure 6) corresponds to 6.1 percent of the population (Figure 9). The percentage of people who were current heavy alcohol users in

Figure 8. Past Month Binge Alcohol Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 8 Table. Past Month Binge Alcohol Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	24.9	24.2	24.5	24.5
12 to 17	5.8*	4.9	5.3	4.7
18 to 25	39.0*	38.4*	36.9*	34.9
26 or Older	24.8	24.2*	24.7	25.1

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

2018 was similar to the percentages in 2016 and 2017, but it was lower than the percentage in 2015 (6.5 percent).

Aged 12 to 17

In 2018, an estimated 131,000 adolescents aged 12 to 17 were current heavy drinkers. Stated another way, about 1 out of 200 adolescents (0.5 percent) engaged in binge drinking on 5 or more days in the past 30 days (Figure 9). The percentage of adolescents who were current heavy drinkers in 2018 was lower than the percentages in 2015 and 2016 but was similar to the percentage in 2017 (0.7 percent).

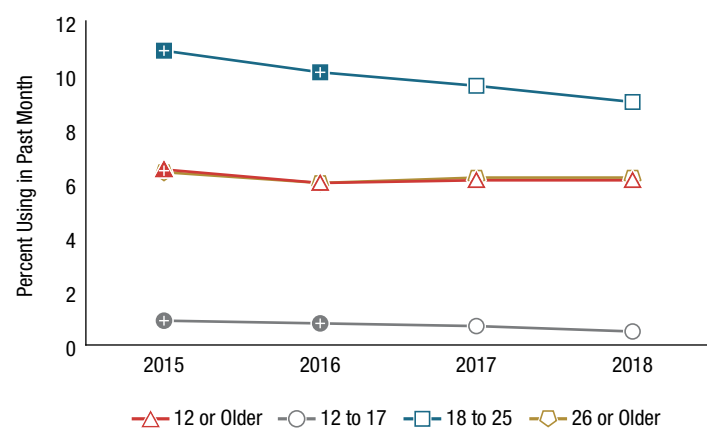
Aged 18 to 25

About 1 out of every 11 young adults aged 18 to 25 (9.0 percent) in 2018 was a current heavy alcohol drinker (Figure 9). This percentage corresponds to 3.1 million young adults who engaged in heavy drinking in the past month. The percentage of young adults who were current heavy drinkers in 2018 was lower than the percentages in 2015 and 2016 but was similar to the percentage in 2017 (9.6 percent).

Aged 26 or Older

An estimated 6.2 percent of adults aged 26 or older in 2018 were current heavy drinkers (Figure 9). This percentage

Figure 9. Past Month Heavy Alcohol Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 9 Table. Past Month Heavy Alcohol Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	6.5*	6.0	6.1	6.1
12 to 17	0.9*	0.8*	0.7	0.5
18 to 25	10.9*	10.1*	9.6	9.0
26 or Older	6.4	6.0	6.2	6.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

corresponds to about 13.4 million adults in this age group who engaged in heavy drinking in the past month. The percentage of adults aged 26 or older who were current heavy alcohol users in 2018 was similar to the percentages in 2015 to 2017.

Illicit Drug Use in the Past Year

As noted previously, NSDUH obtains illicit drug use information for the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, and methamphetamine, as well as for the misuse of prescription stimulants, the misuse of tranquilizers or sedatives,²⁴ and the misuse of pain relievers (see the section on the [Misuse of Psychotherapeutic Drugs](#) for the definition of “misuse”). Estimates of “illicit drug use” reported from NSDUH reflect the data from these drug categories. This report also describes in later sections the misuse of benzodiazepines and opioids in the past year (e.g., the misuse of prescription pain relievers or the use of heroin).²⁵

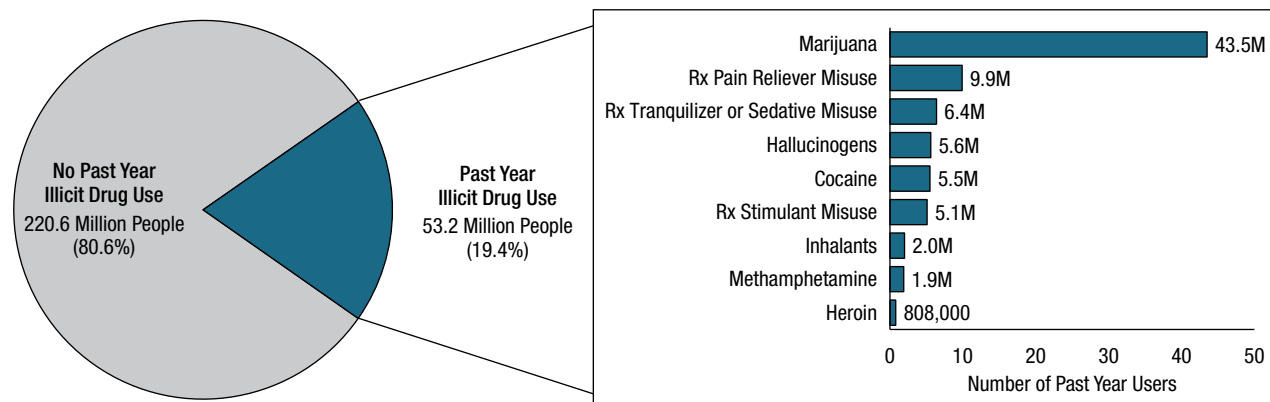
Unlike estimates of tobacco and alcohol use, estimates of illicit drug use are presented for use in the past year rather than the past month. The presentation of past year estimates improves the precision of estimates for detecting changes over time in substances with a low prevalence, such as heroin. In addition, details on the misuse of benzodiazepines and specific subtypes of prescription pain relievers (e.g., fentanyl products) were collected only for the past year.

Among people aged 12 or older in 2018, an estimated 53.2 million people used illicit drugs in the past year (Figure 10). The most commonly used illicit drug in the past year was marijuana, which was used by 43.5 million people. The second most common type of illicit drug use in the United States was the misuse of prescription pain relievers by an estimated 9.9 million people in the past year. Smaller numbers of people were past year users of the other illicit drugs, as shown in Figure 10.²⁶

Any Illicit Drug Use

The estimated 53.2 million people aged 12 or older in 2018 who were past year illicit drug users correspond to 19.4 percent of the population (Figures 10 and 11). Stated another way, nearly 1 in 5 people aged 12 or older in the United States used illicit drugs in the past year. The percentage of the population in 2018 who used illicit drugs in the past year was higher than the percentages in 2015 and 2016 but was similar to the percentage in 2017 (19.0 percent).

Figure 10. Past Year Illicit Drug Use among People Aged 12 or Older: 2018



Rx = prescription.

Note: The estimated numbers of past year users of different illicit drugs are not mutually exclusive because people could have used more than one type of illicit drug in the past year.

Aged 12 to 17

Approximately 4.2 million adolescents aged 12 to 17 in 2018 were past year illicit drug users, which corresponds to about 1 in 6 adolescents (16.7 percent) (Figure 11). The percentage of adolescents in 2015 to 2018 who used illicit drugs in the past year ranged from 15.8 to 17.5 percent.

Aged 18 to 25

Approximately 2 in 5 young adults aged 18 to 25 in 2018 (38.7 percent) were past year users of illicit drugs (Figure 11). This percentage corresponds to about 13.2 million young adults who used illicit drugs in the past year. The percentage of young adults in 2018 who used illicit drugs in the past year was similar to the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, about 1 in 6 adults aged 26 or older (16.7 percent) were past year users of illicit drugs (Figure 11), or about 35.9 million adults in this age group. The percentage of adults aged 26 or older in 2018 who were past year illicit drug users was higher than the percentages in 2015 and 2016 but was similar to the percentage in 2017 (16.1 percent).

Marijuana Use

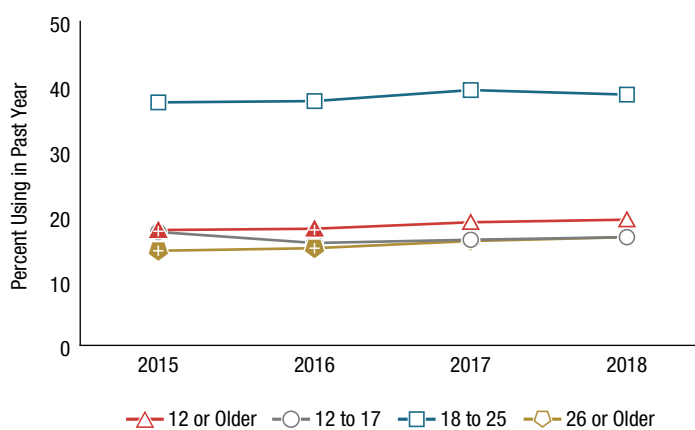
As noted in the section on [Illicit Drug Use in the Past Year](#), an estimated 43.5 million Americans aged 12 or older in 2018 used marijuana in the past year (Figure 10). This number of past year marijuana users corresponds to 15.9 percent of the population (Figure 12). The percentage of the population in 2018 who used marijuana was higher than the percentages from 2002 to 2017. This increase in marijuana use among people

aged 12 or older reflects increases in marijuana use among both young adults aged 18 to 25 and adults aged 26 or older.

Aged 12 to 17

In 2018, about 1 in 8 adolescents aged 12 to 17 (12.5 percent) were past year users of marijuana (Figure 12). This represents approximately 3.1 million adolescents who used marijuana in

Figure 11. Past Year Illicit Drug Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 11 Table. Past Year Illicit Drug Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	17.8*	18.0*	19.0	19.4
12 to 17	17.5	15.8	16.3	16.7
18 to 25	37.5	37.7	39.4	38.7
26 or Older	14.6*	15.0*	16.1	16.7

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

the past year. The percentage of adolescents in 2018 who used marijuana in the past year was lower than the percentages in 2002 to 2004 and in 2009 to 2013, but it was similar to the percentages in 2005 to 2008 and in 2014 to 2017.

Aged 18 to 25

In 2018, more than a third of young adults aged 18 to 25 (34.8 percent) were past year users of marijuana (Figure 12), or about 11.8 million young adults. The percentage of young adults in 2018 who were past year marijuana users was higher than the percentages between 2002 and 2016, but it was similar to the percentage in 2017.

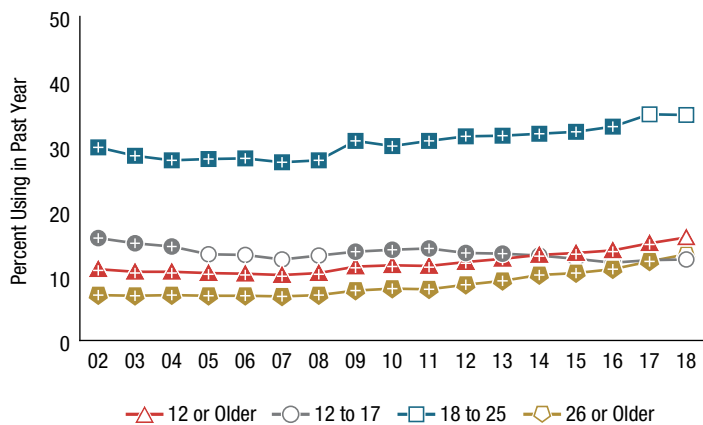
Aged 26 or Older

In 2018, an estimated 13.3 percent of adults aged 26 or older were past year users of marijuana (Figure 12), which represents about 28.5 million adults in this age group. The percentage of adults aged 26 or older in 2018 who used marijuana in the past year was higher than the percentages in 2002 to 2017.

Cocaine Use

In this report, estimates of the use of cocaine include use of crack cocaine. Estimates also are presented separately for crack use.

Figure 12. Past Year Marijuana Use among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 12 Table. Past Year Marijuana Use among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	11.0*	10.6*	10.6*	10.4*	10.3*	10.1*	10.4*	11.4*	11.6*	11.5*	12.1*	12.6*	13.2*	13.5*	13.9*	15.0*	15.9
12-17	15.8*	15.0*	14.5*	13.3	13.2	12.5	13.1	13.7*	14.0*	14.2*	13.5*	13.4*	13.1	12.6	12.0	12.4	12.5
18-25	29.8*	28.5*	27.8*	28.0*	28.1*	27.5*	27.8*	30.8*	30.0*	30.8*	31.5*	31.6*	31.9*	32.2*	33.0*	34.9	34.8
≥26	7.0*	6.9*	7.0*	6.9*	6.9*	6.8*	7.0*	7.7*	8.0*	7.9*	8.6*	9.2*	10.1*	10.4*	11.0*	12.2*	13.3

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

In 2018, an estimated 5.5 million people aged 12 or older were past year users of cocaine (Figure 10), including about 757,000 users of crack. Stated another way, about 2.0 percent of the population in 2018 used cocaine (Figure 13), and 0.3 percent used crack (2018 DT 7.2).

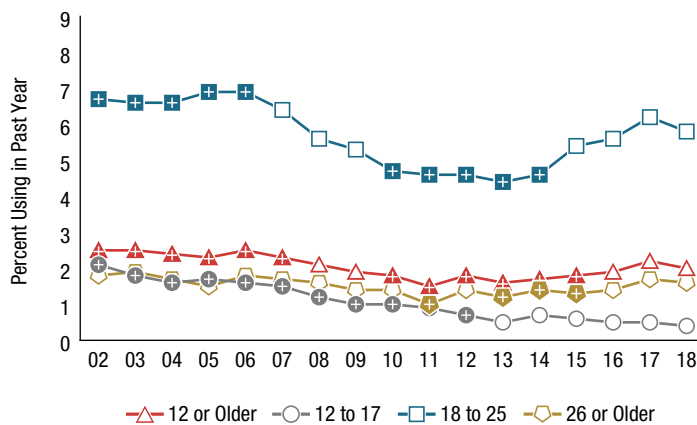
The estimate of past year cocaine use in 2018 differed from the estimates in most years from 2002 to 2015, but it was similar to the estimates in 2016 and 2017. The 2018 estimate of past year crack use among people aged 12 or older was lower than the estimates in 2002 to 2009, but it was similar to the estimates in 2010 to 2017.

Aged 12 to 17

There were 112,000 adolescents aged 12 to 17 in 2018 who were past year users of cocaine, including about 4,000 users of crack. These numbers correspond to 0.4 percent of adolescents who used cocaine in the past year and less than 0.1 percent who used crack (Figure 13 and 2018 DT 7.5).

The 2018 estimate for cocaine use among adolescents was similar to the estimates in 2013 to 2017, but it was lower than the estimates in 2002 to 2012. The estimate of crack use in 2018 among adolescents was lower than the estimates in 2002 to 2011, but it was similar to the estimates in most years from 2012 to 2017.

Figure 13. Past Year Cocaine Use among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 13 Table. Past Year Cocaine Use among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	2.5*	2.5*	2.4*	2.3*	2.5*	2.3*	2.1	1.9	1.8*	1.5*	1.8*	1.6*	1.7*	1.8*	1.9	2.2	2.0
12-17	2.1*	1.8*	1.6*	1.7*	1.6*	1.5*	1.2*	1.0*	1.0*	0.9*	0.7*	0.5	0.7	0.6	0.5	0.5	0.4
18-25	6.7*	6.6*	6.6*	6.9*	6.9*	6.4	5.6	5.3	4.7*	4.6*	4.6*	4.4*	4.6*	5.4	5.6	6.2	5.8
≥26	1.8	1.9	1.7	1.5	1.8	1.7	1.6	1.4	1.4	1.0*	1.4	1.2*	1.4*	1.3*	1.4	1.7	1.6

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 18 to 25

An estimated 5.8 percent of young adults aged 18 to 25 in 2018 used cocaine in the past year (Figure 13), and 0.3 percent used crack (2018 DT 7.11). These percentages correspond to 2.0 million young adults who used cocaine in the past year, including 87,000 who used crack. The percentage of young adults in 2018 who used cocaine was higher than the percentages in 2010 to 2014, but it was similar to the percentages in 2015 to 2017. The estimate of past year crack use among young adults in 2018 was lower than estimates in most years between 2002 and 2012, but it was similar to the estimates in 2013 to 2017.

Aged 26 or Older

In 2018, an estimated 1.6 percent of adults aged 26 or older used cocaine (Figure 13), and 0.3 percent used crack in the past year (2018 DT 7.14). These percentages represent 3.5 million adults aged 26 or older who used cocaine in the past year, including 666,000 who used crack. The percentage of adults in this age group in 2018 who used cocaine in the past year was higher than the percentages in most years from 2011 to 2015, but it was similar to the percentages in 2016 and 2017. The estimate of past year crack use in 2018 among adults aged 26 or older was lower than estimates in 2002 to 2008, but it was similar to the estimates in 2009 to 2017.

Heroin Use

An estimated 808,000 people aged 12 or older in 2018 used heroin in the past year (Figure 10), which corresponds to about 0.3 percent of the population (Figure 14). The estimate of past year heroin use in 2018 was higher than the estimates for most years between 2002 and 2008, but it was similar to the estimates in 2009 to 2017.

Aged 12 to 17

In 2018, less than 0.1 percent of adolescents aged 12 to 17 were past year heroin users (Figure 14). This percentage represents about 10,000 adolescents who used heroin in the past year. The estimate of past year heroin use among adolescents in 2018 was lower than the estimates for most years in 2002 to 2014, but it was similar to the estimates in 2015 to 2017. About 0.1 to 0.2 percent of adolescents used heroin in any year from 2002 to 2017.

Aged 18 to 25

Among young adults aged 18 to 25 in 2018, 0.5 percent were past year heroin users (Figure 14). This percentage represents 157,000 young adults who used heroin in the

past year. The percentage of young adults in 2018 who were past year heroin users was similar to the percentages in 2002 to 2010 and from 2015 to 2017, but it was lower than the percentages in 2011 through 2014 (ranging from 0.7 to 0.8 percent).

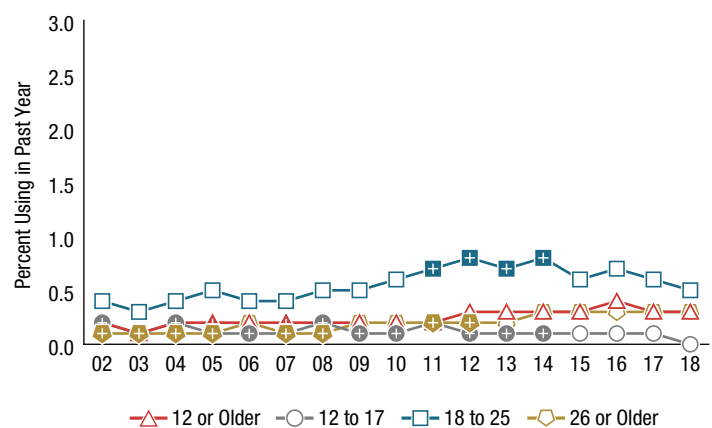
Aged 26 or Older

In 2018, an estimated 0.3 percent of adults aged 26 or older were past year heroin users (Figure 14). This percentage represents 641,000 adults in this age group who used heroin in the past year. The percentage of adults aged 26 or older in 2018 who were past year heroin users was similar to the percentages in 2013 to 2017, but it was slightly higher than the percentages in most years from 2002 through 2012 (ranging from 0.1 to 0.2 percent).

Methamphetamine Use

Prior to 2015, questions about methamphetamine use were asked in the context of questions about the misuse of prescription stimulants because methamphetamine is legally available by prescription (Desoxyn®). However, most methamphetamine used in the United States is produced and distributed illicitly rather than through the pharmaceutical

Figure 14. Past Year Heroin Use among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 14 Table. Past Year Heroin Use among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	0.2*	0.1*	0.2*	0.2*	0.2	0.2*	0.2*	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3
12-17	0.2*	0.1*	0.2*	0.1*	0.1*	0.1	0.2*	0.1*	0.1*	0.2*	0.1*	0.1*	0.1*	0.1	0.1	0.1	0.0
18-25	0.4	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.7*	0.8*	0.7*	0.8*	0.6	0.7	0.6	0.5
≥26	0.1*	0.1*	0.1*	0.1*	0.2	0.1*	0.1*	0.2	0.2	0.2*	0.2*	0.2	0.3	0.3	0.3	0.3	0.3

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Note: Estimates of less than 0.05 percent round to 0.0 percent when shown to the nearest tenth of a percent.

industry. Beginning in 2015, therefore, questions specific to methamphetamine use have been administered separately from questions about the misuse of prescription stimulants.

In 2018, approximately 1.9 million people aged 12 or older used methamphetamine in the past year (Figure 10). This number of past year methamphetamine users corresponds to 0.7 percent of the population (Figure 15). The percentage of people aged 12 or older in 2018 who used methamphetamine in the past year was similar to the percentages in 2015 and 2017, but it was slightly higher than the percentage in 2016 (0.5 percent).

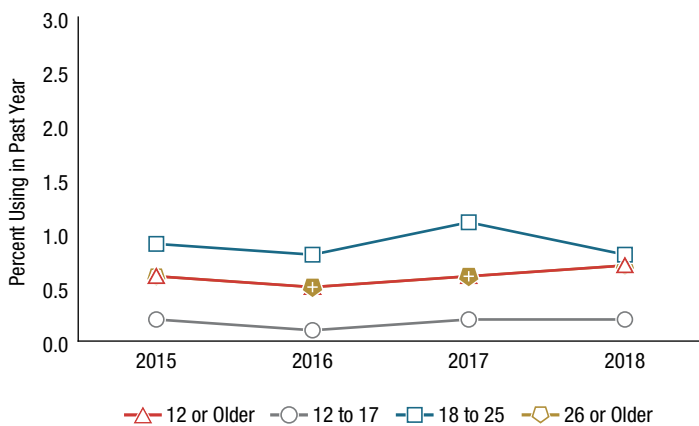
Aged 12 to 17

In 2018, an estimated 0.2 percent of adolescents aged 12 to 17 used methamphetamine in the past year (Figure 15). This percentage represents about 43,000 adolescents who used methamphetamine in the past year. The estimate of past year methamphetamine use among adolescents in 2018 was similar to the estimates in 2015 to 2017.

Aged 18 to 25

In 2018, an estimated 0.8 percent of young adults aged 18 to 25 were past year methamphetamine users (Figure 15). This percentage represents 273,000 young adults who used

Figure 15. Past Year Methamphetamine Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 15 Table. Past Year Methamphetamine Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	0.6	0.5*	0.6	0.7
12 to 17	0.2	0.1	0.2	0.2
18 to 25	0.9	0.8	1.1	0.8
26 or Older	0.6	0.5*	0.6*	0.7

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

methamphetamine in the past year. The percentage of young adults in 2018 who were past year methamphetamine users was similar to the percentages in 2015 to 2017.

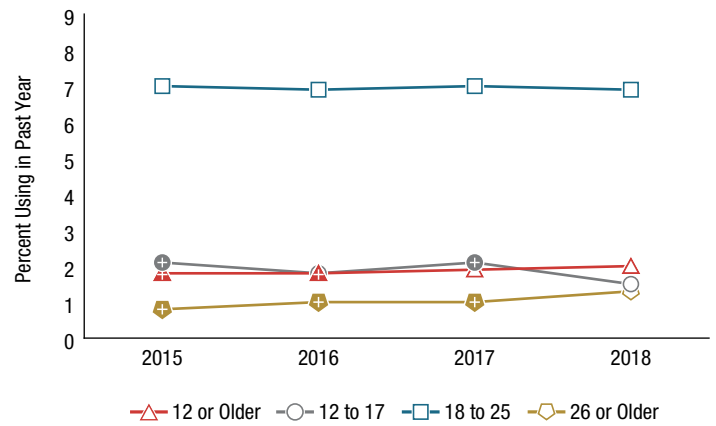
Aged 26 or Older

Among adults aged 26 or older in 2018, 0.7 percent were past year methamphetamine users (Figure 15). This percentage represents 1.6 million adults in this age group who used methamphetamine in the past year. The percentage of adults aged 26 or older in 2018 who were past year methamphetamine users was higher than the percentages in 2016 and 2017, but it was similar to the percentage in 2015.

Hallucinogen Use

Several drugs are grouped under the category of hallucinogens, including LSD, PCP, peyote, mescaline, psilocybin mushrooms, “Ecstasy” (MDMA or “Molly”), ketamine, DMT/AMT/“Foxy,” and *Salvia divinorum*.²⁷ In 2018, an estimated 5.6 million people aged 12 or older were past year users of hallucinogens (Figure 16), corresponding to 2.0 percent of the population (Figure 16). The percentage of people aged 12 or older in 2018 who were past year hallucinogen users was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Figure 16. Past Year Hallucinogen Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 16 Table. Past Year Hallucinogen Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	1.8*	1.8*	1.9	2.0
12 to 17	2.1*	1.8	2.1*	1.5
18 to 25	7.0	6.9	7.0	6.9
26 or Older	0.8*	1.0*	1.0*	1.3

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 12 to 17

In 2018, an estimated 376,000 adolescents aged 12 to 17 were past year users of hallucinogens, which corresponds to 1.5 percent of adolescents (Figure 16). The percentage of adolescents in 2018 who were past year hallucinogen users was lower than the percentages in 2015 and 2017, but it was similar to the percentage in 2016.

Aged 18 to 25

An estimated 6.9 percent of young adults aged 18 to 25 in 2018 were past year users of hallucinogens (Figure 16). This percentage represents 2.3 million young adults who used hallucinogens in the past year. The percentage of young adults in 2018 who were past year hallucinogen users was similar to the percentages between 2015 and 2017.

Aged 26 or Older

In 2018, an estimated 1.3 percent of adults aged 26 or older were past year users of hallucinogens (Figure 16), which represents 2.9 million adults in this age group. The percentage of adults aged 26 or older in 2018 who were past year hallucinogen users was higher than the percentages in 2015 through 2017 (ranging from 0.8 to 1.0 percent).

Inhalant Use

Inhalants include a variety of substances and products, such as nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint, computer keyboard cleaner, other aerosol sprays, felt-tip pens, and glue. Respondents are asked to report the use of inhalants to get high but not to include accidental inhalation of a substance.

In 2018, approximately 2.0 million people aged 12 or older were past year users of inhalants (Figure 10). This number of past year inhalant users corresponds to 0.7 percent of the population (Figure 17). In 2015 to 2018, about 0.6 to 0.7 percent of people aged 12 or older used inhalants in the past year. The estimate in 2018 (0.7 percent) was higher than the estimate in 2016 (0.6 percent).

Aged 12 to 17

In 2018, an estimated 662,000 adolescents aged 12 to 17 were past year users of inhalants. This number of past year inhalant users corresponds to 2.7 percent of adolescents (Figure 17). The percentage of adolescents in 2018 who were past year inhalant users was similar to the percentages in 2015 and 2017, but it was higher than the percentage in 2016.

Aged 18 to 25

An estimated 1.5 percent of young adults aged 18 to 25 in 2018 were past year users of inhalants (Figure 17). This percentage represents 495,000 young adults who used inhalants in the past year. The percentage of young adults in 2018 who were past year inhalant users was similar to the percentages between 2015 and 2017.

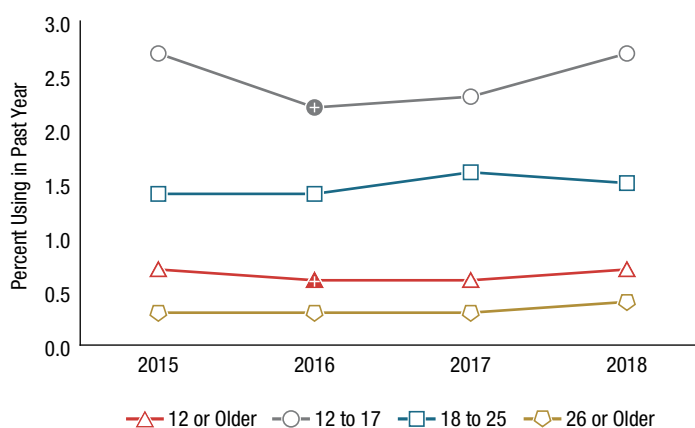
Aged 26 or Older

An estimated 0.4 percent of adults aged 26 or older in 2018 were past year users of inhalants (Figure 17), which represents 846,000 adults in this age group. The percentage of adults aged 26 or older in 2018 who used inhalants in the past year was similar to the percentages between 2015 and 2017.

Misuse of Psychotherapeutic Drugs

NSDUH collects data on the use and misuse of psychotherapeutic drugs currently or recently available by prescription in the United States. Prescription psychotherapeutic drugs consist of prescription stimulants, tranquilizers or sedatives (including benzodiazepines), and pain relievers. In NSDUH, misuse of prescription drugs is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater

Figure 17. Past Year Inhalant Use among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 17 Table. Past Year Inhalant Use among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	0.7	0.6*	0.6	0.7
12 to 17	2.7	2.2*	2.3	2.7
18 to 25	1.4	1.4	1.6	1.5
26 or Older	0.3	0.3	0.3	0.4

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

amounts, more often, or longer than told to take a drug; or use in any other way not directed by a doctor. Misuse of over-the-counter drugs is not included. Discussion of the estimates for prescription stimulants, tranquilizers or sedatives (including benzodiazepines), and pain relievers follows a presentation of the estimates for the misuse of any psychotherapeutic drug in the past year.

In 2018, an estimated 16.9 million Americans aged 12 or older misused prescription psychotherapeutic drugs at least once in the past year. This number of past year prescription psychotherapeutic drug misusers corresponds to 6.2 percent of the population (2018 DT 7.2).

Of the prescription drugs presented in this report, prescription pain relievers were the most commonly misused by people aged 12 or older. The 16.9 million in 2018 who misused prescription psychotherapeutic drugs in the past year included 9.9 million who misused prescription pain relievers in that period (Figure 10), 5.1 million who misused prescription stimulants, and about 6.4 million who misused prescription tranquilizers or sedatives. The estimate for the misuse of tranquilizers or sedatives includes 5.4 million who misused prescription benzodiazepines in the past year (2018 DT 7.2).

Stimulant Misuse

Several prescription drugs are grouped under the category of prescription stimulants in NSDUH. These include amphetamine products, methylphenidate products, anorectic (weight-loss) stimulants, Provigil®, or any other prescription stimulant. The amphetamine and methylphenidate products included in the NSDUH questionnaire are primarily prescribed for the treatment of attention-deficit/hyperactivity disorder (ADHD). Since 2015, methamphetamine has not been included as a prescription stimulant, unless respondents specified the prescription form of methamphetamine (Desoxyn®) as some other stimulant they had misused in the past year.²⁸

The estimate of 5.1 million people aged 12 or older in 2018 who misused prescription stimulants in the past year corresponds to 1.9 percent of the population (Figures 10 and 18). The percentage of past year misusers of stimulants in 2018 was lower than the percentages in 2016 and 2017, but it was similar to the percentage in 2015.

Aged 12 to 17

In 2018, about 369,000 adolescents aged 12 to 17 were past year misusers of prescription stimulants, corresponding to about 1.5 percent of adolescents (Figure 18). The percentage of adolescents in 2018 who misused stimulants

in the past year was similar to the percentages in 2016 and 2017, but it was lower than the percentage in 2015.

Aged 18 to 25

There were about 2.2 million young adults aged 18 to 25 in 2018 who misused prescription stimulants in the past year, which corresponds to about 6.5 percent of young adults (Figure 18). The percentage of young adults in 2018 who misused stimulants in the past year was lower than the percentages in 2016 and 2017, but it was similar to the percentage in 2015.

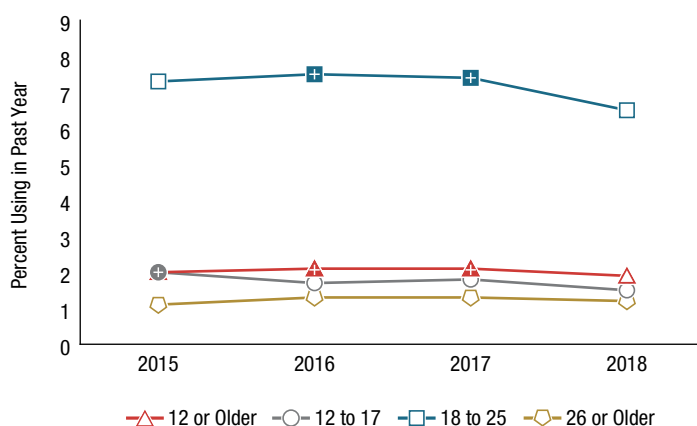
Aged 26 or Older

In 2018, an estimated 2.5 million adults aged 26 or older misused prescription stimulants in the past year, which corresponds to 1.2 percent of adults in this age group (Figure 18). The percentage of adults aged 26 or older in 2018 who misused stimulants in the past year was similar to the percentages in 2015 to 2017.

Tranquilizer or Sedative Misuse

NSDUH collects information on prescription tranquilizers and sedatives. Because prescription drugs in both categories have a common effect on specific activity in the brain,

Figure 18. Past Year Prescription Stimulant Misuse among People Aged 12 or Older: 2015-2018



⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 18 Table. Past Year Prescription Stimulant Misuse among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	2.0	2.1 ⁺	2.1 ⁺	1.9
12 to 17	2.0 ⁺	1.7	1.8	1.5
18 to 25	7.3	7.5 ⁺	7.4 ⁺	6.5
26 or Older	1.1	1.3	1.3	1.2

⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

estimates of the misuse of prescription sedatives or tranquilizers are presented together. Prescription tranquilizers include benzodiazepine tranquilizers (e.g., as alprazolam, lorazepam, clonazepam, or diazepam products), muscle relaxants, or any other prescription tranquilizer. Prescription sedatives include zolpidem products, eszopiclone products, zaleplon products, benzodiazepine sedatives (e.g., as flurazepam and temazepam products or triazolam products), barbiturates, or any other prescription sedative.

In this report, respondents were classified as having misused prescription tranquilizers or sedatives in the past 12 months if they reported the misuse of prescription tranquilizers, prescription sedatives, or both in that period. Because prescription drugs categorized as benzodiazepines can be prescribed as either tranquilizers or sedatives, estimates for any benzodiazepine misuse are presented separately.

The estimate of 6.4 million people aged 12 or older in 2018 who misused prescription tranquilizers or sedatives in the past year corresponds to 2.4 percent of the population (Figures 10 and 19). The percentage of people aged 12 or older in 2018 who misused tranquilizers or sedatives in the past year was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Aged 12 to 17

In 2018, about 460,000 adolescents aged 12 to 17 misused prescription tranquilizers or sedatives in the past year, which corresponds to about 1.8 percent of adolescents (Figure 19). The percentage of adolescents in 2018 who misused tranquilizers or sedatives in the past year was similar to the percentages in 2015 to 2017.

Aged 18 to 25

In 2018, about 1.7 million young adults aged 18 to 25 misused prescription tranquilizers or sedatives in the past year. This number of past year misusers of tranquilizers or sedatives corresponds to 4.9 percent of young adults (Figure 19). The percentage of young adults in 2018 who misused tranquilizers or sedatives in the past year was lower than the percentages in 2015 to 2017.

Aged 26 or Older

An estimated 4.3 million adults aged 26 or older in 2018 were past year misusers of prescription tranquilizers or sedatives, which corresponds to 2.0 percent of adults in this age group (Figure 19). The percentage of adults aged 26 or older in 2018 who misused tranquilizers or sedatives in the past year was similar to the percentages in 2015 to 2017.

Benzodiazepine Misuse

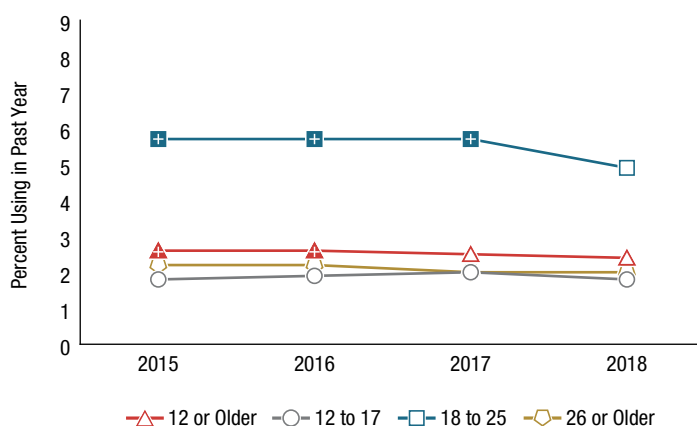
Prescription benzodiazepines are a subcategory of drugs that may be prescribed as either tranquilizers for the relief of anxiety or as sedatives for the relief of insomnia. Benzodiazepines prescribed as tranquilizers are typically metabolized more slowly than benzodiazepines prescribed as sedatives.²⁹ Nevertheless, benzodiazepines are chemically similar, regardless of whether they are prescribed as tranquilizers or sedatives. These drugs cause drowsiness and may impair motor skills important for tasks such as operating a motor vehicle or machinery. This section presents estimates of the misuse of benzodiazepines, regardless of whether respondents reported they misused benzodiazepines in the separate sections of the NSDUH interview for tranquilizers or sedatives.³⁰

The estimated 5.4 million people aged 12 or older in 2018 who were past year misusers of prescription benzodiazepines corresponds to 2.0 percent of the population (2018 DT 7.2 and Figure 20). The percentage of people aged 12 or older in 2018 who were past year benzodiazepine misusers was similar to the percentages in 2015 through 2017.

Aged 12 to 17

In 2018, about 399,000 adolescents aged 12 to 17 misused prescription benzodiazepines in the past year. This number

Figure 19. Past Year Prescription Tranquilizer or Sedative Misuse among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 19 Table. Past Year Prescription Tranquilizer or Sedative Misuse among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	2.6*	2.6*	2.5	2.4
12 to 17	1.8	1.9	2.0	1.8
18 to 25	5.7*	5.7*	5.7*	4.9
26 or Older	2.2	2.2	2.0	2.0

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

of past year misusers of benzodiazepines corresponds to 1.6 percent of adolescents (Figure 20). The percentage of adolescents in 2018 who misused benzodiazepines in the past year was similar to the percentages in 2015 to 2017.

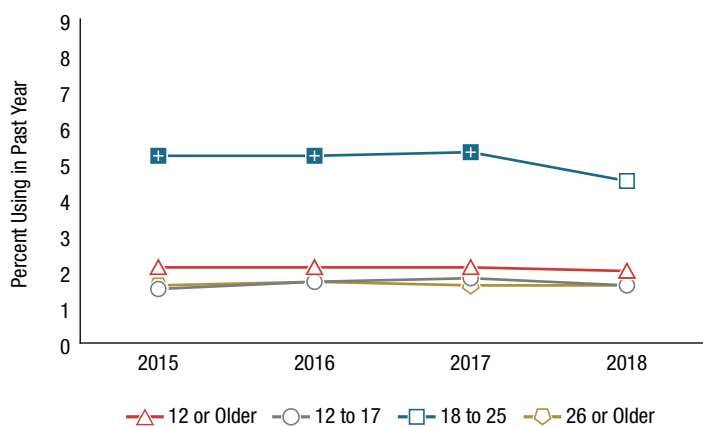
Aged 18 to 25

An estimated 4.5 percent of young adults aged 18 to 25 in 2018 misused prescription benzodiazepines in the past year (Figure 20). This percentage represents 1.5 million young adults who misused benzodiazepines in the past year. The percentage of young adults in 2018 who were past year benzodiazepine misusers was lower than the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, about 3.5 million adults aged 26 or older misused prescription benzodiazepines in the past year. This number of past year misusers of benzodiazepines corresponds to 1.6 percent of adults in this age group (Figure 20). The percentage of adults aged 26 or older in 2018 who misused benzodiazepines in the past year was similar to the percentages in 2015 to 2017.

Figure 20. Past Year Prescription Benzodiazepine Misuse among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 20 Table. Past Year Prescription Benzodiazepine Misuse among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	2.1	2.1	2.1	2.0
12 to 17	1.5	1.7	1.8	1.6
18 to 25	5.2*	5.2*	5.3*	4.5
26 or Older	1.6	1.7	1.6	1.6

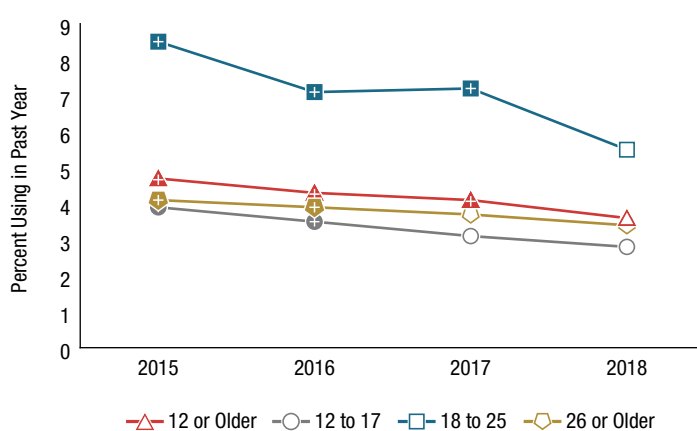
* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Pain Reliever Misuse

Several prescription drugs are grouped under the category of prescription pain relievers in NSDUH. These include products containing hydrocodone, oxycodone, tramadol, codeine, morphine, prescription fentanyl,³¹ buprenorphine, oxymorphone, and hydromorphone, as well as Demerol®, methadone, or any other prescription pain reliever.²⁵ This section provides estimates of any prescription pain reliever misuse and further details on the misuse of pain relievers. Specifically, estimates for 2018 are presented for the subtypes of prescription pain relievers people misused, the main reason for the most recent misuse of prescription pain relievers, and where people obtained the prescription pain relievers they most recently misused in the past year.

As noted previously, approximately 9.9 million people aged 12 or older in 2018 misused prescription pain relievers in the past year (Figure 10), which corresponds to 3.6 percent of the population (Figure 21). The percentage of people in 2018 who were past year prescription pain reliever misusers was lower than the percentages in 2015 to 2017. Continued monitoring of trends in past year pain reliever misuse will be important for assessing whether the annual estimates of misuse in future years continue to decrease or begin increasing again.

Figure 21. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 21 Table. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	4.7*	4.3*	4.1*	3.6
12 to 17	3.9*	3.5*	3.1	2.8
18 to 25	8.5*	7.1*	7.2*	5.5
26 or Older	4.1*	3.9*	3.7	3.4

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 12 to 17

Among adolescents aged 12 to 17 in 2018, 2.8 percent misused prescription pain relievers (Figure 21), corresponding to 695,000 adolescents. The percentage of adolescents in 2018 who misused prescription pain relievers in the past year was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

In 2018, about 1.9 million young adults aged 18 to 25 misused pain relievers in the past year, which corresponds to about 5.5 percent of young adults (Figure 21). The percentage of young adults in 2018 who misused prescription pain relievers in the past year was lower than the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, an estimated 7.4 million adults aged 26 or older misused pain relievers in the past year, which corresponds to 3.4 percent of adults in this age group (Figure 21). The percentage of adults aged 26 or older in 2018 who misused prescription pain relievers in the past year was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Misuse of Subtypes of Pain Relievers

NSDUH asked respondents in 2018 to identify the specific prescription pain relievers they used in the past year. For each specific pain reliever respondents reported using in the past 12 months, respondents were asked whether they misused that pain reliever in that period. The specific pain relievers individuals misused in the past year were categorized into subtypes, such as hydrocodone products. For example, respondents who reported the misuse of the pain relievers Vicodin® or hydrocodone were classified as misusers of hydrocodone products.

This section presents two ways of examining the misuse of subtypes of pain relievers. First, it presents estimates of the misuse of subtypes among the total population aged 12 or older. Then it presents estimates of the misuse of subtypes of pain relievers among people who used the subtype in the past year. Stated another way, this second presentation provides estimates of misuse among a subpopulation of users, such as the percentage of people who misused hydrocodone products among those who had used hydrocodone products in the past year.

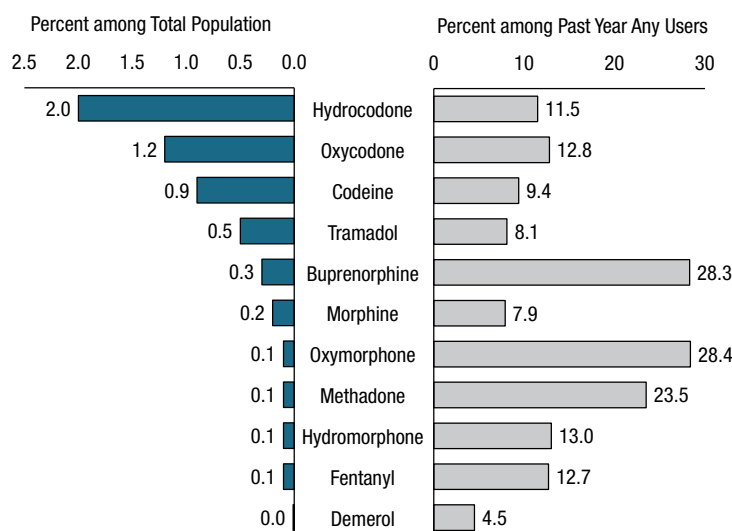
In 2018, the most commonly misused subtype of prescription pain relievers was hydrocodone products, which include

Vicodin®, Lortab®, Norco®, Zohydro® ER, and generic hydrocodone. An estimated 5.5 million people aged 12 or older misused these products in the past year, corresponding to 2.0 percent of the population (Figure 22). An estimated 3.4 million people misused oxycodone products in the past year. This number of past year misusers of oxycodone corresponds to 1.2 percent of the population. Oxycodone products include OxyContin®, Percocet®, Percodan®, Roxicodone®, and generic oxycodone. An estimated 0.3 percent of the population misused buprenorphine products in the past year, which corresponds to 718,000 people. About 256,000 (0.1 percent) misused methadone.

There were 269,000 people aged 12 or older in 2018 who misused prescription fentanyl products, which corresponds to about 0.1 percent of the population (Figure 22). Because NSDUH respondents were asked about the misuse of only prescription forms of fentanyl, however, this estimate for fentanyl misuse may underrepresent people who misused fentanyl that was illicitly manufactured in clandestine laboratories (i.e., as opposed to the misuse of diverted fentanyl produced by the pharmaceutical industry). This estimate of fentanyl misuse also may not include people who misused illicitly manufactured fentanyl (IMF) mixed with heroin or sold as heroin (but contained only IMF).

Although prescription pain reliever misuse was the second most common form of illicit drug use in 2018, most people who used prescription pain relievers in the past year did not misuse them. Among people aged 12 or older in 2018

Figure 22. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older, by Selected Pain Reliever Subtype: 2018



Note: Estimates of less than 0.05 percent round to 0.0 percent when shown to the nearest tenth of a percent.

who used specific prescription pain reliever subtypes in the past 12 months, about 28.3 percent of past year users of buprenorphine products misused these products, and 28.4 percent of past year users of oxymorphone products (e.g., Opana®) misused oxymorphone products in that period (Figure 22). An estimated 23.5 percent of past year users of methadone misused it. About 1 in 8 past year users of oxycodone products or prescription fentanyl products misused these pain relievers in the past year (12.8 and 12.7 percent).

Main Reasons for the Last Misuse of Pain Relievers

Respondents in the 2018 NSDUH who reported prescription pain reliever misuse in the past year were asked to recall the last prescription pain reliever they misused in the past year. Respondents were then asked to report their reasons for misusing this prescription pain reliever that last time. Respondents who reported more than one reason for misusing the last prescription pain reliever were asked to report the main reason for their pain reliever misuse. If respondents reported only one reason for misusing their last prescription pain reliever, then that reason was their main reason for pain reliever misuse.

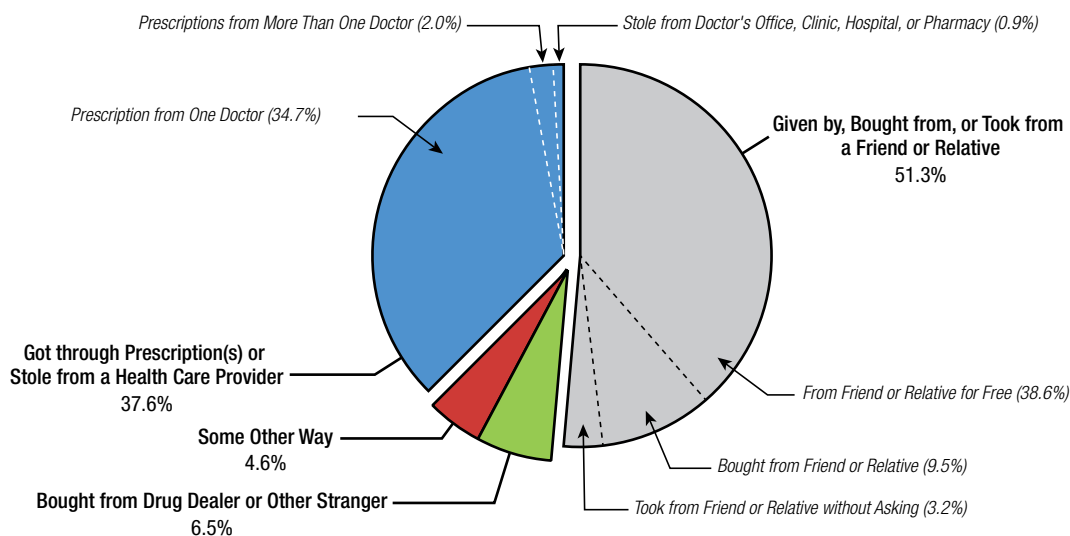
Among people aged 12 or older in 2018 who misused prescription pain relievers in the past year, the most common main reason for their last misuse of a pain reliever was to relieve physical pain (63.6 percent) (2018 DT 6.13). According to the NSDUH definition, use without a prescription of one’s own or use at a higher dosage or more often than prescribed are

both classified as misuse even if it was for the purpose of pain relief. Other common reasons were to feel good or get high (10.6 percent) and to relax or relieve tension (9.2 percent). Less common reasons among past year misusers of pain relievers included to help with sleep (4.5 percent), to help with feelings or emotions (4.0 percent), to experiment or see what the drug was like (2.5 percent), because they were “hooked” or needed to have the drug (3.2 percent), and to increase or decrease the effects of other drugs (0.9 percent). Some other reason was the main reason for misuse among 1.5 percent of past year misusers of pain relievers.

Source of the Last Pain Reliever That Was Misused

Among people aged 12 or older in 2018 who misused prescription pain relievers in the past year, the most common source for the last pain reliever they misused was from a friend or relative (Figure 23). More than half (51.3 percent) of people who misused pain relievers in the past year obtained the pain relievers the last time from a friend or relative. Specifically, 38.6 percent of people who misused pain relievers in the past year obtained pain relievers the last time by getting them from a friend or relative for free, 9.5 percent bought their last pain reliever from a friend or relative, and 3.2 percent took their last pain reliever from a friend or relative without asking. More than one third of people who misused pain relievers in the past year (37.6 percent) obtained pain relievers the last time through prescription(s) or stole pain relievers from a health

Figure 23. Source Where Pain Relievers Were Obtained for Most Recent Misuse among People Aged 12 or Older Who Misused Pain Relievers in the Past Year: 2018



9.9 Million People Aged 12 or Older Who Misused Pain Relievers in the Past Year

Note: Respondents with unknown data for the Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded.

care provider, typically getting the pain relievers through a prescription from one doctor (34.7 percent). About 1 in 15 people who misused pain relievers in the past year (6.5 percent) bought the last pain reliever they misused from a drug dealer or other stranger.

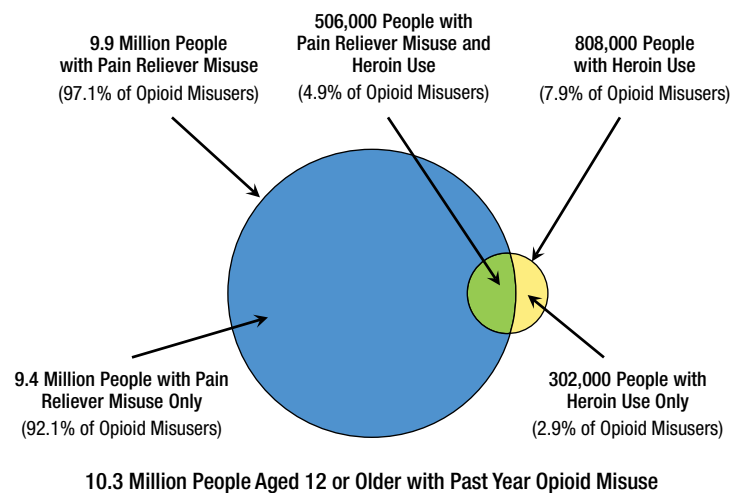
Opioid Misuse

Opioids are a group of chemically similar drugs that include heroin and prescription pain relievers, such as hydrocodone (e.g., Vicodin®), oxycodone (e.g., OxyContin®), and morphine. In this report, opioid misuse includes the misuse of prescription pain relievers or the use of heroin. Prescription pain relievers could include some nonopioids because respondents could specify they misused other pain relievers that are not opioids.²⁵

Approximately 10.3 million people aged 12 or older in 2018 misused opioids in the past year (Figure 24). This number of past year opioid misusers corresponds to 3.7 percent of the population (Figure 25).

The vast majority of past year opioid users in 2018 misused prescription pain relievers (Figure 24). Specifically, 9.9 million people aged 12 or older in 2018 misused prescription pain relievers in the past year compared with 808,000 people who used heroin. The majority of prescription pain reliever misusers had misused only prescription pain relievers in the past year but had not used heroin (9.4 million). Approximately 506,000 people had misused prescription pain relievers and used heroin in the past year. About 302,000 people used heroin in the past year but had not misused prescription pain relievers. Although

Figure 24. Past Year Opioid Misuse among People Aged 12 or Older: 2018



Note: The percentages do not add to 100 percent due to rounding.

5.1 percent of prescription pain reliever misusers also used heroin in the past year, 62.6 percent of heroin users also misused pain relievers in the past year.²³

The percentage of people aged 12 or older in 2018 who were past year opioid misusers was lower than the percentages between 2015 and 2017 (Figure 25). This decrease in past year opioid misuse indicates a need to monitor trends to assess whether the annual estimates of opioid misuse in future years will stabilize at the level in 2018, show further decreases, or increase to levels similar to those in 2015 to 2017.

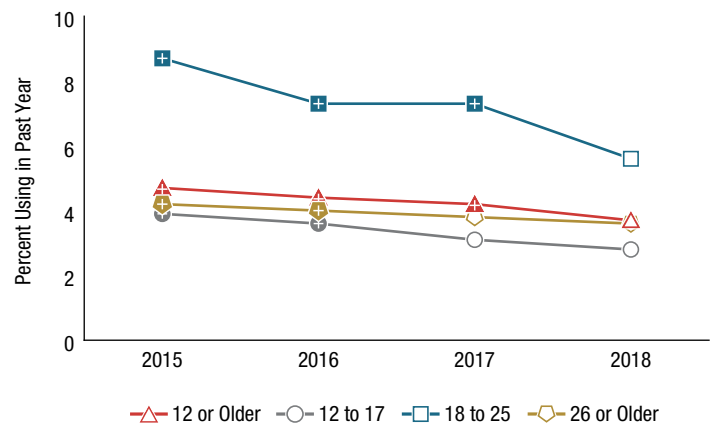
Aged 12 to 17

Among adolescents aged 12 to 17 in 2018, 2.8 percent misused opioids, corresponding to 699,000 adolescents (Figure 25). The percentage of adolescents in 2018 who misused opioids in the past year was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

In 2018, about 1.9 million young adults aged 18 to 25 misused opioids in the past year, which corresponds to about 5.6 percent of young adults (Figure 25). The percentage of young adults in 2018 who were past year opioid misusers was lower than the percentages in 2015 to 2017.

Figure 25. Past Year Opioid Misuse among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 25 Table. Past Year Opioid Misuse among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	4.7+	4.4+	4.2+	3.7
12 to 17	3.9+	3.6+	3.1	2.8
18 to 25	8.7+	7.3+	7.3+	5.6
26 or Older	4.2+	4.0+	3.8	3.6

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 26 or Older

An estimated 7.7 million adults aged 26 or older in 2018 misused opioids in the past year, which corresponds to 3.6 percent of adults in this age group (Figure 25). The percentage of adults aged 26 or older in 2018 who misused opioids in the past year was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Initiation of Substance Use

NSDUH includes questions to measure the initiation of substance use, that is, the first use of particular substances.³² This report presents estimates of the number of recent substance use initiates or prescription drug misuse initiates.³³ Recent initiates were defined as substance users or prescription drug misusers who reported first using or misusing, respectively, a particular substance in the prior 12 months.^{34,35}

The presentation of estimates of initiation of the misuse of prescription drugs is limited because of the way prescription drug misuse information is collected in NSDUH. As a result, respondents could underreport the misuse of the prescription drugs that occurred more than 12 months before the interview. For example, past year initiates of heroin use who last misused prescription pain relievers more than 12 months ago might not have reported this misuse of pain relievers; these individuals would therefore be misclassified as past year initiates of opioid misuse because of their recent heroin initiation. Similar issues apply for determining whether respondents initiated any illicit drug use or initiated the misuse of any tranquilizer or sedative in the past year. Estimates for past year initiation of benzodiazepine misuse are not presented because NSDUH did not capture information on lifetime misuse of benzodiazepines.³⁶

Unlike previous sections, this section focuses on the *numbers* of people who were recent initiates (e.g., the number of people aged 12 or older who were recent initiates of marijuana use) rather than on percentages. However, care should be taken in interpreting increases over time in the estimated number of past year initiates because some of these increases could reflect growth in the size of the population over time.

Figure 26 provides an overview of the numbers of people aged 12 or older in 2018 who were past year initiates for the substances that are discussed in this section. The illicit drugs in 2018 with the largest number of recent initiates were marijuana (3.1 million new users), prescription pain relievers (1.9 million new misusers), prescription tranquilizers

(1.2 million new misusers), hallucinogens (1.1 million new users), prescription stimulants (1.0 million new misusers), and cocaine (874,000 new users). In addition, there were 4.9 million new users of alcohol and 1.8 million people who tried a cigarette for the first time in the past year.³⁷

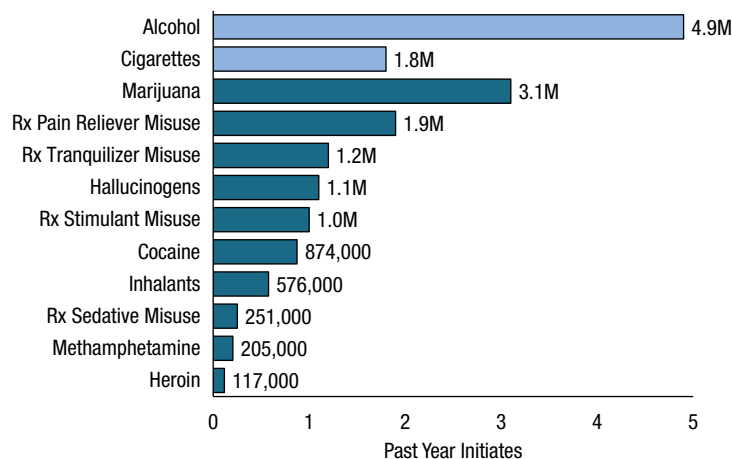
Initiation of Cigarette Use

The estimated 1.8 million people aged 12 or older in 2018 who smoked part or all of a cigarette for the first time in the past 12 months (Figure 26) averages to about 5,000 people each day who initiated cigarette smoking (Table A.3A). The total number of initiates of cigarette smoking who were aged 12 or older in 2018 was lower than the numbers in 2004 to 2014, but it was similar to the numbers in 2015 to 2017 (2018 DT 7.40).

In 2018, an estimated 571,000 adolescents aged 12 to 17 smoked part or all of a cigarette for the first time in the past year (2018 DT 7.41). This number of recent initiates among adolescents averages to approximately 1,600 adolescents each day who initiated cigarette smoking (Table A.3A). Also, 1.1 million young adults aged 18 to 25 in 2018 initiated cigarette use in the past year (2018 DT 7.43), which translates to about 3,100 young adults who initiated cigarette use each day. An estimated 113,000 adults aged 26 or older in 2018 initiated cigarette use in the past year (2018 DT 7.44).

Among adolescents aged 12 to 17 in 2018, the number of recent initiates of any cigarette smoking was lower than the numbers in each year between 2002 and 2016, but it was similar to the number in 2017 (2018 DT 7.41).

Figure 26. Past Year Initiates of Substances among People Aged 12 or Older: 2018



Rx = prescription.

Note: Estimates for prescription pain relievers, prescription tranquilizers, prescription stimulants, and prescription sedatives are for the initiation of misuse.

About 1.2 million to 1.3 million adolescents each year from 2002 to 2011 initiated cigarette smoking in the past year. The number of initiates among adolescents decreased to 1.0 million in 2012 and to fewer than 1.0 million in subsequent years.

Among young adults aged 18 to 25 in 2018, the number of recent initiates of any cigarette smoking was higher than the numbers in 2002 to 2005, but it was similar to the numbers in 2006 to 2017 (2018 DT 7.43). The number of recent cigarette initiates who were aged 26 or older in 2018 was similar to the numbers in most years from 2002 to 2017 (2018 DT 7.44). These data for cigarette initiation show a consistent pattern over time that relatively few people try cigarettes for the first time after age 25.

Initiation of Alcohol Use

As noted previously, about 4.9 million people aged 12 or older in 2018 used alcohol for the first time in the past year, not counting sips from another person's drink (Figure 26). This number averages to approximately 13,400 initiates per day (Table A.3A). The total number of past year initiates aged 12 or older in 2018 for alcohol use was higher than the numbers in 2002 to 2006, but it was similar to the numbers in most years from 2007 to 2017 (2018 DT 7.40).

In 2018, an estimated 2.4 million adolescents aged 12 to 17 used alcohol for the first time in the past year (2018 DT 7.41), which averages to approximately 6,500 adolescents each day who initiated alcohol use (Table A.3A). Also, 2.4 million young adults aged 18 to 25 (2018 DT 7.43) and 63,000 adults aged 26 or older (2018 DT 7.44) in 2018 initiated alcohol use in the past year.

The number of adolescents aged 12 to 17 in 2018 who recently initiated alcohol use was lower than the numbers in most years from 2002 to 2011, but it was similar to the numbers in 2012 to 2017 (2018 DT 7.41). Among young adults aged 18 to 25, the number of recent initiates in 2018 was higher than the numbers in most years from 2002 to 2017 (2018 DT 7.43). For adults aged 26 or older, the number of initiates in 2018 was similar to the numbers in most years from 2002 to 2017 (2018 DT 7.44). As was the case with cigarette initiation, these data show a consistent pattern that relatively few people start to use alcohol after age 25.

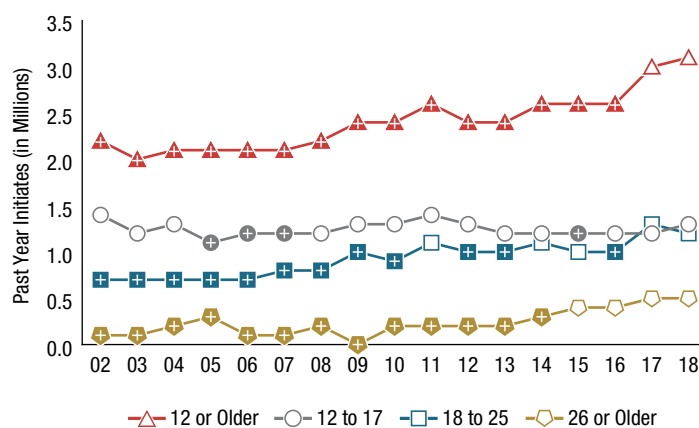
Initiation of Marijuana Use

In 2018, about 3.1 million people aged 12 or older used marijuana for the first time in the past 12 months (Figures 26 and 27). This number averages to about 8,400 new marijuana users each day (Table A.3A). The 2018 estimate for the number of past year initiates of marijuana use was higher than the estimates in 2002 to 2016, but it was similar to the estimate in 2017.

In 2018, an estimated 1.3 million adolescents aged 12 to 17 used marijuana for the first time in the past year (Figure 27), which translates to approximately 3,700 adolescents each day who initiated marijuana use (Table A.3A). About 1.1 million to 1.4 million adolescents per year in 2002 to 2018 were recent marijuana initiates. The 2018 estimate was higher than the estimates in 2005 to 2007, but it was similar to the estimates in most years from 2008 to 2017.

In 2018, 1.2 million young adults aged 18 to 25 initiated marijuana use in the past year (Figure 27), or an average of about 3,300 recent initiates per day in this age group (Table A.3A). The 2018 estimate for the number of young adults who initiated marijuana use in the past year was higher than the estimates in most years from 2002 to 2016, but it was similar to the estimate in 2017.

Figure 27. Past Year Marijuana Initiates among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 27 Table. Past Year Marijuana Initiates among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	2.2 ⁺	2.0 ⁺	2.1 ⁺	2.1 ⁺	2.1 ⁺	2.1 ⁺	2.2 ⁺	2.4 ⁺	2.4 ⁺	2.6 ⁺	2.4 ⁺	2.4 ⁺	2.6 ⁺	2.6 ⁺	2.6 ⁺	3.0	3.1
12-17	1.4	1.2	1.3	1.1 ⁺	1.2 ⁺	1.2 ⁺	1.2	1.3	1.3	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.3
18-25	0.7 ⁺	0.7 ⁺	0.7 ⁺	0.7 ⁺	0.7 ⁺	0.8 ⁺	0.8 ⁺	1.0 ⁺	0.9 ⁺	1.1	1.0 ⁺	1.0 ⁺	1.1	1.0	1.0 ⁺	1.3	1.2
≥26	0.1 ⁺	0.1 ⁺	0.2 ⁺	0.3 ⁺	0.1 ⁺	0.1 ⁺	0.2 ⁺	0.0 ⁺	0.2 ⁺	0.2 ⁺	0.2 ⁺	0.2 ⁺	0.3 ⁺	0.4	0.4	0.5	0.5

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Note: Estimates of less than 0.05 million round to 0.0 million when shown to the nearest tenth of a million.

An estimated 525,000 adults aged 26 or older in 2018 initiated marijuana use in the past year, which rounds to the estimate of 0.5 million initiates in this age group in [Figure 27](#). This number averages to about 1,400 recent initiates per day in this age group ([Table A.3A](#)). The number of recent marijuana initiates aged 26 or older in 2018 was higher than the numbers of initiates in all years from 2002 to 2014, but it was similar to the numbers in 2015 to 2017. Consistent with the pattern for cigarette and alcohol use, the majority of people in 2018 who initiated marijuana use in the past year were aged 12 to 25.

Initiation of Cocaine Use

In 2018, an estimated 874,000 people aged 12 or older used cocaine for the first time in the past year ([Figures 26 and 28](#)). This number averages to approximately 2,400 cocaine initiates per day ([Table A.3A](#)). The number of past year initiates in 2018 for cocaine use was higher than the numbers in 2009 to 2013, but it was similar to the numbers in most recent years from 2014 to 2017.³⁸

In 2018, an estimated 74,000 adolescents aged 12 to 17 used cocaine for the first time in the past year ([Figure 28](#)). Among adolescents in 2018, the number of cocaine initiates was

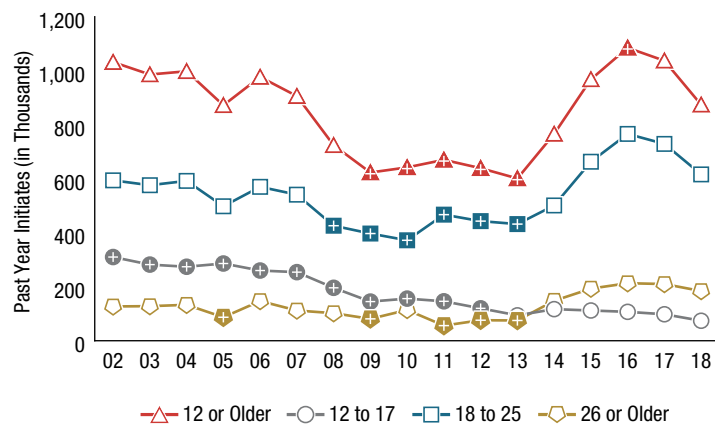
lower than the numbers in all years from 2002 to 2012, but it was similar to the numbers in 2013 to 2017.

Also, 616,000 young adults aged 18 to 25 and 184,000 adults aged 26 or older in 2018 initiated cocaine use in the past year ([Figure 28](#)). The number of young adults who initiated cocaine use each day averages to about 1,700 young adult initiates per day ([Table A.3A](#)). The number of young adult cocaine initiates in 2018 was higher than the numbers in 2008 to 2013, but it was similar to the numbers in 2014 to 2017. Among adults aged 26 or older in 2018, the number of cocaine initiates was similar to the numbers in most years from 2002 to 2008 and in all years from 2014 to 2017. However, the number in 2018 was higher than the numbers in 2011 to 2013.

Initiation of Heroin Use

In 2018, 117,000 people aged 12 or older used heroin for the first time in the past year ([Figures 26 and 29](#)). On average, this represents about 320 people each day who initiated heroin use ([Table A.3A](#)). Among people aged 12 or older in 2018, the number of past year heroin initiates was similar to the numbers of recent heroin initiates in most years from 2002 to 2017.

Figure 28. Past Year Cocaine Initiates among People Aged 12 or Older: 2002-2018



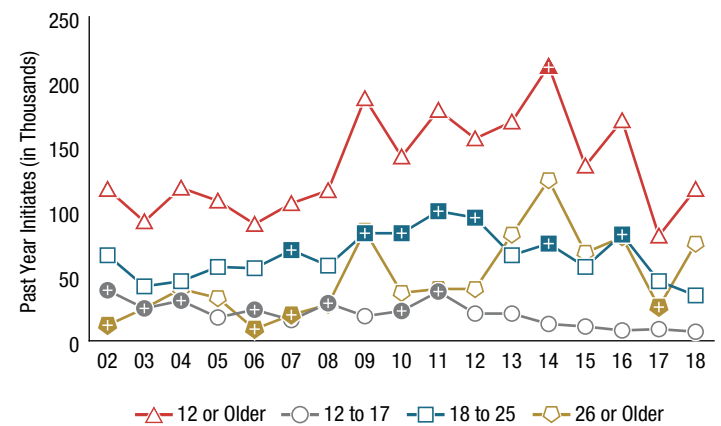
* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 28 Table. Past Year Cocaine Initiates among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	1,032	986	998	872	977	906	724	623*	642*	670*	639*	601*	766	968	1,085*	1,037	874
12-17	310*	282*	274*	286*	260*	254*	196*	145*	156*	146*	120*	94	117	112	107	98	74
18-25	594	576	592	498	570	541	426*	397*	372*	467*	443*	432*	501	663	766	729	616
≥26	127	128	133	87*	147	112	102	81*	114	56*	76*	75*	148	193	213	210	184

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 29. Past Year Heroin Initiates among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 29 Table. Past Year Heroin Initiates among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	117	92	118	108	90	106	116	187	142	178	156	169	212*	135	170	81	117
12-17	39*	25*	31*	18	24*	16	29*	19	23*	38*	21	21	13	11	8	9	7
18-25	66	42	46	57	56	70*	58	83*	83*	100*	95*	66	75*	57	82*	46	35
≥26	12*	25	40	33	9*	20*	28	85	37	40	40	82	124	68	80	26*	75

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

However, caution is advised in interpreting fluctuations in the numbers of heroin initiates in single years. The relatively small numbers of recent initiates per year can contribute to these fluctuations, especially when the estimated numbers are presented for specific age groups, as described below.³⁹

In 2018, an estimated 7,000 adolescents aged 12 to 17, 35,000 young adults aged 18 to 25, and 75,000 adults aged 26 or older used heroin for the first time in the past year (Figure 29). The number of adolescents in 2018 who were recent heroin initiates was similar to the numbers in most years between 2012 and 2017, but it was lower than the numbers in most years from 2002 to 2011.

The number of young adults aged 18 to 25 in 2018 who were past year heroin initiates was similar to the numbers in most years from 2002 to 2008 and in 2017 (Figure 29). However, the number in 2018 was lower than the numbers in 2009 to 2012. Among adults aged 26 or older in 2018, the number of past year heroin initiates was similar to the numbers in most years from 2002 to 2016, but it was higher than the estimate in 2017.

Initiation of Methamphetamine Use

In 2018, 205,000 people aged 12 or older initiated methamphetamine use in the past year (Figures 26 and 30),

Figure 30. Past Year Methamphetamine Initiates among People Aged 12 or Older: 2015-2018

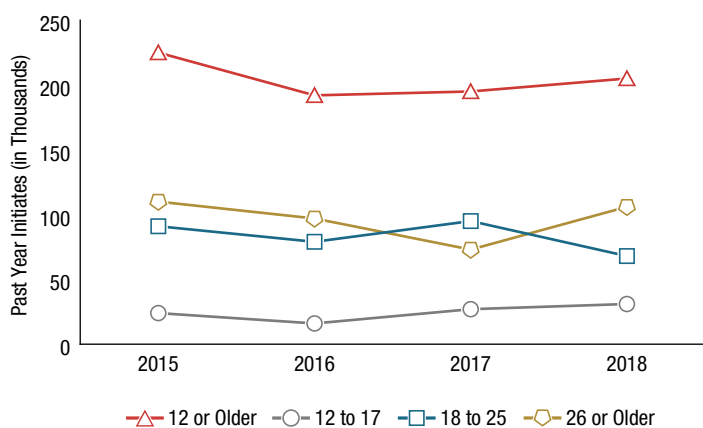


Figure 30 Table. Past Year Methamphetamine Initiates among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	225	192	195	205
12 to 17	24	16	27	31
18 to 25	91	79	95	68
26 or Older	110	97	73	106

which averages to about 560 people per day who initiated methamphetamine use (Table A.3A). The number of past year initiates in 2018 for methamphetamine use was similar to the numbers in 2015 to 2017.

In 2018, an estimated 31,000 adolescents aged 12 to 17 used methamphetamine for the first time in the past year (Figure 30). The number of adolescents in 2018 who were methamphetamine initiates was similar to the numbers in 2015 to 2017.

Also in 2018, an estimated 68,000 young adults aged 18 to 25 and 106,000 adults aged 26 or older initiated methamphetamine use in the past year (Figure 30). The number of young adults who initiated methamphetamine use averages to about 190 young adult initiates per day (Table A.3A). Among young adults and adults aged 26 or older, the numbers of methamphetamine initiates in 2018 were similar to the corresponding numbers in 2015 to 2017.

Initiation of Hallucinogen Use

In 2018, an estimated 1.1 million people aged 12 or older used hallucinogens for the first time in the past year (Figure 26).⁴⁰ This number averages to about 3,100 new hallucinogen users each day (Table A.3A). The number of past year hallucinogen initiates aged 12 or older in 2018 was similar to the numbers in 2015 to 2017 (2018 DT 7.40).

In 2018, an estimated 234,000 adolescents aged 12 to 17 used hallucinogens for the first time in the past year (2018 DT 7.41), which translates to approximately 640 adolescents each day who initiated hallucinogen use (Table A.3A). The 2018 estimate of adolescent hallucinogen initiation was lower than the estimates in 2015 to 2017. This decrease in the hallucinogen initiation among adolescents indicates a need to monitor trends to assess whether the number of initiates continues to decrease or if it returns to a level consistent with the numbers prior to 2018.

In 2018, an estimated 632,000 young adults aged 18 to 25 initiated hallucinogen use in the past year (2018 DT 7.43), or an average of about 1,700 recent initiates per day in this age group (Table A.3A). The 2018 estimate for the number of young adults who initiated hallucinogen use in the past year was similar to the estimates in 2015 to 2017.

An estimated 250,000 adults aged 26 or older in 2018 initiated hallucinogen use in the past year (2018 DT 7.44). This number averages to about 690 recent initiates per day in this age group (Table A.3A). The number of recent hallucinogen initiates aged 26 or older in 2018 was higher

than the number of initiates in 2016, but it was similar to the numbers in 2015 and 2017.

Initiation of Inhalant Use

In 2018, an estimated 576,000 people aged 12 or older had used inhalants for the first time in the past 12 months ([Figure 26](#)), which averages to about 1,600 people per day who initiated inhalant use ([Table A.3A](#)). The number of past year inhalant initiates aged 12 or older in 2018 was similar to the numbers in 2015 to 2017 (2018 DT 7.40).

In 2018, an estimated 308,000 adolescents aged 12 to 17 used inhalants for the first time in the past year (2018 DT 7.41). This number averages to approximately 840 adolescents each day who initiated inhalant use ([Table A.3A](#)). There were 210,000 young adults aged 18 to 25 who initiated inhalant use in the past year (2018 DT 7.43), or an average of 580 young adults each day who initiated inhalant use. An estimated 58,000 adults aged 26 or older used inhalants for the first time in the past year (2018 DT 7.44), or an average of about 160 initiates per day in this age group. The 2018 estimates for the numbers of adolescents, young adults, and adults aged 26 or older who initiated inhalant use in the past year were similar to the estimates for the respective age groups in 2015 to 2017.

Initiation of Stimulant Misuse

In 2018, approximately 1.0 million people aged 12 or older misused prescription stimulants for the first time in the past year ([Figure 26](#)). This estimated number of initiates averages to about 2,700 initiates per day for prescription stimulant misuse ([Table A.3A](#)). The number of initiates of stimulant misuse aged 12 or older in 2018 was lower than the numbers in 2015 and 2016, but it was similar to the number in 2017 (2018 DT 7.40).

Approximately 181,000 adolescents aged 12 to 17 in 2018 misused prescription stimulants for the first time in the past year (2018 DT 7.41). This number averages to approximately 500 adolescents each day who initiated stimulant misuse ([Table A.3A](#)). The number of adolescents in 2018 who initiated stimulant misuse was lower than the number in 2015, but it was similar to the numbers in 2016 and 2017.

There were 517,000 young adults aged 18 to 25 in 2018 who initiated prescription stimulant misuse in the past year (2018 DT 7.43), or an average of 1,400 young adults each day who initiated stimulant misuse ([Table A.3A](#)). The

number of young adults in 2018 who initiated stimulant misuse was similar to the numbers in 2015 to 2017.

In 2018, about 302,000 adults aged 26 or older misused prescription stimulants for the first time in the past year (2018 DT 7.44), which averages to about 830 new misusers in this age group each day ([Table A.3A](#)). The number of adults aged 26 or older in 2018 who initiated stimulant misuse was lower than the number in 2016, but it was similar to the numbers in 2015 and 2017.

Initiation of Tranquilizer or Sedative Misuse

Although this report includes combined estimates for the past year misuse of prescription tranquilizers or sedatives, estimates for the initiation of misuse of these substances are presented separately in this section. As noted previously, it cannot be determined unambiguously whether respondents were past year initiates for the aggregate category of any tranquilizer or sedative misuse because of the potential for respondents to underreport the misuse of prescription drugs that occurred more than 12 months ago.

Initiation of Tranquilizer Misuse

About 1.2 million people aged 12 or older in 2018 misused prescription tranquilizers for the first time in the past year ([Figure 26](#)). This number averages to about 3,300 initiates per day ([Table A.3A](#)). The number of tranquilizer misuse initiates aged 12 or older in 2018 was similar to the numbers in 2015 to 2017 (2018 DT 7.40).

Approximately 215,000 adolescents aged 12 to 17 in 2018 misused prescription tranquilizers for the first time in the past year (2018 DT 7.41). This number averages to approximately 590 adolescents each day who initiated tranquilizer misuse ([Table A.3A](#)). The number of adolescents in 2018 who initiated tranquilizer misuse was similar to the numbers in 2015 to 2017.

There were 434,000 young adults aged 18 to 25 in 2018 who initiated prescription tranquilizer misuse in the past year (2018 DT 7.43), or an average of 1,200 young adults each day who initiated tranquilizer misuse ([Table A.3A](#)). The number of young adults who initiated tranquilizer misuse in 2018 was similar to the numbers in 2015 and 2017, but it was lower than the number in 2016.

In 2018, about 560,000 adults aged 26 or older misused prescription tranquilizers for the first time in the past year (2018 DT 7.44), which averages to about 1,500 new misusers in this age group each day ([Table A.3A](#)). The number of

adults aged 26 or older in 2018 who initiated tranquilizer misuse was similar to the numbers in 2015 to 2017.

Initiation of Sedative Misuse

In 2018, approximately 251,000 people aged 12 or older misused prescription sedatives for the first time in the past year (Figure 26). This estimated number of initiates averages to about 690 initiates per day for prescription sedative misuse (Table A.3A). The number of sedative misuse initiates aged 12 or older in 2018 was similar to the numbers in 2016 and 2017, but it was lower than in 2015 (2018 DT 7.40).

In 2018, an estimated 36,000 adolescents aged 12 to 17 misused prescription sedatives for the first time in the past year (2018 DT 7.41). This number averages to approximately 100 adolescents each day who initiated sedative misuse (Table A.3A). The number of adolescents in 2018 who initiated sedative misuse was similar to the numbers in 2015 to 2017.

There were 73,000 young adults aged 18 to 25 in 2018 who initiated prescription sedative misuse in the past year (2018 DT 7.43), or an average of 200 young adults each day (Table A.3A). The number of young adults in 2018 who initiated sedative misuse was similar to the numbers in 2015 to 2017.

In 2018, about 143,000 adults aged 26 or older misused prescription sedatives for the first time in the past year (2018 DT 7.44), which averages to about 390 new sedative misusers in this age group each day (Table A.3A). The number of adults aged 26 or older in 2018 who initiated sedative misuse was similar to the numbers in 2016 and 2017, but it was lower than the number in 2015.

Initiation of Pain Reliever Misuse

In 2018, the number of recent initiates of prescription pain reliever misuse (1.9 million) in the past year was the second highest among the illicit drugs, after the number of marijuana initiates (Figures 26 and 31). The number of people aged 12 or older who misused prescription pain relievers for the first time in the past year averages to about 5,200 initiates per day (Table A.3A). The number of pain reliever misuse initiates aged 12 or older in 2018 was similar to the numbers in 2015 to 2017.

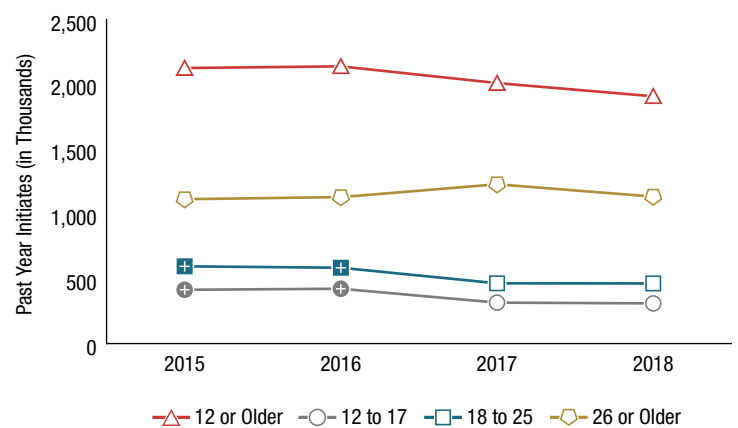
In 2018, approximately 310,000 adolescents aged 12 to 17 misused prescription pain relievers for the first time in the past year (Figure 31). This number averages to approximately

850 adolescents each day who initiated prescription pain reliever misuse (Table A.3A). The number of adolescents in 2018 who initiated pain reliever misuse was lower than the numbers in 2015 and 2016, but it was similar to the number in 2017.

An estimated 464,000 young adults aged 18 to 25 in 2018 initiated prescription pain reliever misuse in the past year (Figure 31), or an average of about 1,300 young adults each day who initiated pain reliever misuse (Table A.3A). The number of young adults in 2018 who initiated pain reliever misuse was lower than the numbers in 2015 and 2016, but it was similar to the number in 2017.

In 2018, about 1.1 million adults aged 26 or older initiated prescription pain reliever misuse in the past year (Figure 31). This number averages to about 3,100 adults in this age group each day who initiated pain reliever misuse (Table A.3A). Unlike the patterns for cigarette, alcohol, and marijuana use, the majority of the people in 2018 who initiated pain reliever misuse were aged 26 or older. The number of adults in this age group in 2018 who were pain reliever misuse initiates was similar to the numbers in 2015 to 2017.

Figure 31. Past Year Prescription Pain Reliever Misuse Initiates among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 31 Table. Past Year Prescription Pain Reliever Misuse Initiates among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	2,126	2,139	2,010	1,908
12 to 17	415+	423+	316	310
18 to 25	596+	585+	465	464
26 or Older	1,114	1,130	1,229	1,134

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

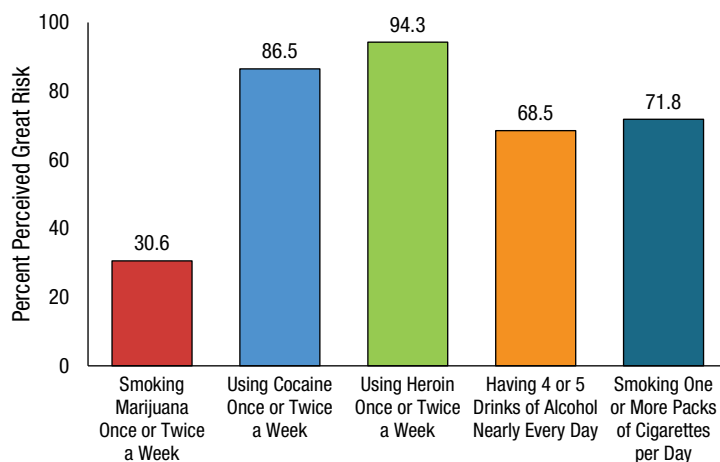
Perceived Risk from Substance Use

One factor that can influence whether individuals will use tobacco, alcohol, or illicit drugs is the extent to which they believe that using these substances might cause them harm. NSDUH respondents were asked how much they thought people risk harming themselves physically and in other ways when they use various substances in certain amounts or frequencies. Response choices for these items were “great risk,” “moderate risk,” “slight risk,” or “no risk.” Depending on the substance, respondents were asked about their perceived risk of harm from using a substance daily or using a substance once or twice a week (i.e., weekly use).

Figure 32 presents the percentages of people aged 12 or older in 2018 who perceived great risk of harm from the use of various substances. In this report, the various risk measures are presented for each age group. Risk perceptions across substances are not compared because of variations in the quantity and frequency of use across these substances.⁴¹ The 2018 NSDUH detailed tables include additional measures of risk perceptions from substance use.

In 2018, an estimated 71.8 percent of people aged 12 or older perceived great risk of harm from smoking one or more packs of cigarettes per day (Figure 32). The percentage of the population in 2018 who perceived great risk from smoking one or more packs of cigarettes per day was similar to the percentage in 2017, but it was lower than the percentages in 2015 and 2016 (2018 DT 7.33). Although the percentage of the population who perceived great risk from smoking one or more packs of cigarettes a day was lower in 2018 than in 2015 and 2016, more than 70 percent of the population in each year thought this behavior was harmful.

Figure 32. Perceived Great Risk from Substance Use among People Aged 12 or Older: 2018



About 2 out of 3 people aged 12 or older in 2018 (68.5 percent) perceived great risk of harm from having four or five drinks of alcohol nearly every day (Figure 32). For brevity, this level of alcohol consumption on a single day is subsequently referred to as “daily binge drinking.”²⁰ The percentage of the population in 2018 who perceived great risk of harm from daily binge drinking was similar to the percentages in 2015 to 2017 (2018 DT 7.33).

About one third of people aged 12 or older in 2018 (30.6 percent) perceived great risk of harm from smoking marijuana once or twice a week (Figure 32). For brevity, this level of consumption in a week is referred to as “weekly use.” The percentage of the population in 2018 who perceived great risk of harm from weekly marijuana use was lower than the percentages in 2015 to 2017 (2018 DT 7.33).

In 2018, an estimated 86.5 percent of people aged 12 or older perceived great risk of harm from weekly cocaine use (Figure 32). The 2018 percentage of the population who perceived great risk of harm from weekly cocaine use was similar to that in 2017, but it was lower than the percentages in 2015 and 2016 (2018 DT 7.33). Although the percentage of the population in 2018 who perceived great risk from weekly cocaine use was lower than the percentage in 2015 and 2016, more than 85 percent in each year thought this behavior was harmful.

In 2018, an estimated 94.3 percent of people aged 12 or older perceived great risk of harm from weekly heroin use (Figure 32). The percentage of the population in 2018 who perceived great risk of harm from weekly heroin use was similar to the percentages in 2015 to 2017 (2018 DT 7.33). More than 90 percent in each year from 2015 to 2018 perceived great risk from weekly heroin use.

Perceived Risk from Substance Use among Adolescents

In 2018, about 2 out of 3 adolescents aged 12 to 17 perceived great risk of harm from smoking one or more packs of cigarettes per day (65.3 percent) and from having four or five drinks of alcohol nearly every day (64.4 percent) (Figure 33). The percentage of adolescents in 2018 who perceived great risk from daily binge drinking was similar to the percentages in 2015 to 2017. Although the percentage of adolescents in 2018 who perceived great risk of harm from smoking one or more packs of cigarettes per day was lower than the percentages in 2015 to 2017, about two thirds of adolescents in each year thought this behavior was harmful.

About 1 in 3 adolescents aged 12 to 17 in 2018 perceived great risk of harm from smoking marijuana weekly (34.9 percent). About 4 out of 5 adolescents (79.6 percent) perceived great risk of harm from weekly cocaine use, and 5 out of 6 (83.0 percent) perceived great risk from weekly heroin use (Figure 33). The percentage of adolescents in 2018 who perceived great risk from weekly marijuana use was lower than the percentages in 2015 to 2017. In contrast, the percentages of adolescents in 2018 who perceived great risk from weekly cocaine use or weekly heroin use were similar to the corresponding percentages in 2015 to 2017.

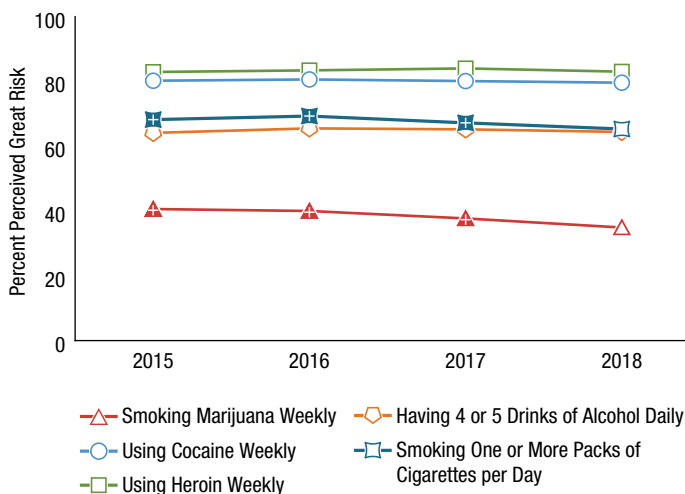
In 2018, adolescents aged 12 to 17 were less likely than young adults aged 18 to 25 or adults aged 26 or older to perceive great risk from using heroin or cocaine weekly. For example, 83.0 percent of adolescents perceived great risk of harm from weekly heroin use (Figure 33) compared with 93.3 percent of young adults (Figure 34) and 95.7 percent of adults aged 26 or older (2018 DT 7.37). An estimated 79.6 percent of adolescents perceived great risk from weekly cocaine use compared with 82.6 percent of young adults and 87.9 percent

of adults aged 26 or older. Additional data on finer age group categories that can be found in the 2018 detailed tables (available at <https://www.samhsa.gov/data/>) indicate that the lower likelihood of adolescents than adults to perceive great risk of harm from cocaine and heroin use may be attributable to a general lack of knowledge about these substances among adolescents because younger adolescents aged 12 or 13 tended to have lower perceptions of the risk of harm compared with older adolescents or adults.

Perceived Risk from Substance Use among Young Adults

In 2018, about 2 out of 3 young adults aged 18 to 25 (67.5 percent) perceived great risk of harm from smoking one or more packs of cigarettes per day, and more than 2 out of 5 (63.4 percent) perceived great risk from daily binge drinking (Figure 34). The percentages of young adults in 2018 who perceived great risk from smoking one or more packs of cigarettes per day and from daily binge drinking were similar to the corresponding percentages in 2015 to 2017.

Figure 33. Perceived Great Risk from Substance Use among Youths Aged 12 to 17: 2015-2018



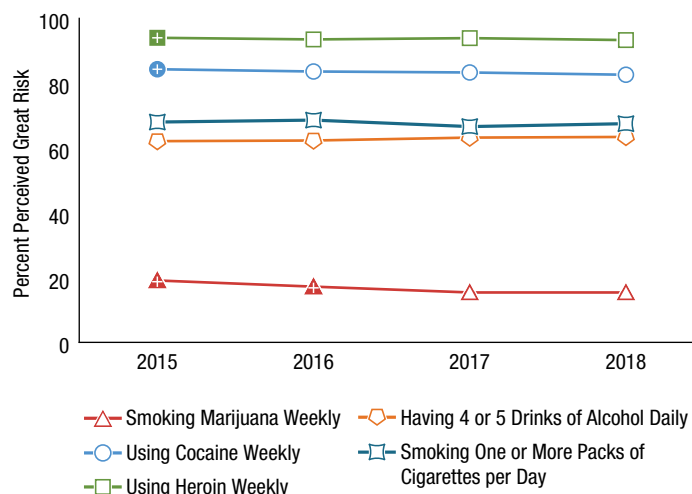
⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 33 Table. Perceived Great Risk from Substance Use among Youths Aged 12 to 17: 2015-2018

Substance Use	2015	2016	2017	2018
Smoking Marijuana Once or Twice a Week	40.6 ⁺	40.0 ⁺	37.7 ⁺	34.9
Using Cocaine Once or Twice a Week	80.2	80.6	80.1	79.6
Using Heroin Once or Twice a Week	82.9	83.4	84.0	83.0
Having 4 or 5 Drinks of Alcohol Nearly Every Day	64.1	65.5	65.2	64.4
Smoking One or More Packs of Cigarettes per Day	68.2 ⁺	69.3 ⁺	67.2 ⁺	65.3

⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 34. Perceived Great Risk from Substance Use among Young Adults Aged 18 to 25: 2015-2018



⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 34 Table. Perceived Great Risk from Substance Use among Young Adults Aged 18 to 25: 2015-2018

Substance Use	2015	2016	2017	2018
Smoking Marijuana Once or Twice a Week	19.1 ⁺	17.2 ⁺	15.4	15.4
Using Cocaine Once or Twice a Week	84.3 ⁺	83.6	83.3	82.6
Using Heroin Once or Twice a Week	94.0 ⁺	93.5	93.9	93.3
Having 4 or 5 Drinks of Alcohol Nearly Every Day	62.1	62.3	63.2	63.4
Smoking One or More Packs of Cigarettes per Day	68.0	68.6	66.6	67.5

⁺ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

An estimated 15.4 percent of young adults aged 18 to 25 in 2018 perceived great risk of harm from smoking marijuana weekly (Figure 34). More than 4 out of 5 young adults perceived great risk from weekly cocaine use (82.6 percent), and more than 9 out of 10 (93.3 percent) perceived great risk from weekly heroin use. The percentages of young adults in 2018 who perceived great risk from weekly cocaine use or weekly heroin use were similar to the percentages in 2016 and 2017 but were lower than the percentages in 2015. For weekly marijuana use, the percentage of young adults in 2018 who perceived great risk of harm was lower than the percentages in 2015 and 2016 but was similar to the percentage in 2017.

In 2018, young adults aged 18 to 25 were less likely than adolescents aged 12 to 17 or adults aged 26 or older to perceive great risk of harm from smoking marijuana weekly. Compared with the estimated 15.4 percent of young adults who perceived great risk from smoking marijuana weekly (Figure 34), 34.9 percent of adolescents (Figure 33) and 32.5 percent of adults aged 26 or older (2018 DT 7.37) perceived great risk from smoking marijuana weekly.

Perceived Risk from Substance Use among Adults Aged 26 or Older

In 2018, about 3 out of 4 adults aged 26 or older perceived great risk of harm from smoking one or more packs of cigarettes per day (73.2 percent), and about 7 out of 10 (69.7 percent) perceived great risk from having four or five drinks of alcohol nearly every day (2018 DT 7.37). Similar percentages of adults in this age group in 2015 to 2018 perceived great risk from daily binge drinking. Although the percentage of adults in this age group who perceived great risk from smoking one or more packs of cigarettes a day was lower in 2018 than in 2015, nearly three fourths of adults in this age group in each year thought this behavior was harmful.

Among adults aged 26 or older in 2018, 32.5 percent perceived great risk of harm from smoking marijuana weekly, 87.9 percent perceived great risk from weekly cocaine use, and 95.7 percent perceived great risk from weekly heroin use (2018 DT 7.37). More than 95 percent of adults in this age group in each year from 2015 to 2018 perceived great risk from weekly heroin use. Although the percentage of adults in this age group in 2018 who perceived great risk from weekly cocaine use was lower than the percentage in 2015, nearly 90 percent of adults in this age group in each year thought this behavior was harmful. Unlike risk perceptions for these other substances, the percentage of adults in this age group

in 2018 who perceived great risk from weekly marijuana use was lower than the percentages in 2015 to 2017.

In 2018, adults aged 26 or older were more likely than adolescents aged 12 to 17 and young adults aged 18 to 25 to perceive great risk from smoking one or more packs of cigarettes per day (73.2 percent for adults aged 26 or older vs. 65.3 percent for adolescents and 67.5 percent for young adults) (2018 DT 7.37; Figures 33 and 34). Nevertheless, about two thirds or more of people in each age group perceived great risk from smoking a pack or more of cigarettes per day.

Substance Use Disorders in the Past Year

Substance use disorders (SUDs) are characterized by impairment caused by the recurrent use of alcohol or other drugs (or both), including health problems, disability, and failure to meet major responsibilities at work, school, or home. NSDUH includes a series of questions to estimate the percentage of the population aged 12 or older who had at least one SUD in the past 12 months (subsequently referred to as “an SUD” or “a past year SUD,” except when “SUDs” refer to more than one substance, such as SUDs for the misuse of specific prescription drugs). Respondents were asked SUD questions if they previously reported use of alcohol or illicit drugs in the past 12 months. Illicit drugs include the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, and methamphetamine, as well as the misuse of prescription stimulants, tranquilizers or sedatives (including benzodiazepines), and pain relievers. The SUD questions classify people as having an SUD in the past 12 months based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV).^{42,43}

This section presents SUD estimates for the most common disorders among the population aged 12 or older. Less common SUD estimates are not discussed in this report (e.g., inhalant use disorder). However, trend data for these SUD measures are available in Tables 7.45 to 7.49 in the 2018 NSDUH detailed tables for the population aged 12 or older and by age group.

Alcohol Use Disorder

Alcohol use disorder was defined as meeting DSM-IV criteria for either dependence or abuse for alcohol. Respondents who used alcohol on 6 or more days in the past 12 months were defined as having dependence if they met three or more of the following seven dependence criteria:

1. spent a lot of time engaging in activities related to alcohol use,
2. used alcohol in greater quantities or for a longer time than intended,
3. developed tolerance,
4. made unsuccessful attempts to cut down on use,
5. continued use despite physical health or emotional problems associated with alcohol use,
6. reduced or eliminated participation in other activities because of alcohol use, and
7. experienced withdrawal symptoms when cutting back or stopping use.

Respondents who used alcohol on 6 or more days in the past 12 months and did not meet criteria for alcohol dependence were defined as having abuse if they reported one or more of the following:

1. problems at work, home, or school because of alcohol use;
2. regularly using alcohol and then doing something physically dangerous;
3. repeated trouble with the law because of alcohol use; and
4. continued use of alcohol despite problems with family or friends.

An estimated 14.8 million people aged 12 or older in 2018 had an alcohol use disorder, which corresponds to 5.4 percent of the population (Figure 35), or about 1 in 19 people. The percentage of people aged 12 or older in 2018 with an alcohol use disorder was lower than the percentages in 2002 to 2015, but it was similar to the percentages in 2016 and 2017.

Aged 12 to 17

An estimated 401,000 adolescents aged 12 to 17 in 2018 had a past year alcohol use disorder, or 1.6 percent of adolescents (Figure 35). The percentage of adolescents in 2018 with an alcohol use disorder was lower than the percentages in 2002 to 2015, but it was similar to the percentages in 2016 and 2017.

Aged 18 to 25

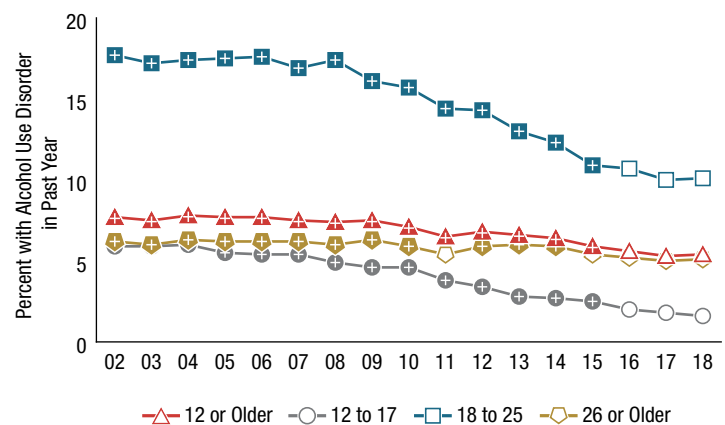
Approximately 3.4 million young adults aged 18 to 25 in 2018 had an alcohol use disorder in the past year. This number of young adults with an alcohol use disorder corresponds to 10.1 percent of young adults (Figure 35). The percentage of young adults in 2018 with an alcohol use disorder was lower

than the percentages in 2002 to 2015, but it was similar to the percentages in 2016 and 2017. Nevertheless, 1 in 10 young adults in 2018 had an alcohol use disorder.

Aged 26 or Older

In 2018, approximately 11.0 million adults aged 26 or older had an alcohol use disorder in the past year, which corresponds to 5.1 percent of the adults in this age group (Figure 35). The percentage of adults aged 26 or older in 2018 with an alcohol use disorder was lower than the percentages in most years from 2002 to 2014, but it was similar to the percentages in 2015 to 2017.

Figure 35. Alcohol Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 35 Table. Alcohol Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	7.7 ⁺	7.5 ⁺	7.8 ⁺	7.7 ⁺	7.7 ⁺	7.5 ⁺	7.4 ⁺	7.5 ⁺	7.1 ⁺	6.5 ⁺	6.8 ⁺	6.6 ⁺	6.4 ⁺	5.9 ⁺	5.6	5.3	5.4
12-17	5.9 ⁺	5.9 ⁺	6.0 ⁺	5.5 ⁺	5.4 ⁺	5.4 ⁺	4.9 ⁺	4.6 ⁺	4.6 ⁺	3.8 ⁺	3.4 ⁺	2.8 ⁺	2.7 ⁺	2.5 ⁺	2.0	1.8	1.6
18-25	17.7 ⁺	17.2 ⁺	17.4 ⁺	17.5 ⁺	17.6 ⁺	16.9 ⁺	17.4 ⁺	16.1 ⁺	15.7 ⁺	14.4 ⁺	14.3 ⁺	13.0 ⁺	12.3 ⁺	10.9 ⁺	10.7	10.0	10.1
≥26	6.2 ⁺	6.0 ⁺	6.3 ⁺	6.2 ⁺	6.2 ⁺	6.2 ⁺	6.0 ⁺	6.3 ⁺	5.9 ⁺	5.4	5.9 ⁺	6.0 ⁺	5.9 ⁺	5.4	5.2	5.0	5.1

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Illicit Drug Use Disorder

This section presents overall estimates for illicit drug use disorder, then provides SUD estimates for selected specific illicit drugs. Illicit drug use disorder is defined as meeting DSM-IV criteria for either dependence or abuse for one or more of the following illicit drugs: marijuana, cocaine, heroin, hallucinogens, inhalants, methamphetamine, or prescription psychotherapeutic drugs that were misused (i.e., stimulants, tranquilizers or sedatives, and pain relievers).⁴⁴ There are seven possible dependence criteria for specific illicit drugs:

1. spent a lot of time engaging in activities related to use of the drug,
2. used the drug in greater quantities or for a longer time than intended,
3. developed tolerance to the drug,
4. made unsuccessful attempts to cut down on use of the drug,
5. continued to use the drug despite physical health or emotional problems associated with use,
6. reduced or eliminated participation in other activities because of use of the drug, and
7. experienced withdrawal symptoms when respondents cut back or stopped using the drug.

For most illicit drugs, dependence is defined as meeting three or more of these seven criteria. However, experiencing withdrawal symptoms is not included as a criterion for some illicit drugs based on DSM-IV criteria. For these substances, dependence is defined as meeting three or more of the first six criteria.

Respondents who used (or misused) a specific illicit drug in the past 12 months and did not meet the dependence criteria for that drug were defined as having abuse for that drug if they reported one or more of the following:

1. problems at work, home, or school because of use of the drug;
2. regularly using the drug and then doing something physically dangerous;
3. repeated trouble with the law because of use of the drug; and
4. continued use of the drug despite problems with family or friends.

Application of these criteria is discussed briefly in the respective SUD sections for specific illicit drugs. Detailed definitions for SUDs for specific illicit drugs also can be found in a glossary of key definitions for the 2018 NSDUH.⁹

In 2018, an estimated 8.1 million people aged 12 or older had at least one illicit drug use disorder. This number of people with an illicit drug use disorder corresponds to 3.0 percent of the population (Figure 36). The percentage of people aged 12 or older in 2018 with an illicit drug use disorder was similar to the percentages in 2015 to 2017.

Aged 12 to 17

An estimated 681,000 adolescents aged 12 to 17 in 2018 had a past year illicit drug use disorder, or 2.7 percent of adolescents (Figure 36). The percentage of adolescents in 2018 with an illicit drug use disorder was lower than the percentage in 2015, but it was similar to the percentages in 2016 and 2017.

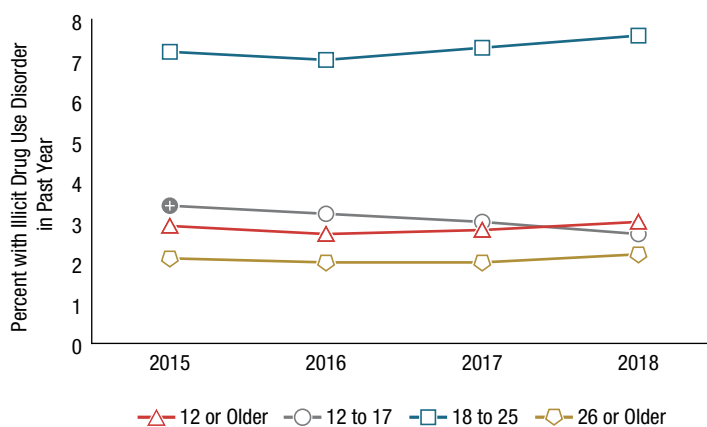
Aged 18 to 25

Approximately 2.6 million young adults aged 18 to 25 in 2018 had an illicit drug use disorder in the past year. This number of young adults with an illicit drug use disorder corresponds to 7.6 percent of young adults (Figure 36). The percentage of young adults in 2018 with an illicit drug use disorder was similar to the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, approximately 4.8 million adults aged 26 or older had an illicit drug use disorder in the past year, corresponding to 2.2 percent of the adults in this age group (Figure 36). The percentage of adults aged 26 or older in 2018 with an illicit drug use disorder was similar to the percentages in 2015 to 2017.

Figure 36. Illicit Drug Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 36 Table. Illicit Drug Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	2.9	2.7	2.8	3.0
12 to 17	3.4*	3.2	3.0	2.7
18 to 25	7.2	7.0	7.3	7.6
26 or Older	2.1	2.0	2.0	2.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Marijuana Use Disorder

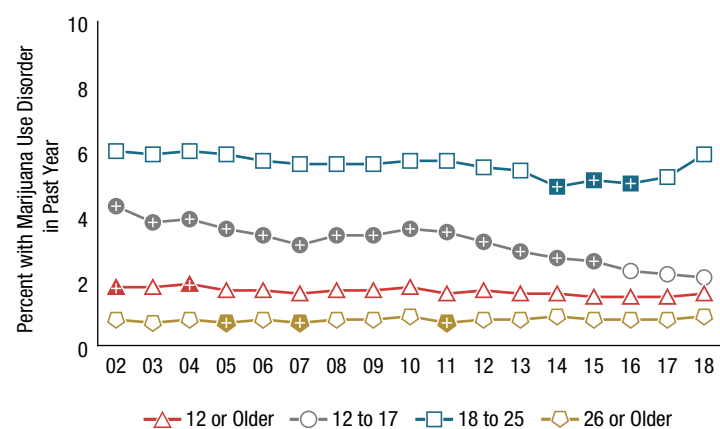
Marijuana use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of marijuana, including health problems, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who used marijuana on 6 or more days in the past 12 months were categorized as having a marijuana use disorder if they met the DSM-IV criteria for either dependence or abuse for marijuana. Dependence and abuse criteria for illicit drugs (including marijuana) were described previously.

Approximately 4.4 million people aged 12 or older in 2018 had a marijuana use disorder in the past year, which corresponds to 1.6 percent of the population (Figure 37). The percentage of the population aged 12 or older in 2018 with a marijuana use disorder was similar to the percentages in most years between 2002 and 2017.

Aged 12 to 17

In 2018, an estimated 2.1 percent of adolescents aged 12 to 17 had a marijuana use disorder in the past year (Figure 37), or about 512,000 adolescents. The percentage of adolescents in 2018 with a marijuana use disorder was lower than

Figure 37. Marijuana Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 37 Table. Marijuana Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	1.8*	1.8	1.9*	1.7	1.7	1.6	1.7	1.7	1.8	1.6	1.7	1.6	1.6	1.5	1.5	1.5	1.6
12-17	4.3*	3.8*	3.9*	3.6*	3.4*	3.1*	3.4*	3.4*	3.6*	3.5*	3.2*	2.9*	2.7*	2.6*	2.3	2.2	2.1
18-25	6.0	5.9	6.0	5.9	5.7	5.6	5.6	5.6	5.7	5.7	5.5	5.4	4.9*	5.1*	5.0*	5.2	5.9
≥26	0.8	0.7	0.8	0.7*	0.8	0.7*	0.8	0.8	0.9	0.7*	0.8	0.8	0.9	0.8	0.8	0.8	0.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

the percentages in 2002 to 2015, but it was similar to the percentages in 2016 and 2017.

Aged 18 to 25

Approximately 2.0 million young adults aged 18 to 25 in 2018 had a marijuana use disorder in the past year, or 5.9 percent of young adults (Figure 37). The percentage of young adults in 2018 with a marijuana use disorder was similar to the corresponding percentages in 2002 through 2013 and 2017, but it was higher than the percentages between 2014 and 2016.

Aged 26 or Older

In 2018, approximately 1.9 million adults aged 26 or older had a marijuana use disorder in the past year, or 0.9 percent of adults in this age group (Figure 37). The 2018 percentage of adults aged 26 or older with a marijuana use disorder was similar to the percentages in most years between 2002 and 2017.

Cocaine Use Disorder

Cocaine use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of cocaine, including health problems, physical withdrawal, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who used cocaine or crack in the past 12 months were categorized as having a cocaine use disorder if they met the DSM-IV criteria for either dependence or abuse for cocaine. Dependence and abuse criteria for illicit drugs (including cocaine) were described previously.

About 977,000 people aged 12 or older in 2018 had a cocaine use disorder in the past year. This number of people with a cocaine use disorder corresponds to 0.4 percent of the population (Figure 38). The percentage of the population aged 12 or older in 2018 with a cocaine use disorder was similar to the percentages in 2009 to 2017, but it was lower than the percentages from 2002 to 2008.

Aged 12 to 17

Less than 0.1 percent of adolescents aged 12 to 17 in 2018 had a cocaine use disorder in the past year (Figure 38), or about 5,000 adolescents. The percentage of adolescents in 2018 with a cocaine use disorder was lower than the percentages in all years from 2002 to 2017.

Aged 18 to 25

Approximately 212,000 young adults aged 18 to 25 in 2018 had a cocaine use disorder in the past year. This number

of young adults with a cocaine use disorder corresponds to 0.6 percent of young adults (Figure 38). The percentage of young adults in 2018 with a cocaine use disorder was lower than the percentages in 2002 to 2009, but it was similar to the percentages from 2010 to 2017.

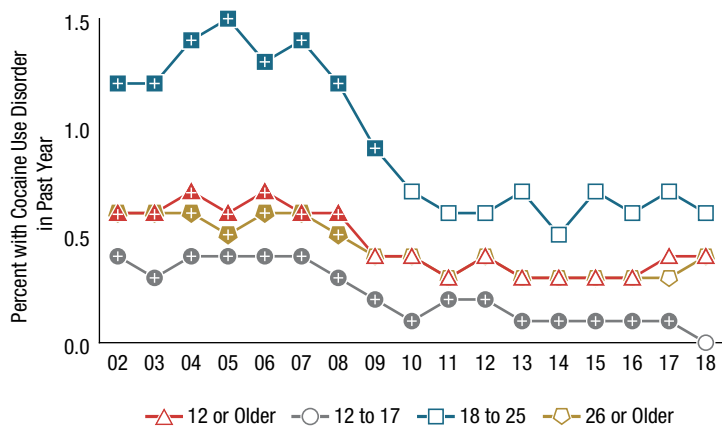
Aged 26 or Older

In 2018, approximately 760,000 adults aged 26 or older had a cocaine use disorder in the past year, which corresponds to 0.4 percent of adults in this age group (Figure 38). The percentage of adults aged 26 or older in 2018 with a cocaine use disorder was lower than the percentages from 2002 to 2008, but it was similar to the percentages between 2009 and 2017.

Heroin Use Disorder

Heroin use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of heroin, including health problems, physical withdrawal, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who used heroin in the past 12 months were categorized as having a heroin use disorder if they met the DSM-IV criteria for either dependence or abuse for heroin.

Figure 38. Cocaine Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 38 Table. Cocaine Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	0.6*	0.6*	0.7*	0.6*	0.7*	0.6*	0.6*	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4
12-17	0.4*	0.3*	0.4*	0.4*	0.4*	0.4*	0.3*	0.2*	0.1*	0.2*	0.2*	0.1*	0.1*	0.1*	0.1*	0.1*	0.0
18-25	1.2*	1.2*	1.4*	1.5*	1.3*	1.4*	1.2*	0.9*	0.7	0.6	0.6	0.7	0.5	0.7	0.6	0.7	0.6
≥26	0.6*	0.6*	0.6*	0.5*	0.6*	0.6*	0.5*	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.
Note: Estimates of less than 0.05 percent round to 0.0 percent when shown to the nearest tenth of a percent.

Dependence and abuse criteria for illicit drugs (including heroin) were described previously.

About 526,000 people aged 12 or older in 2018 had a heroin use disorder. This number of people with a heroin use disorder corresponds to 0.2 percent of the population (Figure 39). The percentage of people in 2018 with a heroin use disorder was higher than the percentages in most years from 2002 to 2008, but it was similar to the percentages from 2009 to 2017. Although the percentages in some earlier years were lower than in 2018, all percentages from 2002 to 2018 were 0.2 percent or less.

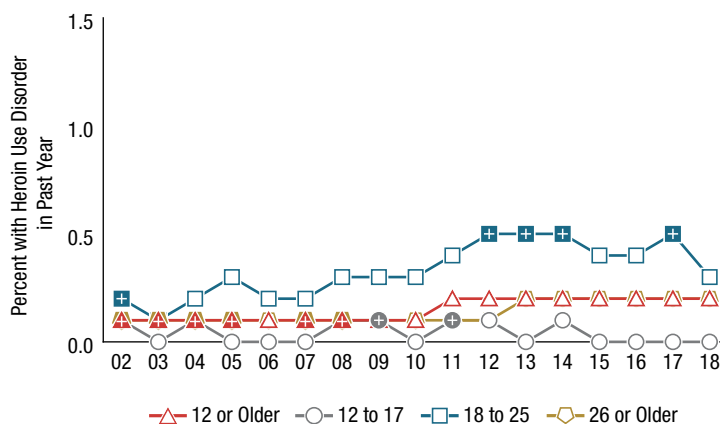
Aged 12 to 17

Less than 0.1 percent of adolescents aged 12 to 17 in 2018 had a heroin use disorder in the past year (Figure 39), which corresponds to about 4,000 adolescents. The percentage of adolescents in 2018 with a heroin use disorder was similar to the percentages in most years from 2002 to 2017.

Aged 18 to 25

Approximately 101,000 young adults aged 18 to 25 in 2018 had a heroin use disorder in the past year, which corresponds to 0.3 percent of young adults (Figure 39). The percentage of young adults in 2018 with a heroin use disorder was lower than

Figure 39. Heroin Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 39 Table. Heroin Use Disorder in the Past Year among People Aged 12 or Older: 2002-2018

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
≥12	0.1*	0.1*	0.1*	0.1*	0.1	0.1*	0.1*	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
12-17	0.1	0.0	0.1*	0.0	0.0	0.0	0.1*	0.1*	0.0	0.1*	0.1	0.0	0.1	0.0	0.0	0.0	0.0
18-25	0.2*	0.1*	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5*	0.5*	0.4	0.4	0.4	0.5*	0.3
≥26	0.1*	0.1*	0.1*	0.1*	0.1	0.1*	0.1*	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.
Note: Estimates of less than 0.05 percent round to 0.0 percent when shown to the nearest tenth of a percent.

the percentages in most years from 2011 to 2017 (ranging from 0.4 to 0.5 percent), but it was similar to the percentages from 2004 to 2010 (ranging from 0.2 to 0.3 percent). Compared with 2002 and 2003, there was a higher percentage of young adults in 2018 with a heroin use disorder.

Aged 26 or Older

In 2018, approximately 421,000 adults aged 26 or older had a heroin use disorder in the past year, which corresponds to 0.2 percent of adults in this age group (Figure 39). Between 2002 and 2018, 0.1 to 0.2 percent of adults aged 26 or older had a heroin use disorder in the past year. The 2018 estimate was higher than the estimates in most years from 2002 to 2008, but it was similar to the estimates between 2009 and 2017.

Methamphetamine Use Disorder

Respondents were asked questions about SUD symptoms that they attributed specifically to their use of methamphetamine. Methamphetamine use disorder does not include disorders based on the misuse of prescription stimulants because, starting in 2015, these concepts were measured and reported separately.

Methamphetamine use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of methamphetamine, including health problems, physical withdrawal, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who used methamphetamine in the past 12 months were categorized as having a methamphetamine use disorder if they met the DSM-IV criteria for either dependence or abuse for methamphetamine. Dependence and abuse criteria for illicit drugs (including methamphetamine) were described previously.

In 2018, an estimated 1.1 million people aged 12 or older had a methamphetamine use disorder. This number of people with a methamphetamine use disorder corresponds to about 0.4 percent of the population (2018 DT 7.45). The percentage of people aged 12 or older in 2018 with a methamphetamine use disorder was higher than the percentage in 2016, but it was similar to the percentages in 2015 and 2017.

Aged 12 to 17

An estimated 0.1 percent of adolescents aged 12 to 17 had a methamphetamine use disorder in the past year (2018

DT 7.46), which represents about 18,000 adolescents. The percentage of adolescents in 2018 with a methamphetamine use disorder was similar to the percentages in 2015 to 2017.

Aged 18 to 25

Approximately 134,000 young adults aged 18 to 25 in 2018 had a methamphetamine use disorder in the past year, which corresponds to 0.4 percent of young adults (2018 DT 7.48). The percentage of young adults in 2018 with a methamphetamine use disorder was similar to the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, 0.4 percent of adults aged 26 or older had a methamphetamine use disorder (2018 DT 7.49). This percentage represents approximately 899,000 adults in this age group. The 2018 methamphetamine use disorder estimate among adults aged 26 or older was higher than the estimate in 2016, but it was similar to the estimates in 2015 and 2017.

Stimulant Use Disorder

Stimulant use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of prescription stimulants, including health problems, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who misused stimulants in the past 12 months were categorized as having a stimulant use disorder if they met the DSM-IV criteria for either dependence or abuse for stimulants. Dependence and abuse criteria for illicit drugs (including misused stimulants) were described previously. Respondents who met criteria for methamphetamine use disorder but did not meet the criteria for having a stimulant use disorder were not classified as having a stimulant use disorder.

In 2018, an estimated 561,000 people aged 12 or older had a stimulant use disorder in the past year. This number of people with a stimulant use disorder corresponds to 0.2 percent of the population (2018 DT 7.45). In each year from 2015 to 2018, 0.2 percent of people aged 12 or older had a stimulant use disorder.

Aged 12 to 17

An estimated 53,000 adolescents aged 12 to 17 in 2018 had a past year stimulant use disorder, or 0.2 percent of adolescents (2018 DT 7.46). In each year from 2015 to 2018, 0.2 percent had a stimulant use disorder.

Aged 18 to 25

Approximately 185,000 young adults aged 18 to 25 in 2018 had a stimulant use disorder in the past year, or 0.5 percent of young adults (2018 DT 7.48). In each year from 2015 to 2018, 0.5 percent of young adults had a stimulant use disorder.

Aged 26 or Older

In 2018, approximately 323,000 adults aged 26 or older had a stimulant use disorder in the past year, which corresponds to 0.2 percent of adults in this age group (2018 DT 7.49). The 2018 estimate of stimulant use disorder among adults aged 26 or older was similar to the estimates in 2015 to 2017.

Tranquilizer Use Disorder or Sedative Use Disorder

Tranquilizer use disorder or sedative use disorder occur when someone experiences clinically significant impairment caused by the recurrent use of tranquilizers, sedatives, or both. Impairment includes health problems, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH collects dependence and abuse information for these two categories of prescription drugs. Respondents were classified as having a tranquilizer or sedative use disorder if they met DSM-IV criteria for tranquilizer use disorder or sedative use disorder. Dependence and abuse criteria for illicit drugs (including misused tranquilizers or sedatives) were described previously.

In 2018, an estimated 751,000 people aged 12 or older had a tranquilizer or sedative use disorder. This number of people with a tranquilizer or sedative use disorder corresponds to 0.3 percent of the population (2018 DT 7.45). In each year from 2015 to 2017, 0.3 percent of people aged 12 or older had a tranquilizer or sedative use disorder.

Aged 12 to 17

An estimated 0.3 percent of adolescents aged 12 to 17 had a tranquilizer or sedative use disorder in the past year (2018 DT 7.46), which corresponds to about 68,000 adolescents. The percentage of adolescents in 2018 with a tranquilizer or sedative use disorder was similar to the percentages in 2015 to 2017.

Aged 18 to 25

Approximately 224,000 young adults aged 18 to 25 in 2018 had a tranquilizer or sedative use disorder in the past year, or 0.7 percent of young adults (2018 DT 7.48). The percentage of young adults in 2018 with a tranquilizer or sedative use disorder was similar to the corresponding percentages in 2015 through 2017.

Aged 26 or Older

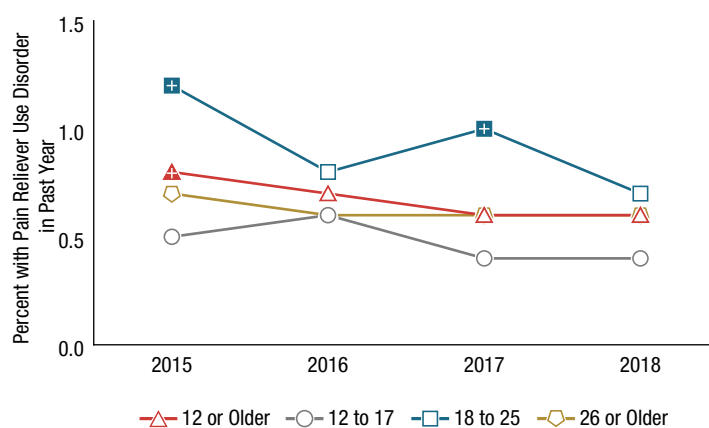
In 2018, approximately 458,000 adults aged 26 or older had a tranquilizer or sedative use disorder in the past year, which corresponds to 0.2 percent of adults in this age group (2018 DT 7.49). In each year from 2015 to 2018, 0.2 percent of adults aged 26 or older had a tranquilizer or sedative use disorder.

Pain Reliever Use Disorder

Pain reliever use disorder occurs when someone experiences clinically significant impairment caused by the recurrent use of pain relievers, including health problems, physical withdrawal, persistent or increasing use, and failure to meet major responsibilities at work, school, or home. NSDUH respondents who misused pain relievers in the past 12 months were categorized as having a pain reliever use disorder if they met the DSM-IV criteria for either dependence or abuse for pain relievers. Dependence and abuse criteria for illicit drugs (including misused pain relievers) were described previously.

In 2018, an estimated 1.7 million people aged 12 or older had a pain reliever use disorder, which corresponds to 0.6 percent of the population (Figure 40). The percentage

Figure 40. Pain Reliever Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 40 Table. Pain Reliever Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	0.8*	0.7	0.6	0.6
12 to 17	0.5	0.6	0.4	0.4
18 to 25	1.2*	0.8	1.0*	0.7
26 or Older	0.7	0.6	0.6	0.6

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

of people aged 12 or older in 2018 with a pain reliever use disorder was similar to the percentages in 2016 and 2017, but it was lower than the percentage in 2015.

Aged 12 to 17

An estimated 0.4 percent of adolescents aged 12 to 17 had a pain reliever use disorder in the past year (Figure 40), which represents about 104,000 adolescents. The percentage of adolescents in 2018 with a pain reliever use disorder was similar to the percentages in 2015 to 2017.

Aged 18 to 25

Approximately 248,000 young adults aged 18 to 25 in 2018 had a pain reliever use disorder in the past year, or 0.7 percent of young adults (Figure 40). The percentage of young adults in 2018 with a pain reliever use disorder was lower than the percentages in 2015 and 2017, but it was similar to the percentage in 2016.

Aged 26 or Older

In 2018, approximately 1.3 million adults aged 26 or older had a pain reliever use disorder in the past year, which corresponds to 0.6 percent of adults in this age group (Figure 40). The 2018 estimate of pain reliever use disorder among adults aged 26 or older was similar to the estimates in 2015 to 2017.

Opioid Use Disorder

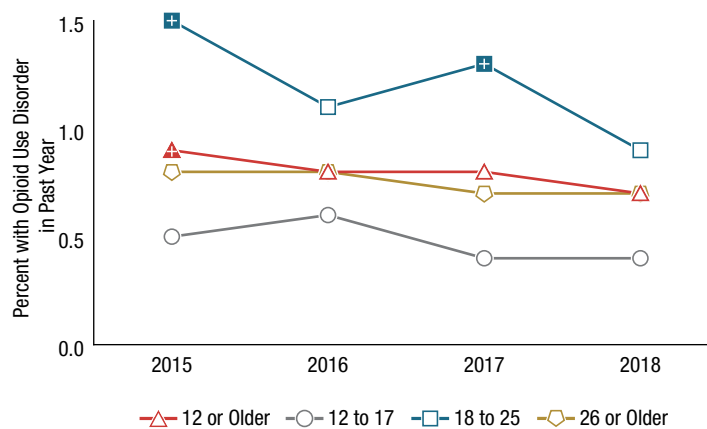
Misuse of opioids includes two categories of drugs: the use of heroin and the misuse of prescription pain relievers. NSDUH collects dependence and abuse information for these two categories of drugs. Respondents were classified as having an opioid use disorder if they met DSM-IV criteria for heroin use disorder or pain reliever use disorder (or both), as described previously.

In 2018, an estimated 2.0 million people aged 12 or older had an opioid use disorder, which corresponds to 0.7 percent of the population (Figure 41). The percentage of people aged 12 or older in 2018 with an opioid use disorder was similar to the percentages in 2016 and 2017, but it was lower than the percentage in 2015.

Aged 12 to 17

An estimated 0.4 percent of adolescents aged 12 to 17 had an opioid use disorder in the past year (Figure 41), which represents about 108,000 adolescents. The percentage of adolescents in 2018 with an opioid use disorder was similar to the percentages in 2015 to 2017.

Figure 41. Opioid Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 41 Table. Opioid Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	0.9+	0.8	0.8	0.7
12 to 17	0.5	0.6	0.4	0.4
18 to 25	1.5+	1.1	1.3+	0.9
26 or Older	0.8	0.8	0.7	0.7

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 18 to 25

Approximately 312,000 young adults aged 18 to 25 in 2018 had an opioid use disorder in the past year, or 0.9 percent of young adults (Figure 41). The percentage of young adults in 2018 with an opioid use disorder was similar to the percentage in 2016, but it was lower than the percentages in 2015 and 2017.

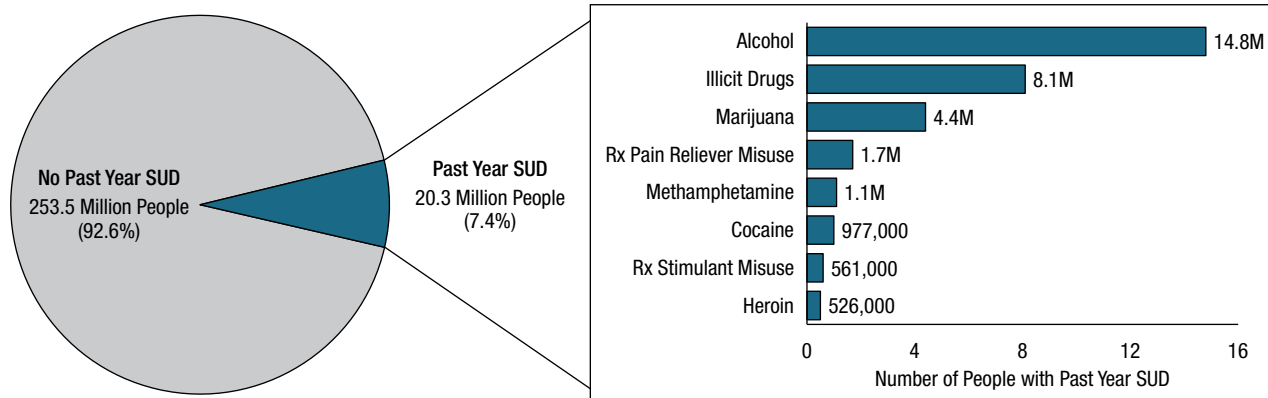
Aged 26 or Older

In 2018, approximately 1.6 million adults aged 26 or older had an opioid use disorder in the past year, which corresponds to 0.7 percent of adults in this age group (Figure 41). The 2018 estimate of opioid use disorder among adults aged 26 or older was similar to the estimates in 2015 to 2017.

Substance Use Disorder (Alcohol or Illicit Drugs)

NSDUH's overall estimates of SUD include people who met the DSM-IV criteria for either dependence or abuse for alcohol or illicit drugs. In 2018, approximately 20.3 million people aged 12 or older had an SUD in the past year, including 14.8 million who had an alcohol use disorder and 8.1 million who had an illicit drug use disorder (Figure 42). Among the

Figure 42. People Aged 12 or Older with a Past Year Substance Use Disorder (SUD): 2018



Rx = prescription.

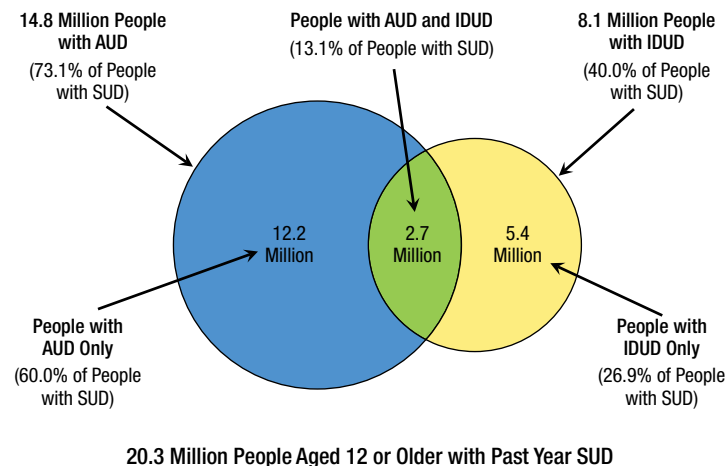
Note: The estimated numbers of people with substance use disorders are not mutually exclusive because people could have use disorders for more than one substance.

8.1 million people who had an illicit drug use disorder, the most common disorders were for marijuana (4.4 million) and misuse of prescription pain relievers (1.7 million).

The estimated 14.8 million people aged 12 or older in 2018 who had an alcohol use disorder in the past year correspond to nearly 3 out of 4 people who had an SUD (73.1 percent) (Figure 43).²³ The 8.1 million people who had an illicit drug use disorder correspond to about 2 out of 5 people who had an SUD (40.0 percent). An estimated 2.7 million people had both an alcohol use disorder and an illicit drug use disorder in the past year, or about 1 in 8 people who had a past year SUD (13.1 percent).

In 2018, the 20.3 million people with a past year SUD correspond to 7.4 percent of people aged 12 or older

Figure 43. Alcohol Use Disorder (AUD) and Illicit Drug Use Disorder (IDUD) in the Past Year among People Aged 12 or Older with Past Year Substance Use Disorder (SUD): 2018

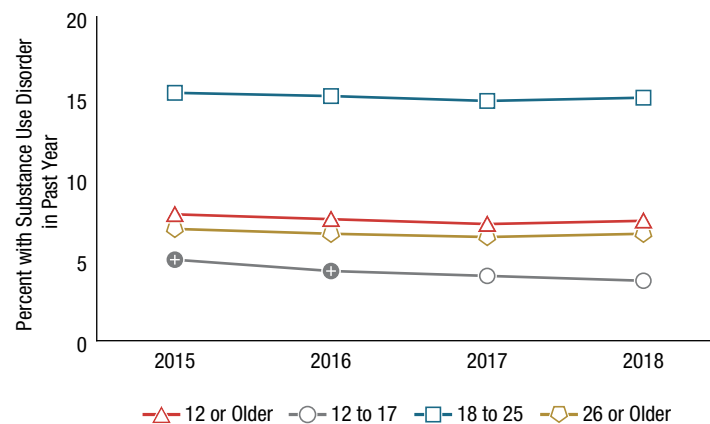


(Figure 44). This percentage of people who had an SUD corresponds to about 1 in 14 people aged 12 or older. The percentage of the population in 2018 with an SUD was similar to the percentages in 2015 to 2017.

Aged 12 to 17

An estimated 916,000 adolescents aged 12 to 17 in 2018 had a past year SUD, or 3.7 percent of adolescents

Figure 44. Substance Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 44 Table. Substance Use Disorder in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	7.8	7.5	7.2	7.4
12 to 17	5.0*	4.3*	4.0	3.7
18 to 25	15.3	15.1	14.8	15.0
26 or Older	6.9	6.6	6.4	6.6

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

(Figure 44). Stated another way, about 1 in 27 adolescents had an SUD in the past year. The percentage of adolescents in 2018 with an SUD was lower than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

About 1 in 7 young adults aged 18 to 25 had an SUD in the past year, or about 15.0 percent of young adults (Figure 44). Approximately 5.1 million young adults aged 18 to 25 in 2018 had an SUD in the past year. The percentage of young adults in 2018 with an SUD was similar to the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, approximately 14.2 million adults aged 26 or older had an SUD in the past year. This number corresponds to about 1 in 15 adults in this age group (6.6 percent) with an SUD in the past year (Figure 44). The percentage of adults aged 26 or older in 2018 with an SUD was similar to the percentages in 2015 to 2017.

Major Depressive Episode in the Past Year

Mental disorders are characterized by negative changes in mood, thought, or behavior and are accompanied by distress or impairment. These disorders can make carrying out daily activities difficult and can impair an individual's ability to work or function in school, interact with family, or fulfill other major life functions.

One such mental disorder is major depressive episode (MDE). Respondents were defined as having had an MDE in the past 12 months if they had at least one period of 2 weeks or longer in the past year when they experienced a depressed mood or loss of interest or pleasure in daily activities, accompanied by problems with sleeping, eating, energy, concentration, or self-worth. The MDE questions are based on diagnostic criteria from DSM-5.⁴⁵ Some of the wordings of the depression questions for adolescents aged 12 to 17 and adults aged 18 or older differed slightly to make the questions more developmentally appropriate for adolescents. Therefore, the adult and youth estimates for MDE are not directly comparable and are presented separately.^{46,47}

NSDUH also collects data on whether an MDE in the past year caused respondents to experience severe impairment in four major life activities or role domains. These domains are defined separately for adults aged 18 or older and youths aged 12 to 17 to reflect the different roles associated with the two age groups. Adults were defined as

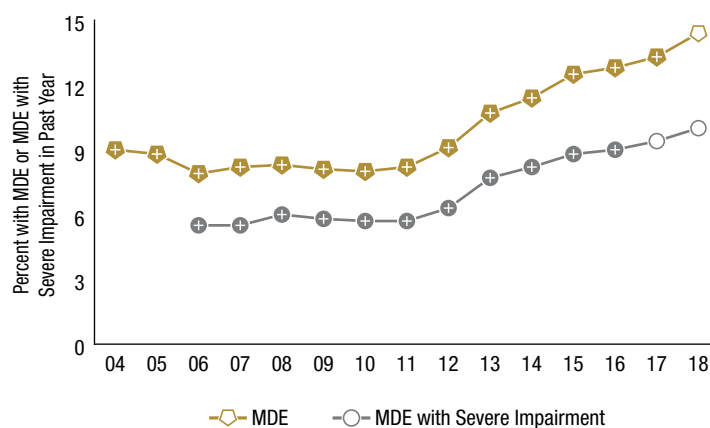
having an MDE with severe impairment if their depression caused severe problems with their ability to manage at home or work, have relationships with others, or have a social life.⁴⁸ Adolescents were defined as having an MDE with severe impairment if their depression caused severe problems with their ability to do chores at home, do well at work or school, get along with their family, or have a social life.⁴⁹

MDE and MDE with Severe Impairment among Adolescents

In 2018, about 1 in 7 adolescents aged 12 to 17 had a past year MDE (14.4 percent) and 1 in 10 had a past year MDE with severe impairment (10.0 percent) (Figure 45). These percentages correspond to 3.5 million adolescents having had an MDE in the past year and 2.4 million adolescents having had a past year MDE with severe impairment. Thus, more than two thirds of adolescents in 2018 who had a past year MDE (70.0 percent) had an MDE with severe impairment.²³

The percentage of adolescents aged 12 to 17 in 2018 who had a past year MDE was higher than the percentages in 2004 to 2017 (Figure 45). The percentage of adolescents in 2018 who

Figure 45. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17: 2004-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 45 Table. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17: 2004-2018

MDE Status	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
MDE	9.0*	8.8*	7.9*	8.2*	8.3*	8.1*	8.0*	8.2*	9.1*	10.7*	11.4*	12.5*	12.8*	13.3*	14.4
MDE with Severe Impairment	N/A	N/A	5.5*	5.5*	6.0*	5.8*	5.7*	5.7*	6.3*	7.7*	8.2*	8.8*	9.0*	9.4	10.0

N/A = not available.

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

had a past year MDE with severe impairment also was higher than the percentages in 2006 to 2016 (ranging from 5.5 to 9.0 percent), but it was similar to the percentage in 2017.

MDE and MDE with Severe Impairment among Adults

In 2018, an estimated 7.2 percent of adults aged 18 or older (17.7 million adults) had at least one MDE in the past year (Figure 46), and 4.7 percent of adults (11.5 million adults) had an MDE with severe impairment in the past year (Figure 47). Adults in 2018 who had an MDE with severe impairment correspond to nearly two thirds (65.1 percent) of adults who had a past year MDE.

The percentage of adults aged 18 or older in 2018 who had a past year MDE was higher than the percentages in most years from 2005 to 2016, but it was similar to the percentage in 2017 (Figure 46). The percentage of adults in 2018 with a past year MDE with severe impairment also was higher than the percentages in most years between 2009 and 2016, but it was similar to the percentage in 2017 (Figure 47).

Aged 18 to 25

In 2018, an estimated 4.6 million young adults aged 18 to 25 had a past year MDE, or 13.8 percent of young adults (Figure 46). The percentage of young adults with a past year

MDE was greater in 2018 than in the years from 2005 to 2016, but it was similar to the percentage in 2017.

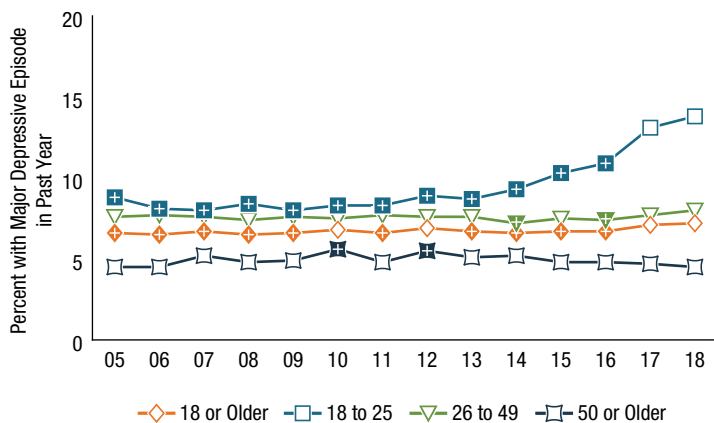
Approximately 3.0 million young adults aged 18 to 25 in 2018 had a past year MDE with severe impairment, or 8.9 percent of young adults (Figure 47). The percentage of young adults with a past year MDE with severe impairment was greater in 2018 than in 2009 to 2016, but it was similar to the percentage in 2017.

Aged 26 to 49

In 2018, about 8.0 million adults aged 26 to 49 had a past year MDE, or 8.0 percent of adults in this age group (Figure 46). The percentage of adults in this age group in 2018 who had a past year MDE was similar to the corresponding percentages in most years from 2005 to 2017.

An estimated 5.3 million adults aged 26 to 49 in 2018 had a past year MDE with severe impairment, or 5.3 percent of adults in this age group (Figure 47). Between 2009 and 2017, the percentages of adults aged 26 to 49 who had a past year MDE with severe impairment ranged from 4.6 to 5.2 percent; the 2018 percentage was either similar to or higher than the earlier percentages. Percentages of adults in this age group who had a past year MDE with severe impairment were similar between 2017 and 2018.

Figure 46. Major Depressive Episode in the Past Year among Adults Aged 18 or Older: 2005-2018



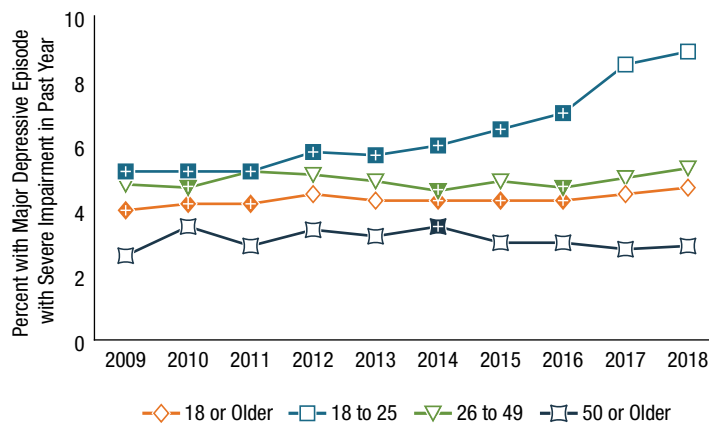
* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 46 Table. Major Depressive Episode in the Past Year among Adults Aged 18 or Older: 2005-2018

Age	05	06	07	08	09	10	11	12	13	14	15	16	17	18
18 or Older	6.6*	6.5*	6.7*	6.5*	6.6*	6.8	6.6*	6.9	6.7*	6.6*	6.7*	6.7*	7.1	7.2
18 to 25	8.8*	8.1*	8.0*	8.4*	8.0*	8.3*	8.3*	8.9*	8.7*	9.3*	10.3*	10.9*	13.1	13.8
26 to 49	7.6	7.7	7.6	7.4	7.6	7.5	7.7	7.6	7.6	7.2*	7.5	7.4*	7.7	8.0
50 or Older	4.5	4.5	5.2	4.8	4.9	5.6*	4.8	5.5*	5.1	5.2	4.8	4.8	4.7	4.5

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 47. Major Depressive Episode with Severe Impairment in the Past Year among Adults Aged 18 or Older: 2009-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 47 Table. Major Depressive Episode with Severe Impairment in the Past Year among Adults Aged 18 or Older: 2009-2018

Age	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	4.0*	4.2*	4.2*	4.5	4.3	4.3*	4.3*	4.3*	4.5	4.7
18 to 25	5.2*	5.2*	5.2*	5.8*	5.7*	6.0*	6.5*	7.0*	8.5	8.9
26 to 49	4.8	4.7*	5.2	5.1	4.9	4.6*	4.9	4.7*	5.0	5.3
50 or Older	2.6	3.5	2.9	3.4	3.2	3.5*	3.0	3.0	2.8	2.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 50 or Older

In 2018, about 5.1 million adults aged 50 or older had a past year MDE, or 4.5 percent of adults in this age group (Figure 46). The percentage of adults aged 50 or older in 2018 who had a past year MDE was similar to the corresponding percentages in most years from 2005 to 2017.

An estimated 3.2 million adults aged 50 or older in 2018 had a past year MDE with severe impairment, or 2.9 percent of adults in this age group (Figure 47). The percentage of adults aged 50 or older in 2018 who had a past year MDE with severe impairment was similar to the percentages in most years from 2009 to 2017.

Any Mental Illness among Adults in the Past Year

NSDUH provides estimates of any mental illness (AMI) and serious mental illness (SMI) for adults aged 18 or older. Except for MDE, NSDUH does not include questions or methods for estimating the occurrence of mental illness among adolescents. Therefore, NSDUH does not include any measure for adolescents that is equivalent to AMI or SMI for adults.⁵⁰

Adults aged 18 or older with AMI were defined as having any mental, behavioral, or emotional disorder in the past year that met DSM-IV criteria (excluding developmental disorders and SUDs).⁴² Adults with AMI were defined as having SMI if they had any mental, behavioral, or emotional disorder that substantially interfered with or limited one or more major life activities. AMI and SMI are not mutually exclusive categories; adults with SMI are included in estimates of adults with AMI. Adults with AMI who do not meet the criteria for having SMI are categorized as having AMI excluding SMI.

In 2018, approximately 47.6 million adults aged 18 or older had AMI in the past year (2018 DT 10.1), including an estimated 11.4 million (2018 DT 10.3) adults who had SMI and about 36.3 million adults who had AMI excluding SMI in the past year (2018 DT 10.5).⁵¹ The 36.3 million adults who had AMI excluding SMI correspond to 14.6 percent of all adults and 76.1 percent of adults with AMI.

The 47.6 million adults aged 18 or older in 2018 who had AMI in the past year correspond to 19.1 percent of all adults (Figure 48). The percentage of adults in 2018 who had AMI was similar to the percentage in 2017, but it was higher than percentages in most years from 2008 to 2016.

Aged 18 to 25

In 2018, approximately 8.9 million young adults aged 18 to 25 (26.3 percent) had AMI in the past year (Figure 48). The percentage of young adults in 2018 who had AMI was greater than the percentages in 2008 to 2016, but it was similar to the percentage in 2017.

Aged 26 to 49

In 2018, about 22.7 million adults aged 26 to 49 (22.5 percent) had AMI in the past year (Figure 48). The 2018 estimate of AMI among adults in this age group was higher than the estimates in most years from 2008 to 2016, but it was similar to the estimate in 2017.

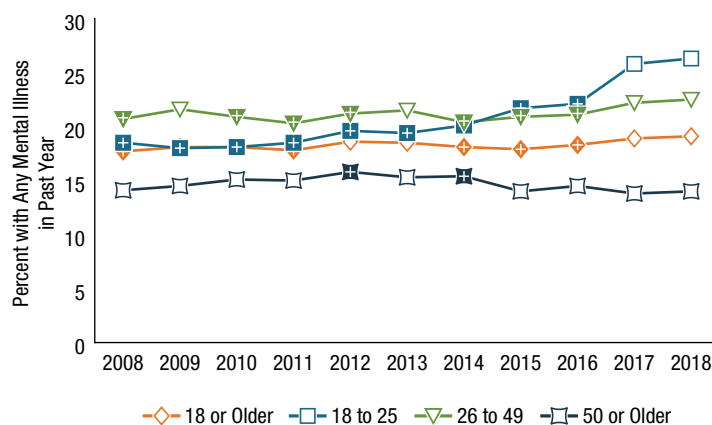
Aged 50 or Older

In 2018, an estimated 16.0 million adults aged 50 or older (14.0 percent) had AMI in the past year (Figure 48). The 2018 estimate of AMI among adults in this age group was similar to estimates in most years from 2008 to 2017.

Serious Mental Illness among Adults in the Past Year

Adults aged 18 or older with AMI were defined as having SMI if they had any diagnosable mental, behavioral, or emotional

Figure 48. Any Mental Illness in the Past Year among Adults Aged 18 or Older: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 48 Table. Any Mental Illness in the Past Year among Adults Aged 18 or Older: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	17.7*	18.1*	18.1*	17.8*	18.6	18.5	18.1*	17.9*	18.3*	18.9	19.1
18 to 25	18.5*	18.0*	18.1*	18.5*	19.6*	19.4*	20.1*	21.7*	22.1*	25.8	26.3
26 to 49	20.7*	21.6	20.9*	20.3*	21.2*	21.5	20.4*	20.9*	21.1*	22.2	22.5
50 or Older	14.1	14.5	15.1	15.0	15.8*	15.3	15.4*	14.0	14.5	13.8	14.0

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

disorder, other than a developmental or substance use disorder, that substantially interfered with or limited one or more major life activities.⁵⁰ In 2018, an estimated 11.4 million adults had SMI in the past year, which corresponds to 4.6 percent of adults (Figure 49). The percentage of adults in 2018 with SMI was higher than percentages in most years from 2008 to 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

In 2018, about 2.6 million young adults aged 18 to 25 (7.7 percent) had SMI in the past year (Figure 49). The percentage of young adults in 2018 who had SMI was greater than the percentages in 2008 to 2016, but it was similar to the percentage in 2017.

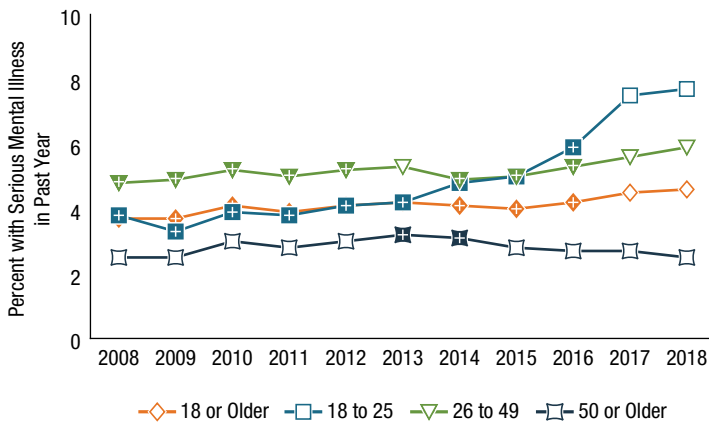
Aged 26 to 49

An estimated 5.9 million adults aged 26 to 49 (5.9 percent) in 2018 had SMI in the past year (Figure 49). The estimate of SMI among adults in this age group in 2018 was higher than the estimates in most years from 2008 to 2016, but it was similar to the estimate in 2017.

Aged 50 or Older

In 2018, approximately 2.8 million adults aged 50 or older (2.5 percent) had SMI in the past year (Figure 49). The

Figure 49. Serious Mental Illness in the Past Year among Adults Aged 18 or Older: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 49 Table. Serious Mental Illness in the Past Year among Adults Aged 18 or Older: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	3.7*	3.7*	4.1*	3.9*	4.1*	4.2	4.1*	4.0*	4.2*	4.5	4.6
18 to 25	3.8*	3.3*	3.9*	3.8*	4.1*	4.2*	4.8*	5.0*	5.9*	7.5	7.7
26 to 49	4.8*	4.9*	5.2*	5.0*	5.2*	5.3	4.9*	5.0*	5.3*	5.6	5.9
50 or Older	2.5	2.5	3.0	2.8	3.0	3.2*	3.1*	2.8	2.7	2.7	2.5

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

percentage of adults in this age group in 2018 with past year SMI was similar to the percentages in most years from 2008 to 2017.

Co-Occurring MDE and SUD among Adolescents

Adolescents aged 12 to 17 with a past year MDE and an SUD (i.e., illicit drug use disorder or alcohol use disorder) are defined as having co-occurring MDE and an SUD. The order of onset of SUDs and MDE symptoms for adolescents cannot be established in the NSDUH data (e.g., whether the onset of SUDs preceded the onset of MDE symptoms, or vice versa).

In 2018, about 3.5 million adolescents aged 12 to 17 had an MDE in the past year, and 2.4 million adolescents had a past year MDE with severe impairment. As also discussed previously, an estimated 916,000 adolescents in 2018 had a past year SUD. An estimated 1.5 percent of adolescents in 2018 had an SUD and an MDE in the past year (Figure 50), corresponding to 358,000 adolescents (Figure 51). About 288,000 adolescents in 2018 (1.2 percent of adolescents) had an SUD and an MDE with severe impairment in the past year.

The percentages of adolescents aged 12 to 17 who had an SUD and an MDE in the past year remained steady from

Figure 50. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) Status among Youths Aged 12 to 17: 2015-2018

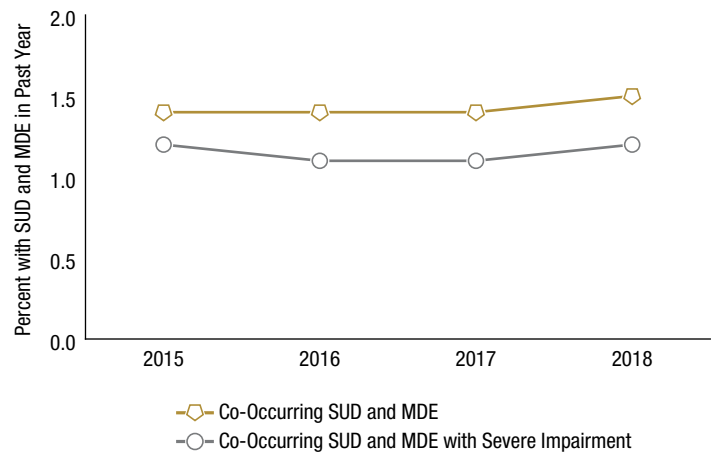
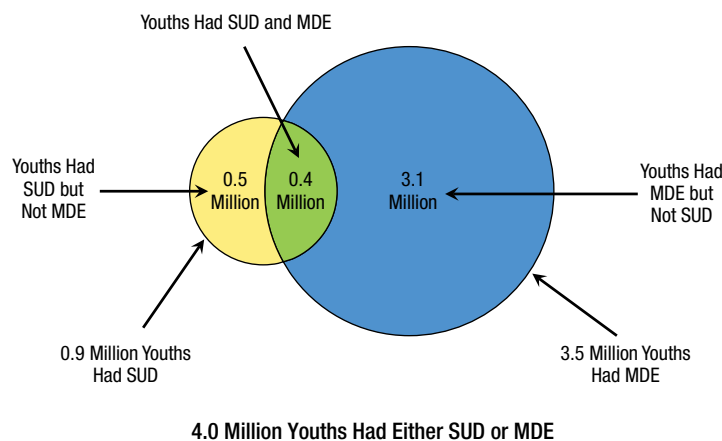


Figure 50 Table. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) Status among Youths Aged 12 to 17: 2015-2018

SUD/MDE Status	2015	2016	2017	2018
Co-Occurring SUD and MDE	1.4	1.4	1.4	1.5
Co-Occurring SUD and MDE with Severe Impairment	1.2	1.1	1.1	1.2

Figure 51. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) among Youths Aged 12 to 17: 2018



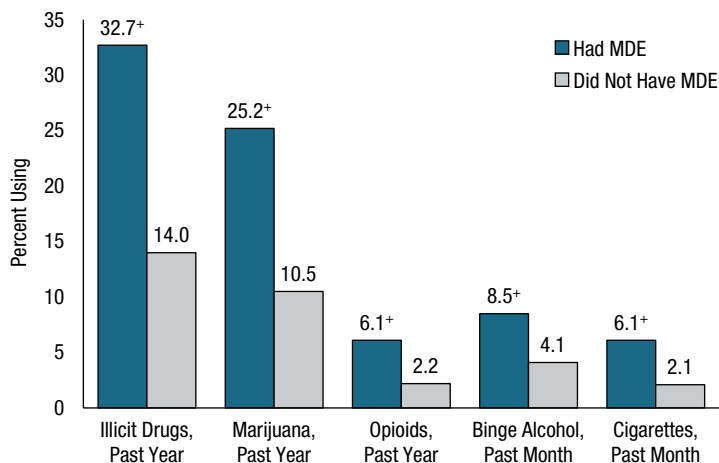
Note: Youth respondents with unknown MDE data were excluded.

2015 to 2018 at 1.4 to 1.5 percent (Figure 50). Similarly, the percentages of adolescents who had an SUD and an MDE with severe impairment in the past year also remained steady from 2015 to 2018 at 1.1 to 1.2 percent.

Substance Use among Adolescents with MDE

This section compares the prevalence of substance use among adolescents aged 12 to 17 who had a past year MDE with the prevalence among adolescents who did not have a past year MDE. In 2018, the percentage of adolescents who used illicit drugs in the past year was higher among those with a past year MDE than it was among those without a past year MDE (32.7 vs. 14.0 percent) (Figure 52). Adolescents who

Figure 52. Substance Use among Youths Aged 12 to 17, by Past Year Major Depressive Episode (MDE) Status: 2018



+ Difference between this estimate and the estimate for youths without MDE is statistically significant at the .05 level.

Note: Youth respondents with unknown MDE data were excluded.

had a past year MDE also were more likely than adolescents without an MDE to be past year users of marijuana (25.2 vs. 10.5 percent) or misusers of opioids (i.e., heroin users or misusers of prescription pain relievers) (6.1 vs. 2.2 percent).

Unlike the illicit drug use estimates described previously, estimates of cigarette smoking and binge alcohol use refer to substance use behaviors that occurred in the past month. In 2018, about 1 in 16 adolescents aged 12 to 17 (6.1 percent) with a past year MDE were cigarette smokers in the past month compared with 2.1 percent of those without a past year MDE (Figure 52). In addition, adolescents who had a past year MDE were more likely than adolescents without an MDE to be past month binge alcohol drinkers (8.5 vs. 4.1 percent).

Co-Occurring Mental Health Issues and SUD among Adults

Adults aged 18 or older who had both a mental disorder and an SUD in the past year are referred to as having co-occurring disorders. In NSDUH, the presence of mental disorders is defined as having either AMI or SMI, and SUDs refer to the presence of either alcohol use disorder or illicit drug use disorder. This section presents findings on co-occurring disorders among adults in the United States. As described previously for adolescents aged 12 to 17, however, the order of onset of SUDs and symptoms of mental disorders cannot be established in the NSDUH data for adults (e.g., whether the onset of SUDs preceded the onset of symptoms of mental disorders, or vice versa).

Co-Occurring AMI and SUD

As noted previously, 47.6 million adults aged 18 or older in 2018 had AMI in the past year. In addition, 19.3 million adults had a past year SUD. About 9.2 million adults had both AMI and an SUD (Figure 53), which corresponds to 3.7 percent of adults (Figure 54). The 2018 percentage of adults with both AMI and an SUD was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

In 2018, approximately 8.9 million young adults aged 18 to 25 had AMI in the past year, and 5.1 million had a past year SUD, as also had been discussed previously. Among young adults, 2.4 million had both AMI and an SUD in the past year (2018 DT 10.6). This corresponds to 7.2 percent of young adults (Figure 54). The 2018 percentage of young adults with both AMI and an SUD was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

As noted previously, 22.7 million adults aged 26 to 49 in 2018 had AMI in the past year, and 9.7 million had a past year SUD. Among adults in this age group, 5.0 million had both AMI and an SUD (2018 DT 10.6). This

Figure 53. Past Year Substance Use Disorder (SUD) and Mental Illness among Adults Aged 18 or Older: 2018

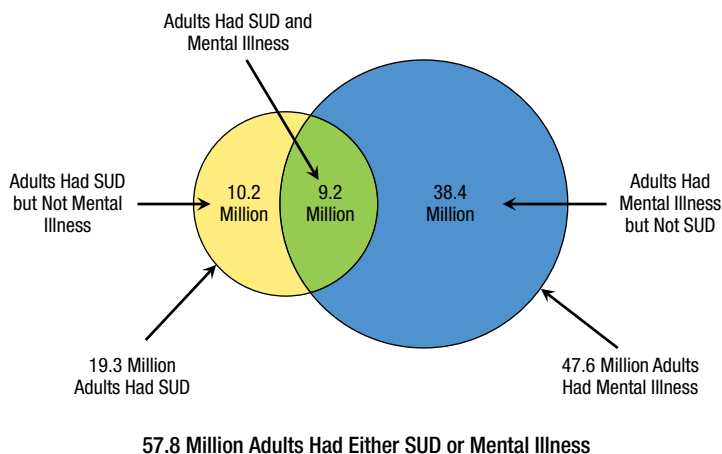
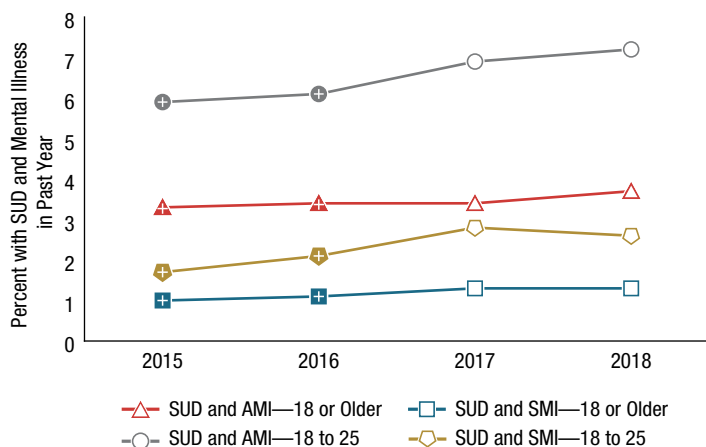


Figure 54. Co-Occurring Past Year Substance Use Disorder (SUD), Any Mental Illness (AMI), and Serious Mental Illness (SMI) among Adults Aged 18 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 54 Table. Co-Occurring Past Year Substance Use Disorder (SUD), Any Mental Illness (AMI), and Serious Mental Illness (SMI) among Adults Aged 18 or Older: 2015-2018

SUD/Mental Illness Status and Age	2015	2016	2017	2018
SUD and AMI				
18 or Older	3.3*	3.4*	3.4	3.7
18 to 25	5.9*	6.1*	6.9	7.2
SUD and SMI				
18 or Older	1.0*	1.1*	1.3	1.3
18 to 25	1.7*	2.1*	2.8	2.6

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

corresponds to 5.0 percent of adults in this age group. The percentage of adults aged 26 to 49 in 2018 who had both AMI and an SUD was higher than the percentages in 2015 and 2017, but it was similar to the percentage in 2016.

In 2018, approximately 16.0 million adults aged 50 or older had AMI in the past year, and 4.5 million had a past year SUD. Among adults in this age group, 1.7 million had both AMI and an SUD (2018 DT 10.6). This corresponds to 1.5 percent of adults in this age group. The percentages of adults aged 50 or older with both AMI and an SUD remained steady from 2015 to 2018 at 1.5 to 1.6 percent.

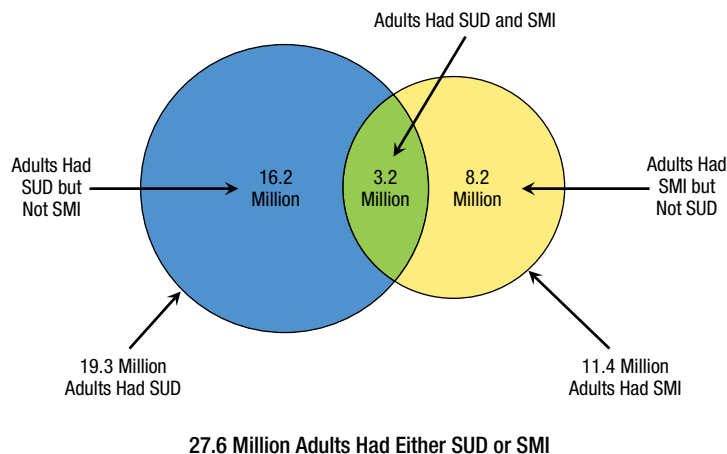
Co-Occurring SMI and SUD

As noted previously, 11.4 million adults aged 18 or older in 2018 had SMI in the past year, and 19.3 million adults had a past year SUD. Approximately 3.2 million adults had co-occurring SMI and an SUD in the past year (Figure 55), which corresponds to 1.3 percent of adults (Figure 54). The 2018 percentage of adults with both SMI and an SUD was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

In 2018, approximately 2.6 million young adults aged 18 to 25 had SMI in the past year, and 5.1 million had a past year SUD, as noted previously. About 879,000 young adults had co-occurring SMI and an SUD in the past year, which corresponds to 2.6 percent of young adults (2018 DT 10.6 and Figure 54). The 2018 percentage of young adults with both SMI and an SUD was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

As noted previously, 5.9 million adults aged 26 to 49 in 2018 had SMI in the past year, and 9.7 million had a

Figure 55. Past Year Substance Use Disorder (SUD) and Serious Mental Illness (SMI) among Adults Aged 18 or Older: 2018



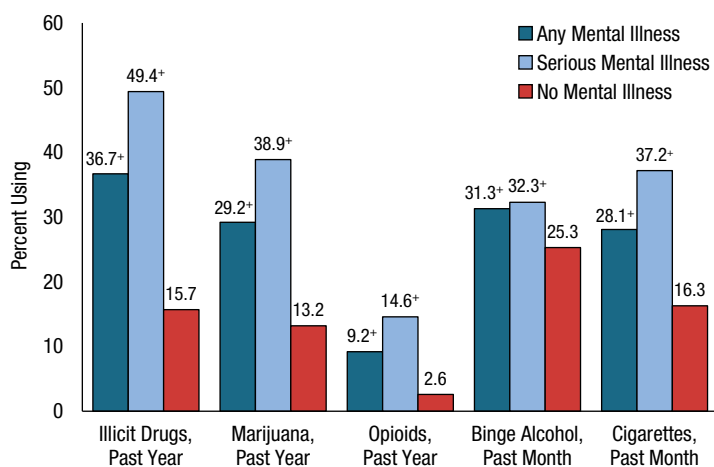
past year SUD. Approximately 1.7 million adults in this age group had co-occurring SMI and an SUD in the past year (2018 DT 10.6), which corresponds to 1.7 percent of adults in this age group. The 2018 percentage of adults aged 26 to 49 who had both SMI and an SUD in the past year was higher than the percentages in 2015 and 2016, but it was similar to the percentage in 2017.

In 2018, about 2.8 million adults aged 50 or older had past year SMI, and 4.5 million had a past year SUD, as noted previously. Approximately 560,000 adults in this age group had co-occurring SMI and an SUD (2018 DT 10.6), which corresponds to 0.5 percent of adults in this age group. The percentages of adults aged 50 or older with both SMI and an SUD remained steady from 2015 to 2018 at 0.4 to 0.5 percent.

Substance Use among Adults with Mental Health Issues

This section compares the prevalence of substance use among adults aged 18 or older who had a mental health issue in the past year with the prevalence among adults who did not have a past year mental health issue. In NSDUH, the presence of a mental health issue among adults refers to them having AMI or SMI. In 2018, the percentages of adults who used illicit drugs in the past year were higher among those with SMI (49.4 percent) and adults with AMI (36.7 percent) compared with those without any mental illness (15.7 percent) (Figure 56). Adults in 2018 who had AMI or SMI were more likely than those without any mental illness to be

Figure 56. Substance Use among Adults Aged 18 or Older, by Mental Illness Status: 2018



* Difference between this estimate and the estimate for adults without mental illness is statistically significant at the .05 level.

past year users of marijuana (29.2 or 38.9 vs. 13.2 percent) or past year misusers of opioids (9.2 or 14.6 vs. 2.6 percent).

Unlike the illicit drug use estimates described previously, estimates of cigarette smoking and binge alcohol use refer to substance use behaviors that occurred in the past month. Among adults aged 18 or older in 2018, 28.1 percent of adults with AMI and 37.2 percent of adults with SMI were cigarette smokers in the past month compared with 16.3 percent of those without any mental illness (Figure 56). In addition, 31.3 percent of adults with AMI and 32.3 percent of adults with SMI were binge alcohol drinkers in the past month compared with 25.3 percent of adults with no mental illness.

Suicidal Thoughts and Behavior among Adults

Suicide is an important public health problem in the United States and a tragedy for all involved—the individuals and their families, friends, neighbors, colleagues, and communities. In 2017, more than 47,000 people in the United States died by suicide.⁵² In addition, suicide rates increased in most states between 1999 and 2016, including increases by more than 30 percent in 25 states over this period.⁵³ However, individuals who died by suicide represent a fraction of those who consider or attempt suicide.⁵⁴ Out of every 31 adults in 2008 to 2011 in the United States who attempted suicide in the past 12 months, there was 1 death by suicide.⁵⁵ Individuals are likely to have thought about suicide before attempting it.

NSDUH has collected information on past year suicidal thoughts and behavior among adults aged 18 or older in the United States since 2008. Information from NSDUH on adults who have seriously thought about suicide or have made suicide plans or attempts can be useful to policymakers and service providers in gauging the size of the adult population at a high level of risk for suicide and in tracking changes in the size of this population over time.

NSDUH respondents aged 18 or older were asked if at any time during the past 12 months they had thought seriously about trying to kill themselves. Adults who had serious thoughts of suicide in the past 12 months were asked whether they made a plan to kill themselves or tried to kill themselves in that period.

In 2018, approximately 10.7 million adults aged 18 or older (4.3 percent) had thought seriously about trying to kill themselves (Figures 57 and 58). Of the 10.7 million

adults who had serious thoughts of suicide, 3.3 million had made suicide plans, and 1.4 million made a nonfatal suicide attempt. Among the 1.4 million adults who attempted suicide in the past year, 1.2 million made suicide plans, and 0.2 million did not make suicide plans. Stated another way, about 1 in 3 adults who had serious thoughts of suicide made suicide plans, and about 1 in 8 adults who had serious thoughts of suicide made a suicide attempt.²³

Figure 57. Suicidal Thoughts, Plans, and Attempts in the Past Year among Adults Aged 18 or Older: 2018

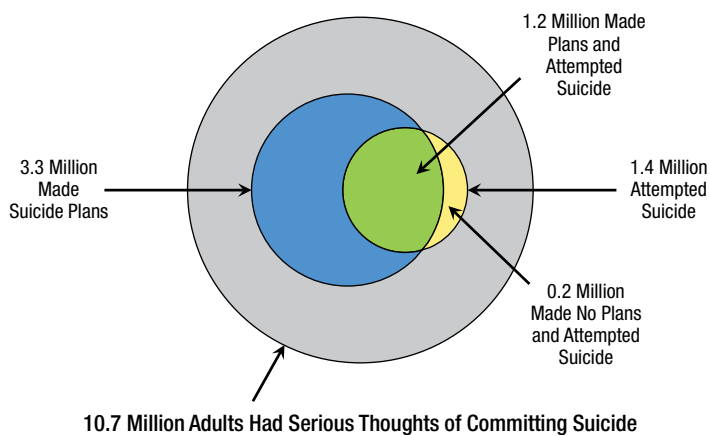
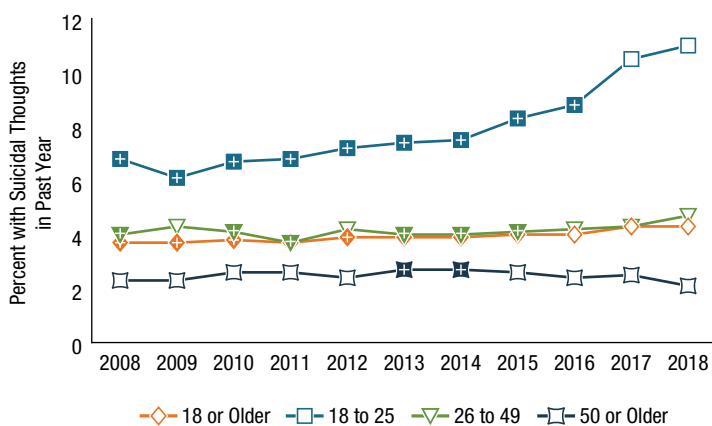


Figure 58. Suicidal Thoughts in the Past Year among Adults Aged 18 or Older: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 58 Table. Suicidal Thoughts in the Past Year among Adults Aged 18 or Older: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	3.7*	3.7*	3.8*	3.7*	3.9*	3.9*	3.9*	4.0	4.0	4.3	4.3
18 to 25	6.8*	6.1*	6.7*	6.8*	7.2*	7.4*	7.5*	8.3*	8.8*	10.5	11.0
26 to 49	4.0*	4.3	4.1*	3.7*	4.2	4.0*	4.0*	4.1*	4.2	4.3	4.7
50 or Older	2.3	2.3	2.6	2.6	2.4	2.7*	2.7*	2.6	2.4	2.5	2.1

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Serious Thoughts of Suicide

The estimated 10.7 million adults aged 18 or older in 2018 who had serious thoughts of suicide in the past year (Figure 57) correspond to 4.3 percent of adults (Figure 58). The percentage of adults in 2018 who had serious thoughts of suicide was higher than the percentages in 2008 to 2014, but it was similar to the percentages in 2015 to 2017.

Aged 18 to 25

In 2018, approximately 3.7 million young adults aged 18 to 25 (11.0 percent) had serious thoughts of suicide in the past year (Figure 58). This number corresponds to about 1 in 9 young adults (11.0 percent) who had serious thoughts of suicide. The percentage of young adults who had serious thoughts of suicide was higher in 2018 than in 2008 to 2016, but it was similar to the percentage in 2017.

Aged 26 to 49

In 2018, about 4.7 million adults aged 26 to 49 had serious thoughts of suicide in the past year, or 4.7 percent of adults in this age group (Figure 58). The percentage of adults in this age group in 2018 who had serious thoughts of suicide was higher than the percentages in most years between 2008 and 2015, but it was similar to the percentages in 2016 and 2017.

Aged 50 or Older

In 2018, approximately 2.4 million adults aged 50 or older had serious thoughts of suicide in the past year, which corresponds to 2.1 percent of adults in this age group (Figure 58). The percentage of adults aged 50 or older in 2018 who had serious thoughts of suicide was similar in most years from 2008 to 2017.

Suicide Plans

The estimated 3.3 million adults aged 18 or older in 2018 who made suicide plans in the past year (Figure 57) correspond to 1.3 percent of adults (Figure 59). The percentage of adults aged 18 or older in 2018 who made suicide plans was higher than in 2008 to 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

In 2018, approximately 1.2 million young adults aged 18 to 25 made suicide plans in the past year, which corresponds to 3.4 percent of young adults (Figure 59). The percentage of young adults in 2018 who made suicide plans was higher than the percentages in 2008 to 2016, but it was similar to the percentage in 2017.

Aged 26 to 49

In 2018, about 1.5 million adults aged 26 to 49 made suicide plans in the past year, which corresponds to 1.4 percent of adults in this age group (Figure 59). The percentage of adults aged 26 to 49 in 2018 who made suicide plans in the past year was higher than the percentages in most years from 2008 to 2015, but it was similar to the percentages in 2016 and 2017.

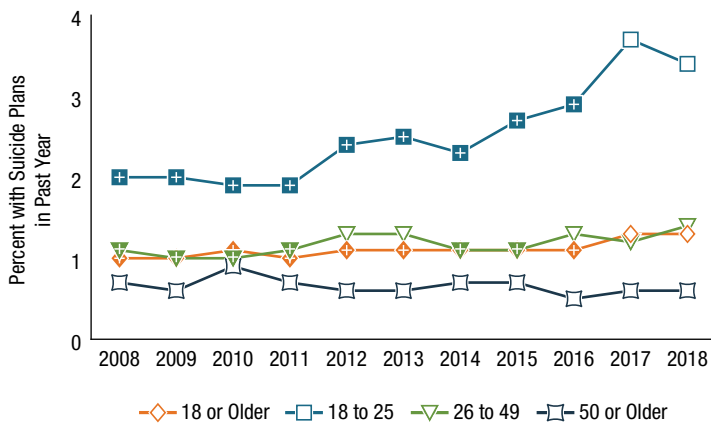
Aged 50 or Older

In 2018, approximately 702,000 adults aged 50 or older made suicide plans in the past year, which corresponds to 0.6 percent of adults in this age group (Figure 59). The percentage of adults aged 50 or older in 2018 who made suicide plans in the past year was similar to the percentages in 2008 to 2017.

Suicide Attempts

The estimated 1.4 million adults aged 18 or older in 2018 who attempted suicide in the past year (with or without first making suicide plans) (Figure 57) correspond to 0.6 percent of all adults (Figure 60). The percentage of adults in 2018 who attempted suicide was similar to the percentages in most years between 2008 and 2017.

Figure 59. Suicide Plans in the Past Year among Adults Aged 18 or Older: 2008-2018



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 59 Table. Suicide Plans in the Past Year among Adults Aged 18 or Older: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	1.0 ⁺	1.0 ⁺	1.1 ⁺	1.0 ⁺	1.1 ⁺	1.1 ⁺	1.1 ⁺	1.1 ⁺	1.1 ⁺	1.3	1.3
18 to 25	2.0 ⁺	2.0 ⁺	1.9 ⁺	1.9 ⁺	2.4 ⁺	2.5 ⁺	2.3 ⁺	2.7 ⁺	2.9 ⁺	3.7	3.4
26 to 49	1.1 ⁺	1.0 ⁺	1.0 ⁺	1.1 ⁺	1.3	1.3	1.1 ⁺	1.1 ⁺	1.3	1.2	1.4
50 or Older	0.7	0.6	0.9	0.7	0.6	0.6	0.7	0.7	0.5	0.6	0.6

+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 18 to 25

In 2018, approximately 647,000 young adults aged 18 to 25 attempted suicide in the past year. This number corresponds to 1.9 percent of young adults (Figure 60). The percentage of young adults who attempted suicide was higher in 2018 than in 2008 to 2014, but it was similar to the percentages in 2015 to 2017.

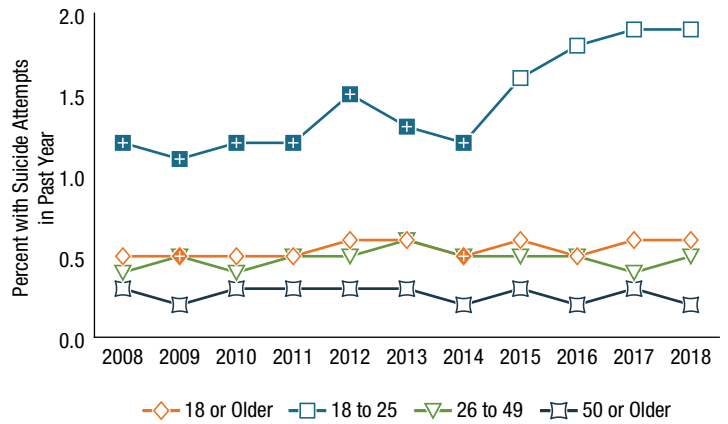
Aged 26 to 49

In 2018, about 521,000 adults aged 26 to 49 attempted suicide in the past year, which corresponds to 0.5 percent of adults in this age group (Figure 60). The percentage of adults aged 26 to 49 in 2018 who attempted suicide in the past year was similar to the percentages from 2008 to 2017.

Aged 50 or Older

In 2018, about 274,000 adults aged 50 or older attempted suicide in the past year, which corresponds to 0.2 percent of adults in that age group (Figure 60). The percentage of adults aged 50 or older in 2018 who attempted suicide in the past year was similar to the percentages from 2008 to 2017.

Figure 60. Suicide Attempts in the Past Year among Adults Aged 18 or Older: 2008-2018



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 60 Table. Suicide Attempts in the Past Year among Adults Aged 18 or Older: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	0.5	0.5 ⁺	0.5	0.5	0.6	0.6	0.5 ⁺	0.6	0.5	0.6	0.6
18 to 25	1.2 ⁺	1.1 ⁺	1.2 ⁺	1.2 ⁺	1.5 ⁺	1.3 ⁺	1.2 ⁺	1.6	1.8	1.9	1.9
26 to 49	0.4	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5
50 or Older	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2

+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Substance Use Treatment in the Past Year

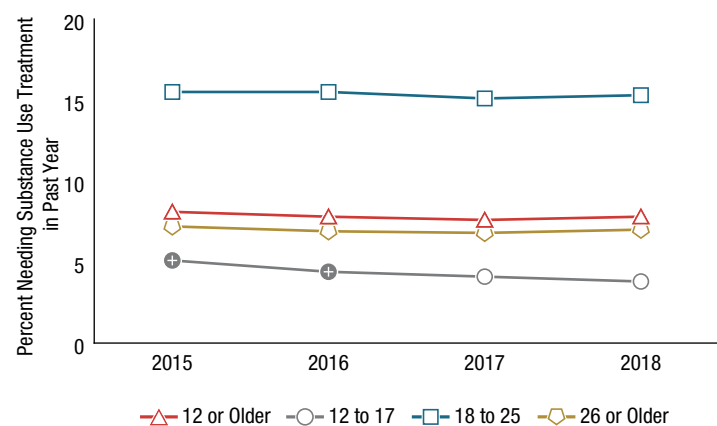
Substance use treatment (i.e., treatment for problems related to the use of alcohol or illicit drugs) is intended to help people address problems associated with their substance use. NSDUH provides two principal measures related to substance use treatment: (a) the need for substance use treatment and (b) the receipt of substance use treatment. NSDUH also collects information on the types of settings where people received treatment and whether people needed substance use treatment but did not receive it. In addition, NSDUH collects information about people who did not receive treatment but felt they needed it and why they did not get treatment.

Need for Substance Use Treatment

NSDUH includes questions used to identify people who needed substance use treatment in the past year. For this report, people are classified as needing substance use treatment if they had an SUD in the past year or if they received substance use treatment at a specialty facility⁵⁶ in the past year.^{57,58}

In 2018, an estimated 21.2 million people aged 12 or older needed substance use treatment in the past year. Stated another way, about 1 in 13 people aged 12 or older (7.8 percent) needed substance use treatment (Figure 61). The percentage of

Figure 61. Need for Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 61 Table. Need for Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	8.1	7.8	7.6	7.8
12 to 17	5.1*	4.4*	4.1	3.8
18 to 25	15.5	15.5	15.1	15.3
26 or Older	7.2	6.9	6.8	7.0

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

the population in 2018 who needed substance use treatment was similar to the percentages from 2015 to 2017.

Aged 12 to 17

In 2018, about 946,000 adolescents aged 12 to 17 needed substance use treatment in the past year. This number corresponds to 3.8 percent of adolescents, or about 1 in 26 adolescents (Figure 61). The percentage of adolescents in 2018 who needed substance use treatment was lower than the corresponding percentages in 2015 and 2016, but it was similar to the percentage in 2017.

Aged 18 to 25

About 5.2 million young adults aged 18 to 25 in 2018 needed treatment for a substance use problem in the past year, corresponding to 15.3 percent of young adults (Figure 61). Stated another way, about 1 in 7 young adults needed substance use treatment. The percentages of young adults who needed substance use treatment were similar from 2015 to 2018. In each year from 2015 to 2018, at least 15 percent of young adults needed substance use treatment.

Aged 26 or Older

About 15.1 million adults aged 26 or older in 2018 needed substance use treatment in the past year. This number corresponds to 7.0 percent of adults in this age group, or about 1 in 14 adults aged 26 or older (Figure 61). The 2018 estimate of adults in this age group who needed treatment for a substance use problem was similar to the estimates between 2015 and 2017.

Receipt of Substance Use Treatment

NSDUH respondents who used alcohol or illicit drugs in their lifetime are asked whether they ever received substance use treatment, and those who received substance use treatment in their lifetime are asked whether they received treatment in the 12 months prior to the survey interview (i.e., the past year). Substance use treatment refers to treatment or counseling received for alcohol or illicit drug use or for medical problems associated with the use of alcohol or illicit drugs.

NSDUH collects information on the receipt of any substance use treatment and the receipt of substance use treatment at a specialty facility. The categories of any substance use treatment and treatment at a specialty facility are not mutually exclusive. People could report receiving treatment at more than one location. Receipt of any substance use treatment includes substance use treatment received in the past year at any location, such as a hospital (inpatient), rehabilitation facility

(outpatient or inpatient), mental health center, emergency room, private doctor's office, prison or jail, or self-help group (e.g., Alcoholics Anonymous or Narcotics Anonymous). Substance use treatment at a specialty facility is included in estimates of any substance use treatment because a subset of the treatment locations is categorized as specialty facilities. Receipt of substance use treatment at a specialty facility is defined as substance use treatment a respondent received at a hospital (only as an inpatient), a drug or alcohol rehabilitation facility (as an inpatient or outpatient), or a mental health center. Receipt of substance use treatment at a specialty facility is also referred to as receipt of specialty substance use treatment.

This section presents the following past year estimates for the population aged 12 or older: receipt of any substance use treatment and receipt of specialty substance use treatment among all people in this age group and receipt of specialty substance use treatment among people who needed substance use treatment. To provide a better understanding of why people may have received substance use treatment, this section also presents treatment estimates among people with specific types of SUDs, such as receipt of specialty alcohol use treatment among people with alcohol use disorder, and receipt of specialty illicit drug use treatment among people with specific illicit drug use disorders.

Receipt of Any Substance Use Treatment

In 2018, approximately 3.7 million people aged 12 or older received any substance use treatment in the past year, or 1.4 percent of the population (Figure 62). The 2018 percentage of people aged 12 or older who received any substance use treatment was similar to the percentages in 2015 to 2017.

By Age Group

Among adolescents aged 12 to 17 in 2018, 159,000 received any substance use treatment in the past year, or 0.6 percent of adolescents (Figure 62). The 2018 percentage was similar to the percentages in 2015 to 2017.

An estimated 547,000 young adults aged 18 to 25 in 2018 received any substance use treatment in the past year. This number of young adults who received any substance use treatment corresponds to 1.6 percent of young adults (Figure 62). The percentage of young adults who received any substance use treatment in 2018 was similar to the percentages in 2015 to 2017.

About 3.0 million adults aged 26 or older in 2018 received any substance use treatment in the past year, or 1.4 percent of adults in this age group (Figure 62). The 2018 percentage

Figure 62. Received Any Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018

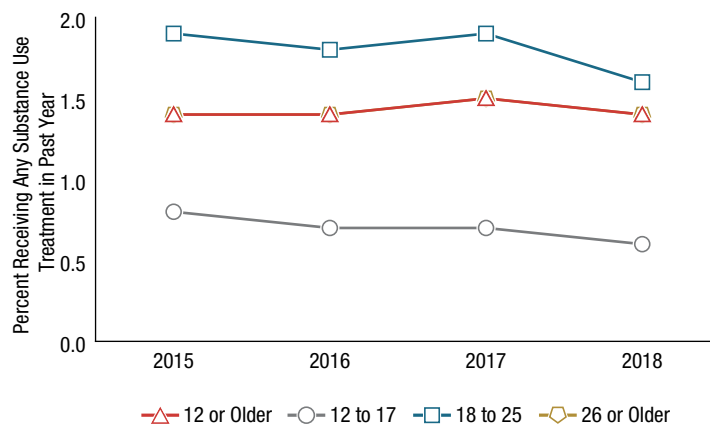


Figure 62 Table. Received Any Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	1.4	1.4	1.5	1.4
12 to 17	0.8	0.7	0.7	0.6
18 to 25	1.9	1.8	1.9	1.6
26 or Older	1.4	1.4	1.5	1.4

of adults aged 26 or older who received any substance use treatment was similar to the percentages in 2015 to 2017.

Receipt of Specialty Substance Use Treatment

Approximately 2.4 million people aged 12 or older in 2018 received substance use treatment at a specialty facility in the past year, or 0.9 percent of the population (Figure 63). The percentage of people who received substance use treatment at a specialty facility in 2018 was similar to the percentages in 2015 to 2017.

By Age Group

In 2018, about 83,000 adolescents aged 12 to 17 received substance use treatment at a specialty facility in the past year, which corresponds to 0.3 percent of adolescents (Figure 63). The percentage of adolescents in 2018 who received substance use treatment at a specialty facility was similar to the percentages from 2015 to 2017.

An estimated 331,000 young adults aged 18 to 25 in 2018 received substance use treatment at a specialty facility in the past year, or 1.0 percent of young adults (Figure 63). The 2018 percentage of young adults who received substance use treatment at a specialty facility was similar to the percentages in 2015 and 2016, but it was lower than the percentage in 2017. Nevertheless, in each year from 2015 to 2018, about

1.0 to 1.3 percent of young adults received substance use treatment at a specialty facility in the past year.

In 2018, about 1.9 million adults aged 26 or older received substance use treatment at a specialty facility in the past year. This number corresponds to 0.9 percent of adults in this age group (Figure 63). The percentage of adults aged 26 or older in 2018 who received substance use treatment at a specialty facility was similar to the corresponding percentages in 2015 to 2017.

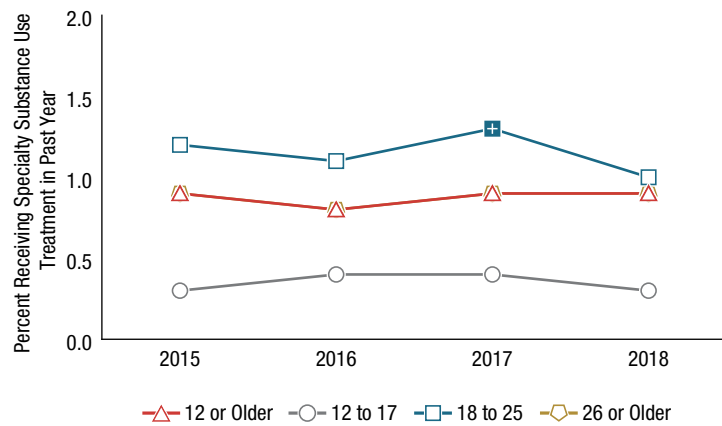
Receipt of Specialty Substance Use Treatment among People Who Needed Substance Use Treatment

The estimated 2.4 million people aged 12 or older in 2018 who received substance use treatment at a specialty facility in the past year also correspond to 11.1 percent of the people who needed treatment (Figure 64). Among people aged 12 or older who needed substance use treatment, the percentage in 2018 who received specialty substance use treatment was similar to the percentages in 2015 to 2017.

By Age Group

The 83,000 adolescents aged 12 to 17 in 2018 who received substance use treatment at a specialty facility in the past year

Figure 63. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 63 Table. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older: 2015-2018

Age	2015	2016	2017	2018
12 or Older	0.9	0.8	0.9	0.9
12 to 17	0.3	0.4	0.4	0.3
18 to 25	1.2	1.1	1.3*	1.0
26 or Older	0.9	0.8	0.9	0.9

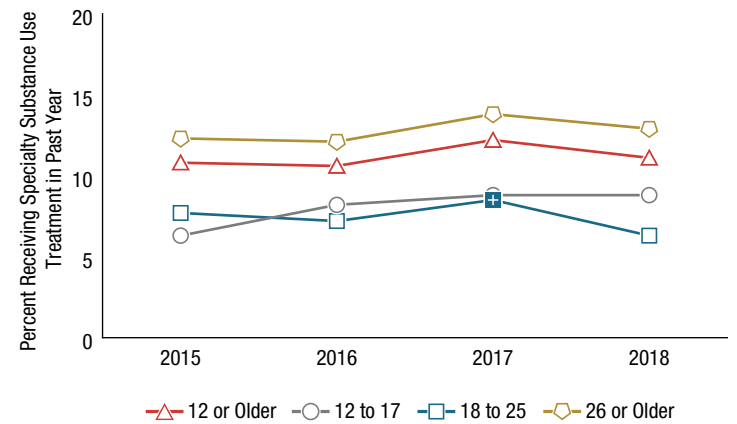
* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

correspond to 8.8 percent of the adolescents who needed substance use treatment (Figure 64). Among adolescents who needed substance use treatment, the percentage in 2018 who received substance use treatment at a specialty facility was similar to the percentages in 2015 to 2017.

In 2018, the 331,000 young adults aged 18 to 25 who received substance use treatment at a specialty facility in the past year correspond to 6.3 percent of the young adults who needed substance use treatment (Figure 64). Among young adults who needed substance use treatment, the 2018 percentage who received specialty substance use treatment was similar to the percentages in 2015 and 2016, but it was lower than the percentage in 2017.

The estimated 1.9 million adults aged 26 or older in 2018 who received substance use treatment at a specialty facility in the past year correspond to 12.9 percent of the adults in this age group who needed substance use treatment (Figure 64). Among adults aged 26 or older who needed substance use treatment, the percentage who received substance use treatment at a specialty facility in 2018 was similar to the percentages in 2015 to 2017.

Figure 64. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older Who Needed Substance Use Treatment in the Past Year: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 64 Table. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older Who Needed Substance Use Treatment in the Past Year: 2015-2018

Age	2015	2016	2017	2018
12 or Older	10.8	10.6	12.2	11.1
12 to 17	6.3	8.2	8.8	8.8
18 to 25	7.7	7.2	8.5*	6.3
26 or Older	12.3	12.1	13.8	12.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Receipt of Alcohol Use Treatment at a Specialty Facility among People with Alcohol Use Disorder

In 2018, about 686,000 people aged 12 or older with an alcohol use disorder received alcohol use treatment at a specialty facility in the past year, or 4.6 percent of people with an alcohol use disorder (2018 DT 7.58). Among people aged 12 or older with an alcohol use disorder, the percentage in 2018 who received alcohol use treatment at a specialty facility was similar to the percentages in 2015 to 2017.

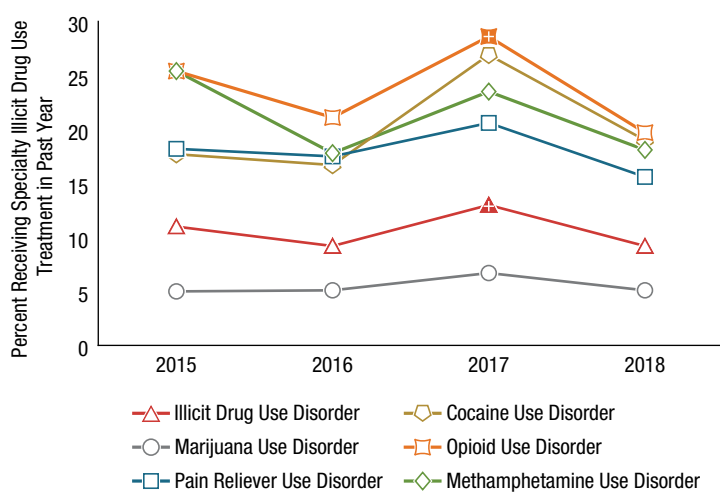
Receipt of Illicit Drug Use Treatment at a Specialty Facility among People with Specific Illicit Drug Use Disorders

In 2018, approximately 743,000 people aged 12 or older with an illicit drug use disorder received illicit drug use treatment at a specialty facility in the past year (2018 DT 7.57). This number corresponds to 9.2 percent of people aged 12 or older with an illicit drug use disorder (Figure 65). Among people aged 12 or older with an illicit drug use

disorder, the percentage in 2018 who received illicit drug use treatment at a specialty facility was similar to the percentages in 2015 and 2016 (11.0 and 9.2 percent, respectively), but it was lower than the percentage in 2017 (13.0 percent).

About 400,000 people aged 12 or older in 2018 with an opioid use disorder received illicit drug use treatment at a specialty facility in the past year, or 19.7 percent of those with an opioid use disorder (Figure 65). In addition, the following percentages of people received illicit drug use treatment at a specialty facility: 19.0 percent of people with a cocaine use disorder, 18.1 percent of people with a methamphetamine use disorder, 17.6 percent of people with a tranquilizer or sedative use disorder, and 9.3 percent of people with a stimulant use disorder. Estimates for the receipt of illicit drug use treatment at a specialty facility among people aged 12 or older with a heroin use disorder, hallucinogen use disorder, or inhalant use disorder were not reported for 2018 due to low precision.¹²

Figure 65. Received Specialty Illicit Drug Use Treatment in the Past Year among People Aged 12 or Older, by Specific Illicit Drug Use Disorders: 2015-2018



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 65 Table. Received Specialty Illicit Drug Use Treatment in the Past Year among People Aged 12 or Older, by Specific Illicit Drug Use Disorders: 2015-2018

Drug Use Disorder	2015	2016	2017	2018
Illicit Drug Use Disorder	11.0	9.2	13.0 ⁺	9.2
Marijuana Use Disorder	5.0	5.1	6.7	5.1
Pain Reliever Use Disorder	18.2	17.5	20.6	15.6
Cocaine Use Disorder	17.7	16.7	26.9	19.0
Opioid Use Disorder	20.7	21.1	28.6 ⁺	19.7
Methamphetamine Use Disorder	25.4	17.8	23.5	18.1

+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Similar to the trend described previously for the receipt of illicit drug use treatment at a specialty facility in the past year among people with an illicit drug use disorder, the percentage of people in 2018 with an opioid use disorder who received illicit drug use treatment at a specialty facility (19.7 percent) was similar to the percentages in 2015 and 2016 (20.7 and 21.1 percent, respectively), but it was lower than the percentage in 2017 (28.6 percent) (Figure 65). In contrast, among people aged 12 or older in 2018 with a marijuana use disorder, cocaine use disorder, methamphetamine use disorder, pain reliever use disorder, stimulant use disorder, or tranquilizer use disorder, the respective percentages who received illicit drug use treatment at a specialty facility in the past year were similar to the corresponding percentages from 2015 to 2017 (2018 DT 7.57). For example, 5.0 to 6.7 percent of people in 2015 to 2018 who had a marijuana use disorder received illicit drug use treatment at a specialty facility.

Perceived Need for Substance Use Treatment

NSDUH respondents are defined as having a perceived need for substance use treatment (i.e., treatment for problems related to their use of alcohol or illicit drugs) if they indicated that they felt they needed substance use treatment in the past year. Respondents may have a perceived need for substance use treatment, regardless of whether they had an SUD in the past year. In this report, estimates for the perceived need for substance use treatment are discussed only for people aged 12 or older

who were classified as needing treatment but who did not receive *specialty* treatment for their use of alcohol or illicit drugs. As described previously, people are defined as needing substance use treatment if they had an SUD in the past year or if they received substance use treatment at a specialty facility⁵⁶ in the past year.^{57,58}

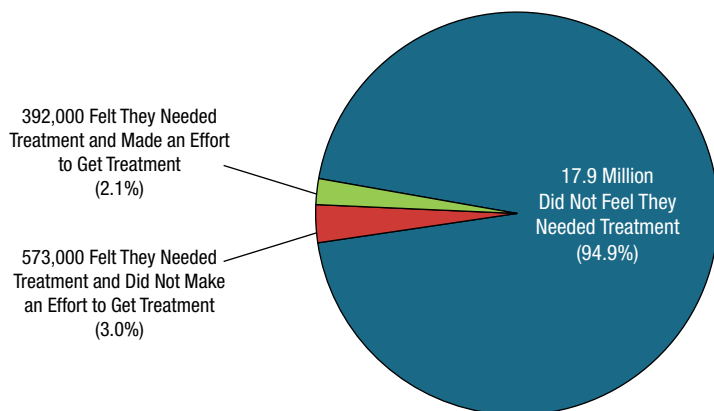
In 2018, among the estimated 18.9 million people aged 12 or older who needed substance use treatment but did not receive specialty treatment in the past year, about 964,000 perceived a need for treatment for their use of illicit drugs or alcohol. These individuals who perceived a need for substance use treatment include 392,000 who made an effort to get treatment and 573,000 who did not make an effort to get treatment (Figure 66).⁵⁹

The estimated 964,000 people who perceived a need for substance use treatment correspond to about 5.1 percent of people aged 12 or older who needed treatment but did not receive specialty substance use treatment in the past year (2018 DT 7.64). Thus, the large majority (94.9 percent) of people aged 12 or older who needed substance use treatment but did not receive specialty treatment did not think they needed treatment in the past 12 months for their substance use. Among people aged 12 or older who needed treatment but did not receive specialty substance use treatment, the percentage in 2018 who perceived they needed treatment was similar to the percentages in 2015 to 2017.

Aged 12 to 17

Most adolescents aged 12 to 17 in 2018 who needed treatment for their substance use but did not receive specialty

Figure 66. Perceived Need for Substance Use Treatment among People Aged 12 or Older Who Needed but Did Not Receive Specialty Substance Use Treatment in the Past Year: 2018



18.9 Million People Needed but Did Not Receive Specialty Substance Use Treatment

treatment did not perceive a need for substance use treatment. Among the estimated 863,000 adolescents in 2018 who needed substance use treatment but did not receive treatment at a specialty facility in the past year, about 15,000 perceived a need for treatment for their substance use. This number of adolescents who perceived a need for substance use treatment corresponds to 1.8 percent of adolescents who needed but did not receive specialty treatment (2018 DT 7.64). Among adolescents who needed treatment but did not receive specialty substance use treatment, the percentage in 2018 who perceived a need for substance use treatment was similar to the percentages in 2015 to 2017.

Aged 18 to 25

Most young adults aged 18 to 25 in 2018 who needed treatment for their substance use but did not receive specialty treatment did not perceive a need for treatment. Among the estimated 4.9 million young adults in 2018 who needed substance use treatment but did not receive treatment at a specialty facility in the past year, about 169,000 perceived a need for treatment for their substance use. This number of young adults who perceived a need for substance use treatment corresponds to 3.5 percent of young adults who needed treatment but did not receive specialty treatment (2018 DT 7.64). Among young adults who needed treatment but did not receive specialty substance use treatment, the percentage in 2018 who perceived a need for substance use treatment was similar to the percentages in 2015 to 2017.

Aged 26 or Older

In 2018, the estimated 13.1 million adults aged 26 or older who needed substance use treatment but did not receive specialty treatment in the past year include approximately 780,000 adults in this age group who perceived a need for treatment for their substance use. This number of adults aged 26 or older who perceived a need for substance use treatment corresponds to 5.9 percent of adults in this age group who needed treatment but did not receive specialty treatment (2018 DT 7.64). Among adults aged 26 or older who needed treatment but did not receive specialty substance use treatment, the percentage in 2018 who perceived a need for substance use treatment was similar to the percentages in 2015 to 2017.

Reasons for Not Receiving Specialty Substance Use Treatment

NSDUH respondents who did not receive substance use treatment in the past 12 months but felt they needed

treatment were asked to report the reasons for not receiving treatment. As noted in the previous section, 94.9 percent of people aged 12 or older in 2018 who were classified as needing substance use treatment (i.e., either had an SUD or received specialty substance use treatment) but who did not receive specialty substance use treatment did not think they needed treatment (Figure 66). Information on common reasons for not receiving substance use treatment despite individuals perceiving a need for treatment is important for identifying and addressing barriers to treatment receipt.

In 2018, common reasons for not receiving substance use treatment among people aged 12 or older who needed treatment and perceived a need for treatment but did not receive treatment at a specialty facility were not being ready to stop using (38.4 percent) or having no health care coverage and not being able to afford the cost of treatment (32.5 percent) (2018 DT 7.65). Stated another way, about 2 in 5 people who needed and perceived a need for treatment but did not receive substance use treatment at a specialty facility were not ready to stop using, and about 1 in 3 had no health care coverage and were not able to afford the cost. Among people aged 12 or older who needed and perceived a need for treatment but did not receive treatment at a specialty facility, the percentages in 2015 to 2018 who were not ready to stop using were similar across the years and ranged from 37.7 to 40.3 percent. Corresponding percentages in 2015 to 2018 for people not receiving substance use treatment because they had no health care coverage and could not afford the cost were also similar across the years and ranged from 26.4 to 32.5 percent.

About 1 in 5 people aged 12 or older in 2018 who needed and perceived a need for treatment but did not receive treatment at a specialty facility did not know where to go to get treatment (21.1 percent) (2018 DT 7.65). This percentage in 2018 was higher than the percentage in 2017 (10.9 percent), but it was similar to the percentages in 2015 and 2016 (12.5 and 18.6 percent, respectively).

In 2018, about 1 in 6 people aged 12 or older who needed and perceived a need for treatment but did not receive treatment at a specialty facility (16.0 percent) felt that getting treatment would have a negative effect on their job (2018 DT 7.65). An estimated 14.9 percent of these people felt that getting treatment would cause their neighbors or community to have a negative opinion of them. These percentages in 2018 were similar to the percentages in 2015 to 2017 (ranging from 11.5 to 20.5 percent for effects on jobs and from 8.3 to 17.2 percent for opinions of neighbors or the community).

Mental Health Service Use in the Past Year

NSDUH includes questions to estimate the use of mental health services in the United States among the adolescent and adult populations. In addition to estimating the use of mental health services among the overall adolescent and adult populations, these questions allow the estimation of the use of mental health services among adolescents and adults with mental health issues (i.e., MDE, AMI, and SMI).

Treatment for Depression among Adolescents

Adolescents aged 12 to 17 who had met the criteria for having a past year MDE were asked whether they had received treatment for their depression in the past year. Adolescents who reported seeing or talking to a health professional or taking prescribed medication for their depression were defined as having received treatment for their depression in the past year.⁶⁰

Of the 3.5 million adolescents in 2018 with a past year MDE, an estimated 1.4 million adolescents received treatment for depression. Stated another way, 41.4 percent of adolescents who had a past year MDE received treatment for depression (Figure 67). The 2018 percentage was similar to the percentages in most years from 2004 to 2017.

In 2018, about 1.1 million adolescents aged 12 to 17 who had a past year MDE with severe impairment received treatment for depression, or 46.9 percent of adolescents who had a past year MDE with severe impairment (Figure 67). The percentage of adolescents in 2018 with an MDE with severe impairment who received treatment for depression was similar to the percentages in most years from 2006 to 2017.

Treatment for Depression among Adults

Adults aged 18 or older who had met the criteria for having a past year MDE were asked whether they had received treatment for their depression in the past year. Treatment for depression in adults is defined as seeing or talking to a health professional or other professional or using prescription medication for depression in the past year.⁶⁰

Of the 17.7 million adults aged 18 or older in 2018 who had a past year MDE, 11.5 million received treatment for depression, or nearly two thirds (64.8 percent) of adults who had a past year MDE (Figure 68). The percentage of adults in 2018 with a past year MDE who received treatment for depression was similar to the percentages in 2009 and in 2015 to 2017, but it was lower than the percentages in 2010 to 2014.

Among the 11.5 million adults aged 18 or older in 2018 who had a past year MDE with severe impairment, 7.9 million received treatment for depression, or more than two thirds (68.6 percent) of adults with a past year MDE with severe impairment (2018 DT 10.35). The percentage of adults in 2018 with an MDE with severe impairment who received treatment for depression was lower than the percentages in 2010 to 2017.

Aged 18 to 25

Of the 4.6 million young adults aged 18 to 25 in 2018 with a past year MDE, about 2.3 million received treatment for depression in the past year, or about half (49.6 percent) of young adults with a past year MDE (Figure 68). The percentage of young adults in 2018 with a past year MDE who received treatment for depression was similar to percentages in most years from 2009 to 2017.

In 2018, approximately 1.6 million of the young adults aged 18 to 25 with a past year MDE with severe impairment received treatment for depression in the past year, or slightly more than half of these young adults (53.7 percent) (2018 DT 10.35). The percentage of young adults in 2018 with an

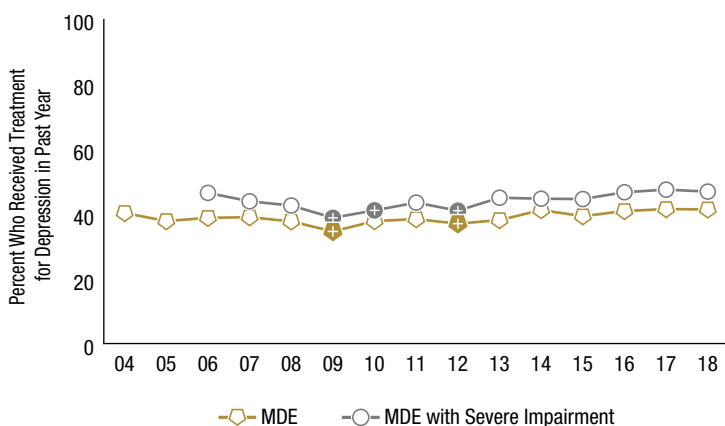
MDE with severe impairment who received treatment for depression was similar to the percentages in 2009 to 2017 (ranging from 51.2 to 57.1 percent).

Aged 26 to 49

In 2018, about 5.1 million of the 8.0 million adults aged 26 to 49 with a past year MDE received treatment for depression in the past year, or close to two thirds of the adults in this age group who had a past year MDE (64.4 percent) (Figure 68). The percentage of adults in this age group in 2018 with a past year MDE who received treatment for depression was similar to the percentages in most years from 2009 to 2017.

In 2018, approximately 3.6 million adults aged 26 to 49 with a past year MDE with severe impairment received treatment for depression in the past year, or 68.0 percent of adults in this age group who had a past year MDE with severe impairment (2018 DT 10.35). The percentage of adults in this age group in 2018 with an MDE with severe impairment who received treatment for depression was lower than the percentages in 2010 to 2013 and in 2016 (ranging from 73.7 to 74.4 percent), but it was similar to the percentages in 2009, 2014 to 2015, and 2017 (ranging from 71.8 to 72.4 percent).

Figure 67. Received Treatment in the Past Year for Depression among Youths Aged 12 to 17 with a Past Year Major Depressive Episode (MDE) or MDE with Severe Impairment: 2004-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

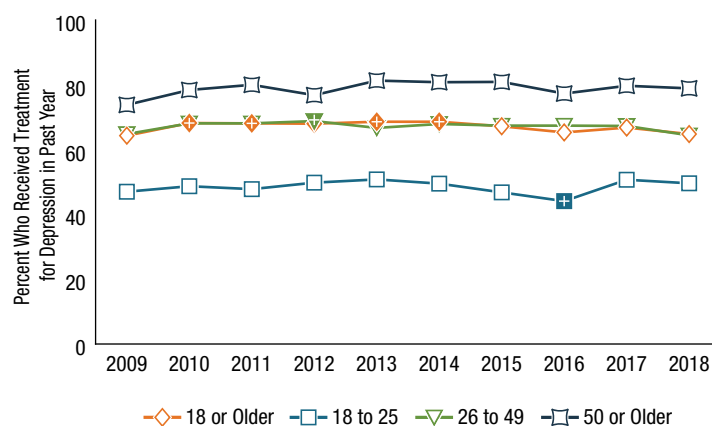
Figure 67 Table. Received Treatment in the Past Year for Depression among Youths Aged 12 to 17 with a Past Year Major Depressive Episode (MDE) or MDE with Severe Impairment: 2004-2018

MDE Status	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
MDE	40.3	37.8	38.8	39.0	37.7	34.6*	37.8	38.4	37.0*	38.1	41.2	39.3	40.9	41.5	41.4
MDE with Severe Impairment	N/A	N/A	46.5	43.9	42.6	38.8*	41.1*	43.5	41.0*	45.0	44.7	44.6	46.7	47.5	46.9

N/A = not available.

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 68. Received Treatment in the Past Year for Depression among Adults Aged 18 or Older with a Past Year Major Depressive Episode: 2009-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 68 Table. Received Treatment in the Past Year for Depression among Adults Aged 18 or Older with a Past Year Major Depressive Episode: 2009-2018

Age	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	64.3	68.2*	68.1*	68.0*	68.6*	68.6*	67.2	65.3	66.8	64.8
18 to 25	47.0	48.7	47.8	49.8	50.8	49.5	46.8	44.1*	50.7	49.6
26 to 49	64.8	68.1	68.1	68.8*	66.7	67.9	67.4	67.4	67.3	64.4
50 or Older	73.8	78.4	80.0	76.8	81.3	80.8	80.9	77.3	79.7	78.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 50 or Older

Of the 5.1 million adults aged 50 or older in 2018 who had a past year MDE, about 4.0 million received treatment for depression in the past year, or 78.9 percent of adults in this age group who had a past year MDE (Figure 68). The percentage of adults aged 50 or older in 2018 with an MDE who received treatment for depression was similar to the percentages from 2009 to 2017.

In 2018, 2.7 million of the 3.2 million adults aged 50 or older with a past year MDE with severe impairment received treatment for depression in the past year, or 83.1 percent of adults in this age group with a past year MDE with severe impairment (2018 DT 10.35). The percentage of adults aged 50 or older in 2018 with an MDE with severe impairment who received treatment for depression was similar to the percentages in most years from 2009 to 2017.

Any Mental Health Service Use among All Adolescents

In addition to asking youths aged 12 to 17 about treatment for depression, NSDUH includes questions for adolescents that ask about any receipt of services for emotional and behavioral problems (i.e., not just depression) not caused by substance use. The youth mental health service utilization section of the interview asks respondents aged 12 to 17 whether they received any treatment or counseling within the 12 months prior to the interview for problems with emotions or behavior in the following settings: (a) *specialty mental health settings*,⁶¹ (b) *education settings* (talked with a school social worker, psychologist, or counselor about an emotional or behavioral problem; participated in a program for students with emotional or behavioral problems while in a regular school; or attended a school for students with emotional or behavioral problems); (c) *general medical settings* (care from a pediatrician or family physician for emotional or behavioral problems); (d) *juvenile justice settings* (services for an emotional or behavioral problem in a detention center, prison, or jail); or (e) *child welfare settings* (foster care or therapeutic foster care).

As noted previously, the NSDUH interview does not include questions or methods for estimating the occurrence of mental disorders among adolescents aged 12 to 17 other than whether they had an MDE. Therefore, NSDUH does not include measures for adolescents equivalent to AMI or SMI for adults. Consequently, this section focuses on mental health care among all adolescents.

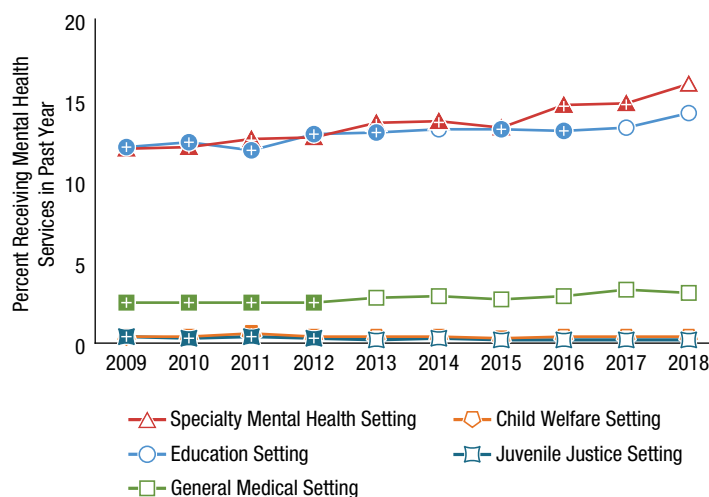
In 2018, the following numbers and percentages of adolescents aged 12 to 17 received mental health services

in the past 12 months in specific settings for problems with emotions or behaviors (2018 DT 11.1 and Figure 69):

- 3.9 million adolescents (16.0 percent) received mental health services in a specialty mental health setting (inpatient or outpatient care),
- 3.4 million adolescents (14.2 percent) received mental health services in an education setting,
- 767,000 adolescents (3.1 percent) received mental health services in a general medical setting,
- 94,000 adolescents (0.4 percent) received mental health services in a child welfare setting, and
- 48,000 adolescents (0.2 percent) received mental health services in a juvenile justice setting.

The percentage of adolescents aged 12 to 17 in 2018 who received mental health services in a specialty mental health setting in the past 12 months (16.0 percent) was higher than the percentages in 2009 to 2017, which ranged from 12.0 to 14.8 percent (Figure 69). The percentage of adolescents in 2018 who received mental health services in an education

Figure 69. Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17: 2009-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 69 Table. Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17: 2009-2018

Source	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Specialty Mental Health Setting	12.0*	12.1*	12.6*	12.7*	13.6*	13.7*	13.3*	14.7*	14.8*	16.0
Education Setting	12.1*	12.4*	11.9*	12.9*	13.0*	13.2	13.2*	13.1*	13.3	14.2
General Medical Setting	2.5*	2.5*	2.5*	2.5*	2.8	2.9	2.7	2.9	3.3	3.1
Child Welfare Setting	0.4	0.4	0.6*	0.4	0.4	0.4	0.3	0.4	0.4	0.4
Juvenile Justice Setting	0.4*	0.3*	0.4*	0.3*	0.2	0.3	0.2	0.2	0.2	0.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

setting (14.2 percent) also was higher than the percentages in most years from 2009 to 2017, ranging from 11.9 to 13.3 percent. In contrast, the percentages of adolescents in 2018 who received mental health services in a child welfare setting (0.4 percent), a juvenile justice setting (0.2 percent), and a general medical setting (3.1 percent) were similar to the corresponding percentages between 2013 and 2017.

Any Mental Health Service Use among All Adults

Adults aged 18 or older are asked whether they received treatment or counseling for any problem with emotions, “nerves,” or mental health in the past year in any inpatient or outpatient setting or if they used prescription medication in the past year for a mental or emotional condition. All adults are asked these questions about their use of mental health services (i.e., not just those with mental illness). Respondents are asked not to include treatment for their use of alcohol or illicit drugs. Unlike the previously discussed questions about treatment for depression, general questions for the receipt of treatment or counseling for mental health issues among adults do not ask about treatment for a particular mental disorder. Consequently, references in this section to treatment or counseling for any problem with emotions, nerves, or mental health are described broadly as “mental health service use” or “mental health care.” This section presents estimates of mental health service use for the entire adult population, regardless of whether they were defined as having AMI or SMI in the past 12 months.

In 2018, an estimated 37.1 million adults aged 18 or older received any mental health services during the past 12 months. This number corresponds to 15.0 percent of adults, or about 1 in 7 adults (Figure 70). An estimated 12.2 percent of adults received prescription medication for a mental health issue, 7.9 percent received outpatient mental health services, and 1.0 percent received inpatient mental health services.

The estimate of adults aged 18 or older in 2018 who received any mental health services in the past 12 months was greater than the estimates in all years between 2002 and 2011, but it was similar to the estimates in most years from 2012 to 2017 (Figure 70). The percentage of adults in 2018 who received prescription medication was greater than the percentages in 2002 to 2009, but it was similar to the percentages in 2010 to 2017. The percentage of adults in 2018 who received outpatient mental health services was greater than the percentages in 2003 to 2016, but it was similar to the percentage in 2017. The estimate of adults in 2018 who

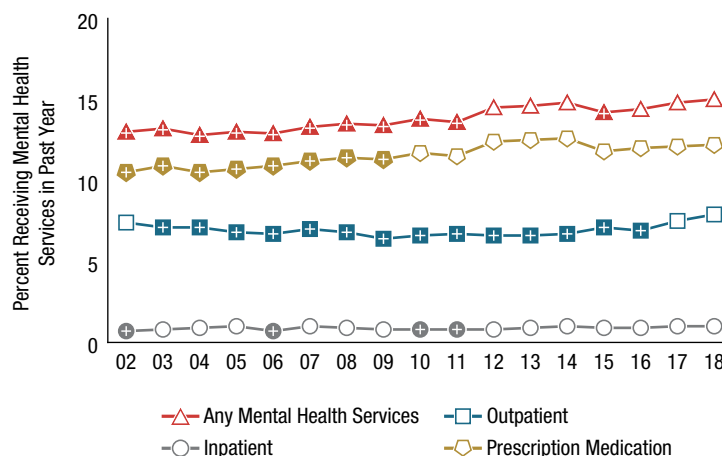
received inpatient mental health services was similar to the estimates in most years from 2002 to 2017.

Aged 18 to 25

In 2018, approximately 5.1 million young adults aged 18 to 25 used mental health services in the past year (2018 DT 10.7). This number of young adults who received mental health services corresponds to 15.2 percent of young adults. An estimated 11.1 percent of young adults received prescription medication for a mental health issue, 9.3 percent received outpatient mental health services, and 1.6 percent received inpatient mental health services (2018 DT 10.16).

The percentage of young adults aged 18 to 25 in 2018 who received mental health services in the past year was higher than the percentages in 2002 to 2016, but it was similar to the percentage in 2017 (14.9 percent) (2018 DT 10.7). The percentages of young adults in 2018 who received prescription medication or outpatient services were higher than the percentages in 2002 to 2016, but they were similar to the corresponding percentages in 2017 (2018 DT 10.16). The percentage of young adults in 2018 who

Figure 70. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older: 2002-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 70 Table. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older: 2002-2018

Service Type	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
Any Mental Health Services	13.0*	13.2*	12.8*	13.0*	12.9*	13.3*	13.5*	13.4*	13.8*	13.6*	14.5	14.6	14.8	14.2*	14.4	14.8	15.0
Inpatient	0.7*	0.8	0.9	1.0	0.7*	1.0	0.9	0.8	0.8*	0.8*	0.8	0.9	1.0	0.9	0.9	1.0	1.0
Outpatient	7.4	7.1*	7.1*	6.8*	6.7*	7.0*	6.8*	6.4*	6.6*	6.7*	6.6*	6.6*	6.7*	7.1*	6.9*	7.5	7.9
Prescription Medication	10.5*	10.9*	10.5*	10.7*	10.9*	11.2*	11.4*	11.3*	11.7	11.5	12.4	12.5	12.6	11.8	12.0	12.1	12.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

received inpatient services was higher than the percentages in most years from 2002 to 2014, but it was similar to the percentages in 2015 to 2017.

Aged 26 to 49

In 2018, about 16.1 million adults aged 26 to 49 used mental health services in the past year (2018 DT 10.7). This number corresponds to 16.1 percent of adults in this age group. An estimated 12.9 percent of adults aged 26 to 49 received prescription medication for a mental health issue, 8.8 percent received outpatient mental health services, and 1.0 percent received inpatient mental health services (2018 DT 10.16).

The 2018 estimate of the receipt of mental health services in the past year among adults aged 26 to 49 was higher than the estimates from 2002 to 2011, but it was similar to the estimates in most years from 2012 to 2017 (2018 DT 10.7). The percentage of adults in this age group in 2018 who received prescription medication was higher than the percentages in 2002 to 2008, but it was similar to the percentages in 2009 to 2017 (2018 DT 10.16). The percentage of adults aged 26 to 49 in 2018 who received outpatient services was higher than the percentages in 2005 to 2016, but it was similar to the percentages in 2002 to 2004 and 2017. The percentage of adults in this age group in 2018 who received inpatient services was similar to the percentages in most years from 2002 to 2017.

Aged 50 or Older

In 2018, approximately 15.9 million adults aged 50 or older used mental health services in the past year (2018 DT 10.7). This number corresponds to 14.0 percent of adults in this age group. An estimated 11.8 percent of adults aged 50 or older received prescription medication for a mental health issue, 6.6 percent received outpatient mental health services, and 0.7 percent received inpatient mental health services (2018 DT 10.16).

The 2018 estimate of the receipt of mental health services in the past year among adults aged 50 or older was higher than the estimates in 2002 to 2006, but it was similar to the estimates in 2007 to 2017, except for 2014 (15.4 percent) (2018 DT 10.7). Percentages of adults in this age group in 2018 who received prescription medication or inpatient services were similar to corresponding estimates in most years (for prescription medication) or all years (for inpatient services) from 2002 to 2017 (2018 DT 10.16). The percentage of adults aged 50 or older in 2018 who received outpatient

services was higher than percentages in 2009 to 2012, but it was similar to percentages in most years from 2013 to 2017.

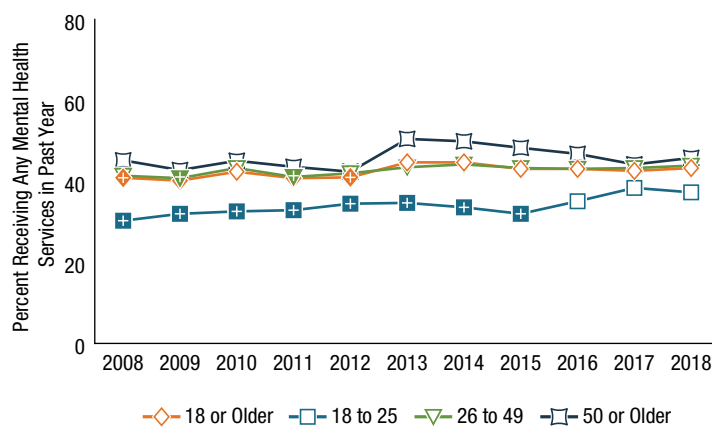
Any Mental Health Service Use among Adults with AMI

NSDUH data may also be used to assess mental health service use among adults aged 18 or older with AMI. Among the 47.6 million adults in 2018 with AMI, fewer than half (20.6 million, or 43.3 percent) received mental health services in the past year (Figure 71). This percentage of adults in 2018 with AMI who received mental health care was higher than the percentages in most years from 2008 to 2012, but it was similar to the percentages in 2013 to 2017.

Aged 18 to 25

In 2018, approximately 3.3 million young adults aged 18 to 25 with AMI used mental health services in the past year. This number of young adults who used mental health services corresponds to 37.3 percent of young adults with AMI (Figure 71). The percentage of young adults in 2018 with AMI who received mental health care was similar to the percentages in 2016 and 2017, and it was higher than the percentages between 2008 and 2015, when nearly one third

Figure 71. Any Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 71 Table. Any Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	40.9 ⁺	40.2 ⁺	42.4	40.8 ⁺	41.0 ⁺	44.7	44.7	43.1	43.1	42.6	43.3
18 to 25	30.3 ⁺	32.0 ⁺	32.6 ⁺	32.9 ⁺	34.5 ⁺	34.7 ⁺	33.6 ⁺	32.0 ⁺	35.1	38.4	37.3
26 to 49	41.4	40.8 ⁺	43.3	41.1 ⁺	42.0	43.5	44.2	43.3	43.1	43.3	43.9
50 or Older	45.2	42.8	45.1	43.6	42.4	50.5	49.9	48.3	46.8	44.2	45.8

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

of young adults with AMI received services. Nevertheless, more than 60 percent of young adults in 2018 who had AMI did *not* receive mental health services in the past year.

Aged 26 to 49

In 2018, an estimated 10.0 million adults aged 26 to 49 with AMI used mental health services in the past year. This number of adults in this age group who received mental health services corresponds to 43.9 percent of those with AMI (Figure 71). The percentage of adults aged 26 to 49 in 2018 with AMI who received mental health care was similar to the percentages in most years from 2008 to 2017.

Aged 50 or Older

In 2018, approximately 7.3 million adults aged 50 or older with AMI used mental health services in the past year. This number of adults in this age group who used mental health services corresponds to 45.8 percent of those with AMI (Figure 71). The percentage of adults aged 50 or older in 2018 with AMI who received mental health care was similar to the percentages in all years from 2008 to 2017.

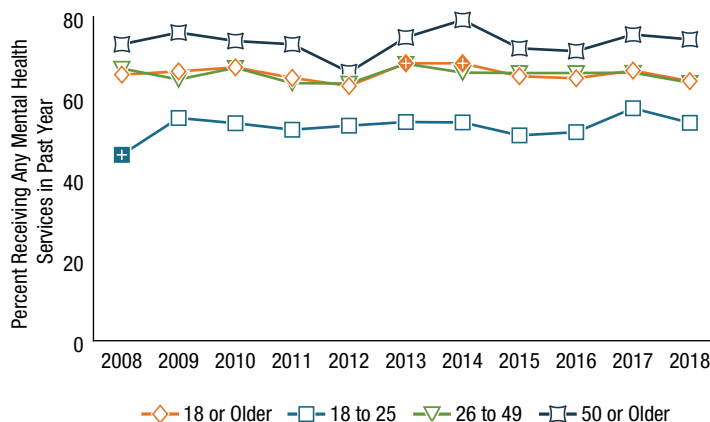
Any Mental Health Service Use among Adults with SMI

NSDUH data may also be used to assess mental health service use among adults aged 18 or older with SMI. In 2018, about 7.3 million of the 11.4 million adults with past year SMI (64.1 percent) received mental health services in the past year (Figure 72). This percentage of adults in 2018 with SMI who received mental health services in the past year was similar to the percentages in 2008 to 2012 and in 2015 to 2017, but it was lower than the percentages in 2013 and 2014. In any given year, about two thirds of adults with past year SMI received mental health services in the past year. Stated another way, however, about one third of adults with SMI in any given year did *not* receive mental health services.

Aged 18 to 25

In 2018, approximately 1.4 million young adults aged 18 to 25 with SMI used mental health services in the past year. This number of young adults who used mental health services corresponds to 53.8 percent of those with SMI (Figure 72). The percentage of young adults in 2018 with SMI who received mental health services was similar to the percentages in 2009 to 2017, but it was higher than the percentage in 2008.

Figure 72. Any Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 72 Table. Any Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	65.7	66.5	67.5	64.9	62.9	68.5 ⁺	68.5 ⁺	65.3	64.8	66.7	64.1
18 to 25	45.9 ⁺	55.0	53.7	52.1	53.1	54.0	53.9	50.7	51.5	57.4	53.8
26 to 49	67.2	64.5	67.4	63.6	63.5	68.4	66.2	66.1	66.1	66.2	63.7
50 or Older	73.2	76.1	74.0	73.2	66.3	74.9	79.2	72.2	71.5	75.6	74.4

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 26 to 49

In 2018, about 3.8 million adults aged 26 to 49 with SMI used mental health services in the past year. This number of adults in this age group who received mental health services in the past year corresponds to 63.7 percent of those with SMI (Figure 72). The percentage of adults aged 26 to 49 with SMI who received mental health services remained steady from 2008 to 2018.

Aged 50 or Older

In 2018, an estimated 2.1 million adults aged 50 or older with SMI used mental health services in the past year. This number of adults in this age group who used mental health services corresponds to about three fourths of those with SMI (74.4 percent) (Figure 72). The percentage of adults aged 50 or older with SMI who received mental health services remained steady from 2008 to 2018.

Perceived Unmet Need for Mental Health Services among Adults with Mental Illness

This section discusses estimates of the perceived unmet need for mental health services among adults aged 18 or older with AMI or SMI and the reasons for not receiving these services among adults with a perceived unmet need.

In contrast to how the perceived unmet need for substance use treatment is estimated (see the earlier section on the [Perceived Need for Substance Use Treatment](#)), the perceived unmet need for mental health services is estimated from a question that asks all adults aged 18 or older whether there was any time in the past 12 months when they thought they needed treatment or counseling for mental health issues but did not receive services. However, this section focuses on discussing estimates of the perceived unmet need for mental health services among adults with AMI or SMI, regardless of whether they received mental health services in the past 12 months. Therefore, this measure for the perceived unmet need for mental health services includes adults with AMI or SMI who may have received some type of mental health care in the past 12 months. Adults with AMI or SMI who received mental health services in the past 12 months could have felt an unmet need for services before or after they received services.

Perceived Unmet Need for Mental Health Services among Adults with AMI

In 2018, approximately 11.2 million adults aged 18 or older with past year AMI perceived an unmet need for mental health care in the past year (2018 DT 10.23), including 5.0 million adults with AMI who did not receive any mental health services in the past year (2018 DT 10.25). About 1 in 4 adults with past year AMI (23.6 percent) perceived an unmet need for mental health care (Figure 73). Among adults with a perceived unmet need and past year AMI, 44.4 percent did not receive any mental health services.

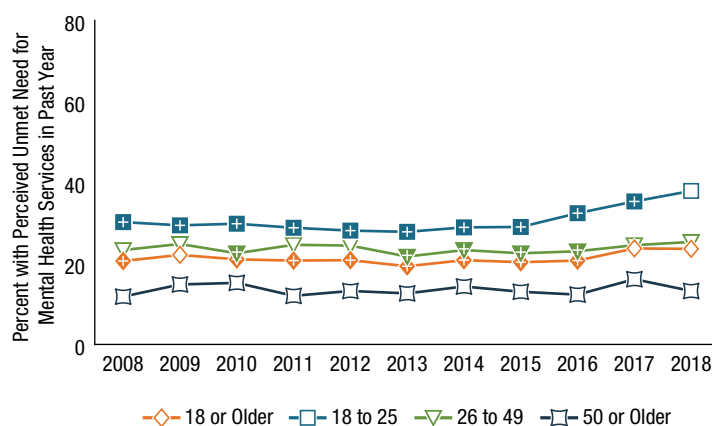
The estimate of 23.6 percent of adults aged 18 or older in 2018 with past year AMI who perceived an unmet need for mental health care in that period was higher than the estimates in most years from 2008 to 2017 (Figure 73). The 2018 percentage of adults with a perceived unmet need and past year AMI who did not receive mental health services was similar to the percentages in most years from 2008 to 2017 (2018 DT 10.25).

Aged 18 to 25

About 3.4 million young adults aged 18 to 25 in 2018 with past year AMI perceived an unmet need for mental health care in the past year, which corresponds to 37.9 percent of young adults with past year AMI (Figure 73). This percentage in 2018 of young adults with AMI who perceived an unmet need for mental health services was higher than the percentages in all years from 2008 to 2017 (ranging from 27.8 to 35.3 percent).

In 2018, slightly more than half of the 3.4 million young adults aged 18 to 25 with AMI who perceived an unmet need for mental health care did not receive any mental health services in the past year (1.8 million young adults with AMI, or 54.3 percent) (2018 DT 10.25).⁶² The percentage of young adults in 2018 with a perceived unmet need and past year AMI who did not receive mental health services in the past year was similar to the percentages in all years from 2008 to 2017, ranging from 50.1 to 56.7 percent.

Figure 73. Perceived Unmet Need for Mental Health Services in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 73 Table. Perceived Unmet Need for Mental Health Services in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	20.6+	22.1	21.0+	20.7+	20.8+	19.3+	20.8+	20.3+	20.7+	23.7	23.6
18 to 25	30.2+	29.4+	29.8+	28.8+	28.1+	27.8+	28.9+	29.0+	32.4+	35.3+	37.9
26 to 49	23.3	24.8	22.5+	24.6	24.4	21.7+	23.3+	22.5+	23.0+	24.5	25.3
50 or Older	11.8	14.8	15.2	12.0	13.2	12.6	14.3	13.0	12.3	16.1	13.2

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Aged 26 to 49

An estimated 5.7 million adults aged 26 to 49 in 2018 with past year AMI perceived an unmet need for mental health care in the past year. This number corresponds to 25.3 percent of adults in this age group with past year AMI (Figure 73). This percentage was similar to the percentages in 2008, 2009, 2011, 2012, and 2017, but it was higher than the percentages in 2010 and in 2013 to 2016.

Among the estimated 5.7 million adults aged 26 to 49 with AMI who had a perceived unmet need for mental health care, 44.2 percent (2.5 million adults) did not receive any mental health services in the past year (2018 DT 10.25). This percentage in 2018 was similar to the percentages in most years from 2008 to 2017.

Aged 50 or Older

About 2.1 million or 13.2 percent of adults aged 50 or older in 2018 with past year AMI perceived an unmet need for mental health care in the past year (Figure 73). The percentages of adults in this age group with AMI who perceived an unmet need for mental health services remained steady between 2008 and 2018 (ranging from 11.8 to 16.1 percent) (Figure 73). Among adults aged 50 or older with AMI who had a perceived unmet need for mental health care, 29.2 percent (614,000 adults) did not receive any mental health services in the past year (2018 DT 10.25). The 2018 percentage of adults in this age group with AMI and a perceived unmet need for mental health care who did not receive any mental health services was similar to the percentages in all years from 2008 to 2017.

Perceived Unmet Need for Mental Health Services among Adults with SMI

In 2018, about 5.1 million adults aged 18 or older with past year SMI perceived an unmet need for mental health care in the past year (2018 DT 10.23), including 1.8 million adults with SMI who did not receive any mental health services in the past year (2018 DT 10.26). More than 2 out of 5 adults with SMI (45.1 percent) perceived an unmet need for mental health services (Figure 74). About one third of adults with a perceived unmet need and past year SMI (36.1 percent) did not receive any mental health services in the past year.

The percentage of adults aged 18 or older in 2018 with SMI who perceived an unmet need for mental health

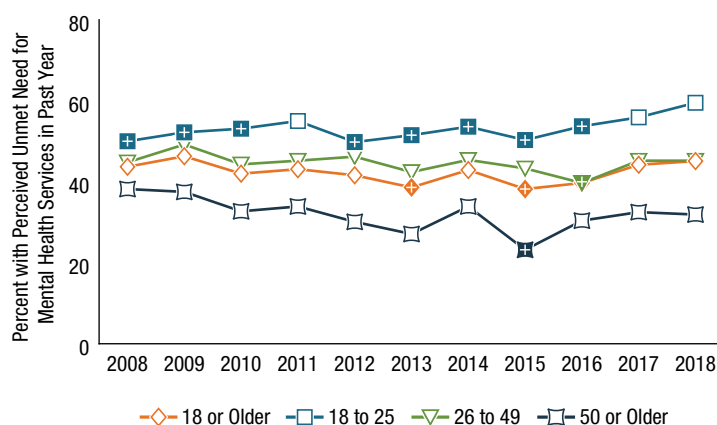
services (45.1 percent) was higher than the percentages in 2015 and 2016, but it was similar to the percentages in 2017 and most years between 2008 and 2014 (Figure 74). The 2018 percentage of adults with SMI and a perceived unmet need for mental health services who did not receive any mental health services in the past year was higher than the percentages in 2008 to 2010 (ranging from 27.9 to 30.1 percent), but it was similar to the percentages in all years from 2011 to 2017 except for 2015 (30.7 percent) (2018 DT 10.26).

Aged 18 to 25

In 2018, an estimated 1.5 million young adults aged 18 to 25 with SMI perceived an unmet need for mental health care in the past year, or 59.5 percent of young adults with SMI (Figure 74). For young adults with SMI, the 2018 estimate of the perceived unmet need for mental health services was higher than the estimates in most years from 2008 to 2016, but it was similar to the estimate in 2017.

About 726,000 of the 1.5 million young adults aged 18 to 25 in 2018 with SMI who perceived an unmet need for mental

Figure 74. Perceived Unmet Need for Mental Health Services in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: 2008-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 74 Table. Perceived Unmet Need for Mental Health Services in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: 2008-2018

Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18 or Older	43.7	46.3	42.0	43.1	41.6	38.6*	42.9	38.2*	39.7*	44.2	45.1
18 to 25	50.0*	52.2*	53.1*	55.0	49.8*	51.5*	53.6*	50.3*	53.7*	55.9	59.5
26 to 49	44.8	49.2	44.3	45.2	46.2	42.4	45.4	43.3	39.7*	45.2	45.2
50 or Older	38.2	37.5	32.7	33.9	30.1	27.1	33.9	23.2*	30.4	32.5	31.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

health services did not receive any mental health services in the past year, or 47.0 percent of these young adults (2018 DT 10.26). The 2018 percentage of young adults with SMI and a perceived unmet need for mental health services who did not receive any mental health services was similar to the percentages in all years from 2008 to 2017, ranging from 40.6 to 49.1 percent.

Aged 26 to 49

In 2018, approximately 2.7 million adults aged 26 to 49 with SMI perceived an unmet need for mental health care in the past year, or 45.2 percent of adults in this age group with SMI (Figure 74). Among adults with SMI who were aged 26 to 49, the 2018 estimate of the perceived unmet need for mental health services was similar to the estimates in most years from 2008 to 2017.

About 905,000 of the 2.7 million adults aged 26 to 49 in 2018 with SMI who perceived an unmet need for mental health services in the past year did not receive any mental health services (2018 DT 10.23), or 34.0 percent of these adults who perceived an unmet need for mental health services (2018 DT 10.26). For adults aged 26 to 49 with SMI who perceived an unmet need for mental health services, the percentages who did not receive any mental health services remained steady between 2008 and 2018 (ranging from 26.8 to 36.3 percent).

Aged 50 or Older

In 2018, about 907,000 adults aged 50 or older with SMI perceived an unmet need for mental health care in the past year, corresponding to 31.9 percent of adults in this age group with SMI (Figure 74). Among adults aged 50 or older with SMI, the 2018 estimate of the perceived unmet need for mental health services was similar to the estimates in most years from 2008 to 2017.

The percentage of adults aged 50 or older with SMI and a perceived unmet need for mental health care who did not receive any mental health services in the past year did not meet the criteria for statistical precision (2018 DT 10.26).¹² Therefore, trends are not discussed for these estimates among adults in this age group.

Reasons for Not Receiving Mental Health Services among Adults with Mental Illness and a Perceived Unmet Need

Among adults aged 18 or older in 2018 with AMI in the past year and among adults with SMI in the past year who had a perceived unmet need for mental health services

but who did not receive services in the past year, the most common reason for not receiving services was that these adults could not afford the cost of care. About 2 out of 5 adults with AMI (45.2 percent) (2018 DT 8.34) and slightly more than half of adults with SMI (54.7 percent) (2018 DT 8.35) who perceived an unmet need for mental health services did not receive services because they could not afford the cost of care.

Other reasons in 2018 for not receiving mental health care among adults aged 18 or older with mental illness included not knowing where to go for services and believing that they could handle the problem without treatment. Among adults with AMI who had a perceived unmet need for mental health care and did not receive services in the past year, 29.6 percent believed at the time that they could handle the problem without treatment, and 29.3 percent did not know where to go for services (2018 DT 8.34). In addition, 21.3 percent of these adults with AMI did not have the time to go for care.

Among corresponding adults aged 18 or older in 2018 with SMI, 25.4 percent did not receive services because they believed at the time they could handle the problem without treatment (2018 DT 8.35), and 31.6 percent did not know where to go for services. An estimated 22.5 percent of these adults with SMI were concerned about being committed to a psychiatric hospital or having to take medication.

Receipt of Services for Co-Occurring Substance Use Disorder and Mental Health Issues

People with co-occurring SUD and mental health issues may receive services to help with either or both of these issues. This section presents estimates of the receipt of services among adolescents and adults with co-occurring SUD and mental health issues.

Receipt of Services among Adolescents with Co-Occurring MDE and a Substance Use Disorder

Among the 358,000 adolescents aged 12 to 17 in 2018 who had a co-occurring MDE and an SUD in the past year, 234,000 received either substance use treatment at a specialty facility or mental health services in the past year (2018 DT 11.14). This number of adolescents who received mental health care or specialty substance use treatment corresponds to 65.7 percent of adolescents who had a co-occurring MDE and an SUD (Figure 75). Stated another way, more than a third of adolescents with both an MDE

and an SUD in the past year did not receive either type of service. Among adolescents in 2018 with a co-occurring MDE and an SUD, 5.4 percent received both mental health care and specialty substance use treatment, 59.5 percent received only mental health care, and 0.8 percent received only specialty substance use treatment.

Receipt of Services among Adults with Co-Occurring AMI and a Substance Use Disorder

Among the 9.2 million adults aged 18 or older in 2018 with co-occurring AMI and an SUD in the past year, about 4.7 million received either substance use treatment at a specialty facility⁵⁶ or mental health care in the past year, or about half of these adults (51.4 percent) (Figure 76). Thus, 48.6 percent of adults with co-occurring AMI and an SUD did not receive either type of care. The percentages of adults in 2018 with co-occurring AMI and an SUD who received either type of service was similar to the percentages in all years from 2015 to 2017, ranging from 48.0 to 51.0 percent. Stated another way, however, about half of the adults in

each year who had co-occurring AMI and an SUD in the past year did *not* receive either type of service.⁶³

An estimated 7.0 percent of adults aged 18 or older in 2018 with these co-occurring disorders received both mental health services and specialty substance use treatment in the past year (Figure 76), 41.0 percent received only mental health services, and 3.3 percent received only specialty substance use treatment (2018 DT 10.27). The percentage of adults with co-occurring AMI and an SUD who received both mental health care and specialty substance use treatment remained steady between 2015 and 2018.

Aged 18 to 25

Among young adults aged 18 to 25 in 2018 who had co-occurring AMI and an SUD in the past year, 43.8 percent received substance use treatment at a specialty facility or mental health care in the past year (2018 DT 10.28). The 2018 percentage of young adults with these co-occurring disorders who received either type of service was higher than the percentage in 2015 (35.2 percent), but it was

Figure 75. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Youths Aged 12 to 17 with Past Year Major Depressive Episode and Substance Use Disorder: 2015-2018

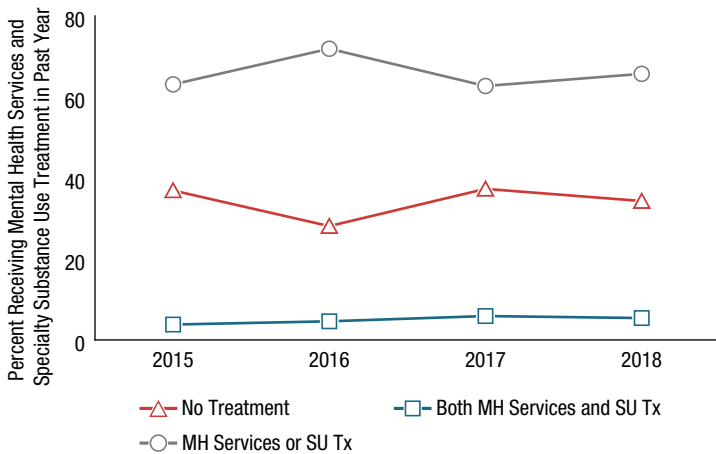


Figure 75 Table. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Youths Aged 12 to 17 with Past Year Major Depressive Episode and Substance Use Disorder: 2015-2018

Service Type	2015	2016	2017	2018
No Treatment	36.9	28.1	37.3	34.3
Mental Health Services or Specialty Substance Use Treatment	63.1	71.9	62.7	65.7
Both Mental Health Services and Specialty Substance Use Treatment	3.8	4.6	5.9	5.4

Figure 76. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Adults Aged 18 or Older with Past Year Mental Illness and Substance Use Disorder: 2015-2018

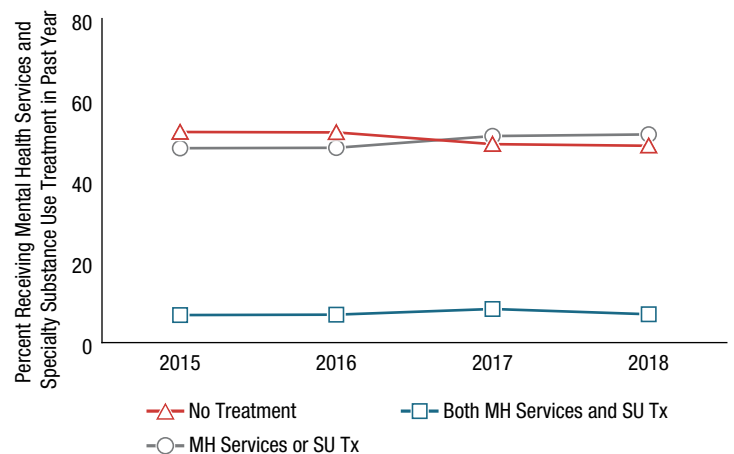


Figure 76 Table. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Adults Aged 18 or Older with Past Year Mental Illness and Substance Use Disorder: 2015-2018

Service Type	2015	2016	2017	2018
No Treatment	52.0	51.9	49.0	48.6
Mental Health Services or Specialty Substance Use Treatment	48.0	48.1	51.0	51.4
Both Mental Health Services and Specialty Substance Use Treatment	6.8	6.9	8.3	7.0

similar to the percentages in 2016 and 2017 (42.0 and 46.7 percent, respectively). In each year from 2015 to 2018, therefore, more than half of young adults with co-occurring AMI and an SUD in the past year did not receive either service, including nearly two thirds of young adults in 2015 (64.8 percent).

Among young adults aged 18 to 25 in 2018 who had co-occurring AMI and an SUD, 37.9 percent received only mental health care, 3.7 percent received both mental health care and specialty substance use treatment, and 2.0 percent received only specialty substance use treatment in the past year (2018 DT 10.28). The 2018 percentage of young adults with co-occurring AMI and an SUD who received both mental health services and specialty substance use treatment was lower than the percentage in 2017 (6.3 percent), but it was similar to the percentages in 2015 (5.4 percent) and 2016 (3.8 percent).

Aged 26 to 49

Among adults aged 26 to 49 in 2018 who had co-occurring AMI and an SUD in the past year, 49.5 percent received mental health care or substance use treatment at a specialty facility in the past year (2018 DT 10.30). The percentages of adults in this age group with co-occurring AMI and an SUD who received either type of service remained steady between 2015 and 2018, ranging from 47.9 to 52.6 percent. However, about half of adults in this age group in 2015 to 2018 who had co-occurring AMI and an SUD did not receive either service.

Among adults aged 26 to 49 in 2018 who had co-occurring AMI and an SUD, 38.7 percent received only mental health care, 8.2 percent received both mental health care and specialty substance use treatment, and 2.5 percent received only specialty substance use treatment in the past year (2018 DT 10.30). The percentage of adults in this age group with co-occurring AMI and an SUD who received both mental health care and specialty substance use treatment remained steady between 2015 and 2018.

Aged 50 or Older

Among adults aged 50 or older in 2018 who had co-occurring AMI and an SUD in the past year, 67.6 percent received mental health care or substance use treatment at a specialty facility in the past year (2018 DT 10.31). The 2018 percentage of adults in this age group with these co-occurring disorders who received either type of service

was similar to the percentages in 2015 and 2016 (57.1 and 56.3 percent, respectively), but it was higher than the percentage in 2017 (52.6 percent). In 2015 to 2017, more than 40 percent of adults aged 50 or older with these co-occurring disorders did not receive either service.

Among adults in this age group in 2018 who had co-occurring AMI and an SUD, 51.9 percent received only mental health care, and 8.3 percent received both mental health care and specialty substance use treatment (2018 DT 10.31). The percentage of adults aged 50 or older with co-occurring AMI and an SUD who received both types of services remained steady between 2015 and 2018.

Receipt of Services among Adults with Co-Occurring SMI and a Substance Use Disorder

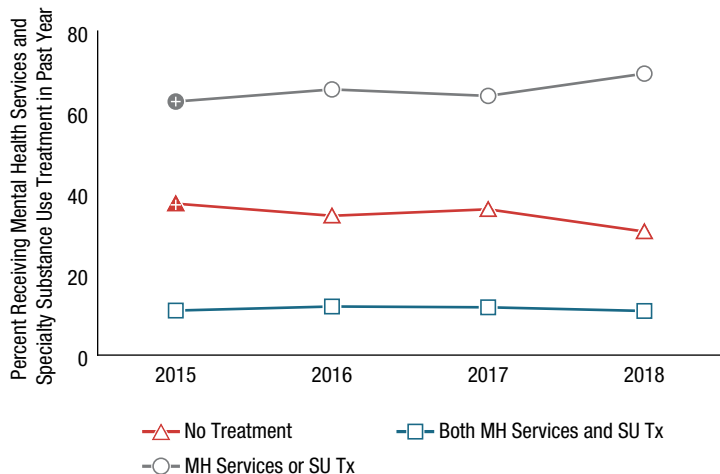
Among the 3.2 million adults aged 18 or older in 2018 who had co-occurring SMI and an SUD in the past year, 69.5 percent received either substance use treatment at a specialty facility or mental health care in the past year, and 30.5 percent did not receive either type of care ([Figure 77](#)). The 2018 percentage of adults with these co-occurring disorders who received either type of care was higher than the percentage in 2015, but it was similar to the percentages in 2016 and 2017. Stated another way, however, about 1 in 3 adults in 2015 to 2018 with co-occurring SMI and an SUD did *not* receive either type of care.

Among adults aged 18 or older in 2018 with co-occurring SMI and an SUD, 10.9 percent received both mental health care and specialty substance use treatment, 55.9 percent received only mental health care, and 2.7 percent received only specialty substance use treatment (2018 DT 10.27). The percentage of adults with co-occurring SMI and an SUD who received both mental health care and specialty substance use treatment remained steady between 2015 and 2018 ([Figure 77](#)).

Aged 18 to 25

Among young adults aged 18 to 25 in 2018 with co-occurring SMI and an SUD, 60.1 percent received either mental health care or specialty substance use treatment in the past year (2018 DT 10.28). The 2018 percentage of young adults with these co-occurring disorders who received either type of care was similar to the percentages in 2015 to 2017 (ranging from 53.1 to 59.2 percent). In each year from 2015 to 2018, however, at least 40 percent of young adults with co-occurring SMI and an SUD did not receive either service.

Figure 77. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Adults Aged 18 or Older with Past Year Serious Mental Illness and Substance Use Disorder: 2015-2018



* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Figure 77 Table. Receipt of Mental Health Services and Specialty Substance Use Treatment in the Past Year among Adults Aged 18 or Older with Past Year Serious Mental Illness and Substance Use Disorder: 2015-2018

Service Type	2015	2016	2017	2018
No Treatment	37.4*	34.4	36.0	30.5
Mental Health Services or Specialty Substance Use Treatment	62.6*	65.6	64.0	69.5
Both Mental Health Services and Specialty Substance Use Treatment	11.0	12.0	11.8	10.9

* Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

In 2018, about 5.8 percent of young adults aged 18 to 25 with SMI and an SUD received both mental health care and specialty substance use treatment, 52.8 percent received only mental health care, and 1.5 percent received only specialty substance use treatment in the past year (2018 DT 10.28). The percentage of young adults with co-occurring SMI and an SUD who received both mental health care and specialty substance use treatment remained steady between 2015 and 2018.

Aged 26 to 49

Among adults aged 26 to 49 in 2018 with co-occurring SMI and an SUD, 67.2 percent received either mental health care or specialty substance use treatment, including 13.7 percent who received both mental health care and specialty substance use treatment, 51.6 percent who received only mental health care, and 1.9 percent who received only specialty substance use treatment in the past year (2018 DT 10.30). The percentages of adults in this age group with co-occurring SMI and an SUD who received either type of service or received both types of service remained steady between 2015 and 2018. Among adults aged 26 to 49 in 2015 to 2018 who had co-occurring SMI and an SUD, 31.0 to 34.6 percent did not receive either service.

Aged 50 or Older

In 2015 to 2018, estimates for the receipt of services among adults aged 50 or older with co-occurring SMI and an SUD were not reported because of low precision (2018 DT 10.31).¹²

Endnotes

1. Hasin, D. S., & Grant, B. F. (2015). The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) Waves 1 and 2: Review and summary of findings. *Social Psychiatry and Psychiatric Epidemiology*, 50, 1609-1640. <https://doi.org/10.1007/s00127-015-1088-0>
2. World Health Organization. (2013). *Mental health action plan 2013–2020*. Retrieved from http://www.who.int/mental_health/publications/action_plan/en/
3. Reeves, W. C., Strine, T. W., Pratt, L. A., Thompson, W., Ahluwalia, I., Dhingra, S. S., McKnight-Eily, L. R., Harrison, L., D'Angelo, D. V., Williams, L., Morrow, B., Gould, D., & Safran, M. A. (2011). Mental illness surveillance among adults in the United States. *Morbidity and Mortality Weekly Report CDC Surveillance Summaries*, 60(Suppl. 3), 1-29. Retrieved from <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6003a1.htm>
4. Murray, C. J. L., & Lopez, A. D. (2013). Measuring the global burden of disease. *New England Journal of Medicine*, 369, 448-457. <https://doi.org/10.1056/nejmra1201534>
5. This report occasionally presents estimated numbers of people with a specific characteristic (e.g., estimated numbers of substance users). Some of these estimated numbers are not included in figures or tables in the report but may be found in the detailed tables for the 2018 NSDUH available at <https://www.samhsa.gov/data/>.
6. In this report, terms such as “Americans,” “people in this country,” “general population,” or similar terms are used broadly to refer to the civilian, noninstitutionalized population covered by NSDUH. Although some people in the general population of the United States are outside of the civilian, noninstitutionalized population, information from the 2010 census suggests the civilian, noninstitutionalized population includes at least 97 percent of the total U.S. population. See the following reference: Lofquist, D., Lugaila, T., O’Connell, M., & Feliz, S. (2012, April). *Households and families: 2010* (C2010BR-14, 2010 Census Briefs). Retrieved from <https://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>
7. Details about the sample design, weighting, and interviewing results for the 2018 NSDUH are provided in Sections 2.1, 2.3.4, and 3.3.1 of CBHSQ (2019). In particular, Tables 2.1 and 2.2 in CBHSQ (2019) provide sample design information on the targeted numbers of completed interviews by state and by age group, respectively. The report also discusses differences in the current sample allocation compared with the allocation used from 2002 to 2013. See the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
8. Overall response rates are not calculated for adolescents or adults because the screening response rate is not specific to age groups.
9. Center for Behavioral Health Statistics and Quality. (2019). *National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
10. For methodological reasons, the 2018 NSDUH estimates are not comparable with NSDUH data collected prior to 2002. For more details, see Appendix C in the following report for the 2004 NSDUH: Office of Applied Studies. (2005). *Results from the 2004 National Survey on Drug Use and Health: National findings* (HHS Publication No. SMA 05-4062, NSDUH Series H-28). Rockville, MD: Substance Abuse and Mental Health Services Administration.
11. Estimates presented in this report have been weighted to reflect characteristics of the civilian, noninstitutionalized population aged 12 or older in the United States. The calculation of NSDUH weights for analysis includes a step that yields weights consistent with population totals obtained from the U.S. Census Bureau based on the most recently available decennial census.
12. For a discussion of the criteria for suppressing (i.e., not publishing) unreliable estimates, see Section 3.2.2 in the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
13. Changes in survey content and methodology make current NSDUH estimates not comparable with NSDUH data collected prior to 2002. For selected measures since 2015, comparability with estimates prior to 2015 also has been affected. Details about recent questionnaire changes and their effects on the comparability of estimates are provided in Section C of CBHSQ (2016). See the following reference: Center for Behavioral Health Statistics and Quality. (2016). *2015 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
14. If the number of people in the population with a characteristic of interest has increased (e.g., the number of substance users) simply because the size of the overall population has increased, then the percentages will control for the increases both in the number of people with the characteristic of interest and the total number of people in the population.
15. Where trends in this report involve more than 4 years of data, the term “most years” is used when the 2018 estimate is either similar to or significantly different from the estimates in the majority of years referenced in the sentence.
16. Anomalous differences between 2 years of data usually “correct” themselves with 1 or 2 additional years of data. For estimates that started a new baseline in 2015, additional years of data also will be useful for monitoring whether the trends observed for 2015 to 2018 continue to hold or to change as part of longer-term trends.
17. NSDUH does not currently ask separate questions about the vaping of nicotine.
18. See the following reference: Center for Behavioral Health Statistics and Quality. (2014). *Results from the 2013 National Survey on Drug Use and Health: Summary of national findings* (HHS Publication No. SMA 14-4863, NSDUH Series H-48). Retrieved from <https://www.samhsa.gov/data/>

19. Recent increases in vaping nicotine have resulted in changes in adolescent tobacco use. Findings from the 2018 National Youth Tobacco Survey (NYTS) and Monitoring the Future Study indicate increases in vaping nicotine (Cullen et al., 2018; Johnston et al., 2019; U.S. Food and Drug Administration [FDA], 2019). The NYTS data suggest vaping nicotine is reversing declines in overall tobacco use among adolescents. In addition, vaping of nicotine products among adolescents has been identified as a risk factor for future cigarette use (FDA, 2019), which may affect long-term cigarette use trends. See the following three references:

Cullen, K. A., Ambrose, B. M., Gentzke, A. S., Apelberg, B. J., Jamal, A., & King, B. A. (2018). Notes from the field: Use of electronic cigarettes and any tobacco product among middle and high school students—United States, 2011–2018. *Morbidity and Mortality Weekly Report*, 67(45), 1276–1277. <https://doi.org/10.15585/mmwr.mm6745a5>

Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2019). *Monitoring the Future national survey results on drug use 1975–2018: Overview, key findings on adolescent drug use*. Ann Arbor, MI: University of Michigan, Institute for Social Research. Retrieved from <http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2018.pdf>

U.S. Food and Drug Administration. (2019). 2018 NYTS data: A startling rise in youth e-cigarette use. Retrieved from <https://www.fda.gov>
20. In NSDUH, a “drink” is defined as a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. Times when respondents only had a sip or two from a drink are not considered to be alcohol consumption.
21. The threshold for determining binge alcohol use for females was lowered from five or more drinks on an occasion for the 2014 and earlier NSDUHs to four or more drinks on an occasion for the 2015 NSDUH to ensure consistency with federal definitions and other federal data collection programs. The threshold for males in 2015 remained at five or more drinks on an occasion. New baselines began in 2015 for estimates of binge and heavy alcohol use for females and for binge and heavy alcohol use for the overall population (both genders). Estimates from 2002 to 2018 for binge and heavy alcohol use among males are available in the 2018 NSDUH detailed tables at <https://www.samhsa.gov/data/>.
22. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking that brings blood alcohol concentration (BAC) levels to 0.08 grams per deciliter (g/dL). This typically occurs after four drinks for women and five drinks for men in about 2 hours. See the following two references:

National Institute on Alcohol Abuse and Alcoholism. (2004, Winter). NIAAA council approves definition of binge drinking. *NIAAA Newsletter*, 3, 3. Retrieved from https://pubs.niaaa.nih.gov/publications/Newsletter/winter2004/Newsletter_Number3.pdf

National Institute on Alcohol Abuse and Alcoholism. (2019). *Drinking levels defined*. Retrieved from <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking>
23. These estimates were calculated from special analyses but are not included in the appendix tables or in the 2018 detailed tables.
24. The NSDUH questionnaire includes separate sections for tranquilizer misuse and sedative misuse. Data from these sections were combined to produce aggregate estimates for the misuse of any tranquilizer or sedative.
25. All questions for specific pain relievers in the NSDUH questionnaire ask about opioid pain relievers, but respondents could specify they misused other pain relievers that are not opioids. Nevertheless, in 2015 to 2018, about 97 percent or more of individuals in each year who misused prescription pain relievers in the past year misused a prescription opioid pain reliever. For more information on this topic, see Chapter 4 of the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
26. The estimated numbers of current users of different illicit drugs are not mutually exclusive because people could have used more than one type of illicit drug in the past month.
27. LSD = lysergic acid diethylamide; PCP = phencyclidine; MDMA = methylenedioxy-methamphetamine; DMT = dimethyltryptamine; AMT = alpha-methyltryptamine; Foxy = N, N-diisopropyl-5-methoxytryptamine (5-MeO-DIPT). Definitions for these hallucinogens also are included in Appendix A of the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
28. Desoxyn® was not mentioned in 2018 as some other stimulant and has been mentioned only rarely in some years since 2015. Because Desoxyn® is chemically similar to other prescription amphetamines (e.g., Adderall®), it was grouped with the other amphetamines.
29. For example, the product label for Xanax®, which is prescribed as a tranquilizer, indicates the drug has an average half-life of 11.2 hours (i.e., the length of time for half of the dosage of the drug to be metabolized), with a range of 6.3 to 26.9 hours in healthy adults. In comparison, the product label for Halcion®, a benzodiazepine prescribed as a sedative, has a short half-life in the range of 1.5 to 5.5 hours. Product label information for these drugs is available on the FDA's Center for Drug Evaluation and Research website at <https://www.fda.gov/Drugs/>.
30. Respondents who reported use of benzodiazepines in sections other than for tranquilizers or sedatives (e.g., pain relievers) were not included in the measures of benzodiazepine use or misuse.
31. Examples of forms of fentanyl presented to NSDUH respondents are available by prescription. NSDUH respondents were not asked about the use of fentanyl illicitly manufactured in clandestine laboratories.
32. To measure initiation for most substances, NSDUH respondents who reported they ever used a particular substance were asked to report their age when they first used it. To measure initiation of prescription drug misuse (i.e., misuse of pain relievers, tranquilizers, stimulants, and sedatives), NSDUH respondents who reported they misused a particular prescription drug in the past 12 months were asked to report their age when they first misused it. Respondents who reported first use (or misuse in the case of prescription drugs) of a substance within a year of their current age also were asked to report the year and month when they first used (or misused) it.

33. Estimates relating to the periods prior to the 12-month reference period have not been considered here because of concerns about their validity resulting from recall bias. See the following reference: Gfroerer, J., Hughes, A., Chromy, J., Heller, D., & Packer, L. (2004, July). Estimating trends in substance use based on reports of prior use in a cross-sectional survey. In S. B. Cohen & J. M. Lepkowski (Eds.), *Eighth Conference on Health Survey Research Methods: Conference proceedings [Peachtree City, GA]* (HHS Publication No. PHS 04-1013, pp. 29-34). Hyattsville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics.
34. For substances other than prescription psychotherapeutic drugs, respondents who had ever used the substance (e.g., marijuana) were asked to report when they first used the substance, and respondents who reported first use within a year of their current age were asked to report the year and month when they first used it. Thus, past year initiates of the use of substances other than prescription psychotherapeutic drugs reported their first use within 12 months of the interview date.
35. Assessing whether respondents in the 2018 NSDUH had initiated misuse of a prescription psychotherapeutic drug in the past 12 months differed from assessing whether respondents had initiated the use of other substances in that period because the psychotherapeutic drug categories (e.g., prescription pain relievers) include many different types of prescription drugs in a given category (e.g., pain relievers containing hydrocodone, such as Vicodin[®], Lortab[®], Norco[®], Zohydro[®] ER, or generic hydrocodone). Respondents in 2018 were asked questions about initiation of misuse only for the specific prescription drugs they misused in the past 12 months, including their age when they first misused a drug and (if the first misuse occurred within a year of the current age) the year and month of first misuse for that drug. Respondents who reported they initiated misuse in the past 12 months for all of the specific prescription drugs in a given category they misused in that period were asked a follow-up question to establish whether they had *ever* misused prescription drugs in that category more than 12 months before being interviewed. Respondents who answered this follow-up question as “no” were defined as being past year initiates of the misuse of any prescription drug in the overall category. This answer meant respondents had never misused any prescription drug in that category more than 12 months prior to the interview date.
36. More information about the methods for measuring and estimating the initiation of substance use and prescription drug misuse in NSDUH can be found in Section 3.4.2 of the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
37. Numbers in [Figure 26](#) refer to people who used a specific substance for the first time in the past year, regardless of whether the initiation of use of other substances occurred prior to the past year.
38. Past year initiates of crack cocaine use were counted as past year initiates of cocaine use only if they had not previously used cocaine in any form.
39. For more information, see Section B.2.3 in the following reference: Center for Behavioral Health Statistics and Quality. (2017). *2016 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
40. Past year initiates of LSD, PCP, or Ecstasy use are counted as past year initiates of hallucinogen use only if respondents had previously not used other hallucinogens.
41. Survey questions for the perceived risk from using different substances vary in terms of the frequency (e.g., use once or twice a week, use nearly every day or daily) and quantity of use (e.g., having five or more drinks of alcohol, any use of marijuana, cocaine, or heroin), making comparisons difficult for perceptions of risk from using different substances.
42. American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC: Author.
43. The DSM-IV criteria for SUDs include separate criteria for dependence or abuse. Individuals who met the criteria for abuse for a given substance (e.g., alcohol) did not meet the criteria for dependence for that substance. For more information, see Section 3.4.3 and the definitions for abuse and dependence in Appendix A of the following reference: Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
44. Respondents who reported any use of prescription drugs in a given prescription psychotherapeutic category in the past 12 months (e.g., prescription pain relievers) but did not report misuse of any drugs in that category in the past 12 months were not asked the SUD questions for that category.
45. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (DSM-5) (5th ed.). Arlington, VA: Author.
46. Adolescents were first asked whether they ever had a period in their lifetime lasting several days or longer when any of the following was true for most of the day: (a) feeling sad, empty, or depressed; (b) feeling very discouraged or hopeless about how things were going in their lives; or (c) losing interest and becoming bored with most things they usually enjoy. Adolescents who reported any of these problems were asked further questions about having an MDE in their lifetime, including whether they had at least five of nine symptoms in the same 2-week period in their lifetime; at least one of the symptoms needed to be having a depressed mood or loss of interest or pleasure in daily activities. Unlike questions for adults, adolescents who reported gaining weight without trying were asked if this occurred because they were growing. Those who had lifetime MDE were asked if they had a period of time in the past 12 months when they felt depressed or lost interest or pleasure in daily activities for 2 weeks or longer, and they reported they had some of their other lifetime MDE symptoms in the past 12 months. These adolescents were defined as having past year MDE.
47. Adults were first asked whether they ever had a period in their lifetime lasting several days or longer when any of the following was true for most of the day: (a) feeling sad, empty, or depressed; (b) feeling discouraged about how things were going in their lives; or (c) losing interest in most things they usually enjoy. Adults who reported any of these problems were asked further questions about having an MDE in their lifetime, including whether they had at least five of nine symptoms in the same 2-week period in their lifetime; at least one of the symptoms needed to be having a depressed mood or loss of interest or pleasure in daily activities. Those who had lifetime MDE were asked if they had a period of time in the past 12 months when they felt depressed or lost interest or pleasure in daily activities for 2 weeks or longer, and they reported they had some of their other lifetime MDE symptoms in the past 12 months. These adults were defined as having past year MDE. Data on MDE in the past year for adults are available in NSDUH since 2005.
48. Data on MDE with severe impairment for adults are available since 2009.
49. Questions measuring adolescents’ impairment in carrying out life activities because of MDE were added to the survey in 2006.

50. In order to generate estimates of AMI and SMI in the United States, SAMHSA designed and implemented the Mental Health Surveillance Study (MHSS). From 2008 to 2012, a subsample of adults was selected from the main NSDUH study to participate in a follow-up telephone interview that obtained a detailed mental health assessment administered by trained mental health clinicians. The MHSS interview used the Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition (SCID-I/NP). A prediction model created from clinical interview data was applied to data from the 2008 to 2015 NSDUHs to produce estimates of AMI for the entire NSDUH adult sample in these years. The SCID instrument is available in First, Spitzer, Gibbon, and Williams (2002), and information on the definitions and estimation methods for the mental illness estimates are provided in Section 3.4.7 and Appendix A of CBHSQ (2019). See the following references:
- Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (2002). *Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition (SCID-I/NP)*. New York, NY: New York State Psychiatric Institute, Biometrics Research.
51. Estimated numbers of adults aged 18 or older with SMI or AMI excluding SMI do not sum to the estimated number of adults with AMI due to rounding.
52. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2018). *National Violent Death Reporting System (NVDRS): About NVDRS, NVDRS overview fact sheet*. Retrieved from <https://www.cdc.gov/violenceprevention/datasources/nvdrs/>
53. Stone, D. M., Simon, T. R., Fowler, K. A., Kegler, S. R., Yuan, K., Holland, K. M., Ivey-Stephenson, A. Z., & Crosby, A. E. (2018, June 8). *Vital Signs: Trends in suicide rates — United States, 1999-2016 and circumstances contributing to suicide — 27 states, 2015. Morbidity and Mortality Weekly Report, 67(22)*, 617-624. Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6722a1-H.pdf>
54. Crosby, A. E., Han, B., Ortega, L. A. G., Parks, S. E., & Gfroerer, J. (2011, October 21). Suicidal thoughts and behaviors among adults aged ≥18 years—United States, 2008-2009. *Morbidity and Mortality Weekly Report Surveillance Summaries, 60(SS13)*, 1-22. Retrieved from <https://www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm>
55. Han, B., Kott, P. S., Hughes, A., McKeon, R., Blanco, C., & Compton, W. M. (2016). Estimating the rates of deaths by suicide among adults who attempt suicide in the United States. *Journal of Psychiatric Research, 77*, 125-133. <https://doi.org/10.1016/j.jpsychires.2016.03.002>
56. Specialty treatment refers to substance use treatment at a hospital (only as an inpatient), a drug or alcohol rehabilitation facility (as an inpatient or outpatient), or a mental health center. This NSDUH definition historically has not considered emergency rooms, private doctors' offices, prisons or jails, and self-help groups to be specialty substance use treatment facilities.
57. The NSDUH definition of the need for treatment does not explicitly indicate the need for treatment at a specialty facility. People who had an SUD in the past year can be considered to need some form of assistance for their problems with substance use. However, individuals who met DSM-IV criteria for abuse but not dependence may not necessarily need treatment at a specialty facility. For more information about the DSM-IV criteria for having an SUD, see Section 3.4.3 and the definitions for abuse and dependence in Appendix A of CBHSQ (2019). See the following references:
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders (DSM-IV)* (4th ed.). Washington, DC: Author.
- Center for Behavioral Health Statistics and Quality. (2019). *2018 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from <https://www.samhsa.gov/data/>
58. Because there were 20.3 million people aged 12 or older in 2018 with an SUD in the past year, about 95 percent of the people in 2018 who needed treatment for a substance use problem were defined as such because they had an SUD in the past year, regardless of whether they received substance use treatment at a specialty facility.
59. Estimated numbers of people in [Figure 66](#) who made an effort or did not make an effort to get substance use treatment do not sum to the total number of people who needed substance use treatment, did not receive specialty treatment in the past year, and perceived a need for treatment due to rounding.
60. Health professionals include general practitioners or family doctors; other medical doctors (e.g., cardiologist, gynecologist, urologist); psychologists; psychiatrists or psychotherapists; social workers; counselors; other mental health professionals (e.g., mental health nurse or other therapist where type is not specified); and nurses, occupational therapists, or other health professionals.
61. The specialty mental health setting includes services in outpatient or inpatient settings. Outpatient services include those from (a) a private therapist, psychologist, psychiatrist, social worker, or counselor; (b) a mental health clinic or center; (c) a partial day hospital or day treatment program; or (d) an in-home therapist, counselor, or family preservation worker. Inpatient or residential specialty mental health services in which adolescents stayed overnight or longer include services in a hospital or a residential treatment center.
62. Percentages that readers calculate from estimated numbers of adults with a perceived unmet need for mental health services may not agree with reported percentages because the estimated numbers are rounded to the nearest 0.1 million adults.
63. Percentages for the receipt of specific types of services do not sum to the total percentage who received any type of service due to rounding.

Appendix A: Supplemental Tables of Estimates for Key Substance Use and Mental Health Indicators in the United States

Table A.1B Types of Illicit Drug, Tobacco Product, and Alcohol Use in the Past Month among Individuals Aged 12 or Older: 2002-2018

Substance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ILLICIT DRUGS	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Marijuana	6.2* (0.14)	6.2* (0.14)	6.1* (0.15)	6.0* (0.15)	6.0* (0.15)	5.8* (0.14)	6.1* (0.15)	6.7* (0.16)	6.9* (0.16)	7.0* (0.16)	7.3* (0.17)
Cocaine	0.9* (0.05)	1.0* (0.06)	0.8 (0.05)	1.0* (0.06)	1.0* (0.06)	0.8 (0.06)	0.7 (0.05)	0.7 (0.05)	0.6* (0.04)	0.5* (0.04)	0.6 (0.05)
Crack	0.2* (0.03)	0.3* (0.04)	0.2 (0.03)	0.3* (0.04)	0.3* (0.04)	0.2* (0.03)	0.1 (0.02)	0.2 (0.03)	0.1 (0.02)	0.1* (0.02)	0.2 (0.04)
Heroin	0.1* (0.02)	0.1* (0.01)	0.1* (0.02)	0.1* (0.01)	0.1 (0.03)	0.1* (0.02)	0.1 (0.02)	0.1* (0.01)	0.1 (0.02)	0.1 (0.02)	0.1 (0.02)
Hallucinogens	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
LSD	0.0* (0.01)	0.1* (0.01)	0.1* (0.01)	0.0* (0.01)	0.1* (0.01)	0.1* (0.01)	0.1* (0.01)	0.1* (0.01)	0.1* (0.01)	0.1* (0.01)	0.1* (0.01)
PCP	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.00)	0.0 (0.01)	0.0 (0.00)	0.0 (0.01)	0.0 (0.01)	0.0 (0.00)	0.0 (0.00)
Ecstasy	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Inhalants	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Methamphetamine	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Misuse of Psychotherapeutics	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Pain Relievers	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Stimulants	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Tranquilizers or Sedatives	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Tranquilizers	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Sedatives	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Benzodiazepines	--	--	--	--	--	--	--	--	--	--	--
Opioids	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Illicit Drugs Other Than Marijuana	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
TOBACCO PRODUCTS	30.4* (0.35)	29.8* (0.34)	29.2* (0.33)	29.4* (0.35)	29.6* (0.35)	28.7* (0.34)	28.4* (0.35)	27.7* (0.33)	27.5* (0.34)	26.5* (0.33)	26.7* (0.34)
Cigarettes	26.0* (0.34)	25.4* (0.33)	24.9* (0.32)	24.9* (0.32)	25.0* (0.33)	24.3* (0.33)	24.0* (0.32)	23.3* (0.32)	23.0* (0.31)	22.1* (0.32)	22.1* (0.32)
Smokeless Tobacco	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Cigars	5.4* (0.15)	5.4* (0.14)	5.7* (0.13)	5.6* (0.15)	5.6* (0.14)	5.4* (0.14)	5.3* (0.15)	5.3* (0.14)	5.2* (0.14)	5.0* (0.14)	5.2* (0.15)
Pipe Tobacco	0.8 (0.07)	0.7 (0.06)	0.8 (0.06)	0.9 (0.06)	0.9* (0.07)	0.8 (0.07)	0.8 (0.06)	0.8 (0.06)	0.8 (0.06)	0.8 (0.06)	1.0* (0.07)
ALCOHOL	51.0 (0.42)	50.1 (0.39)	50.3 (0.40)	51.8 (0.40)	51.0 (0.39)	51.2 (0.41)	51.6 (0.39)	51.9 (0.38)	51.8 (0.39)	51.8 (0.39)	52.1 (0.39)
Binge Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Heavy Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
SUBSTANCE USE											
Illicit Drugs, Tobacco Products, or Alcohol	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Illicit Drugs or Alcohol	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Tobacco Products or Alcohol	61.0* (0.40)	60.1* (0.38)	59.6 (0.40)	61.1* (0.39)	60.7* (0.39)	60.5* (0.37)	60.6* (0.38)	60.6* (0.36)	60.9* (0.39)	60.3* (0.38)	61.0* (0.37)

NOTE: Footnotes and source information are shown at the end of the second half of this table.

Table A.1B Types of Illicit Drug, Tobacco Product, and Alcohol Use in the Past Month among Individuals Aged 12 or Older: 2002-2018 (continued)

Substance	2013	2014	2015	2016	2017	2018
ILLICIT DRUGS	nc	nc	10.1* (0.17)	10.6* (0.18)	11.2 (0.19)	11.7 (0.21)
Marijuana	7.5* (0.17)	8.4* (0.16)	8.3* (0.15)	8.9* (0.16)	9.6* (0.18)	10.1 (0.20)
Cocaine	0.6 (0.05)	0.6* (0.04)	0.7 (0.05)	0.7 (0.04)	0.8 (0.05)	0.7 (0.05)
Crack	0.1 (0.02)	0.1 (0.02)	0.1 (0.02)	0.2 (0.02)	0.2 (0.03)	0.2 (0.03)
Heroin	0.1 (0.02)	0.2 (0.02)	0.1 (0.02)	0.2 (0.02)	0.2 (0.02)	0.1 (0.02)
Hallucinogens	nc	nc	0.5* (0.03)	0.5 (0.03)	0.5 (0.03)	0.6 (0.04)
LSD	0.1* (0.01)	0.1* (0.02)	0.1 (0.01)	0.1 (0.02)	0.2 (0.02)	0.2 (0.02)
PCP	0.0 (0.01)	** (**)	0.0 (0.00)	0.0 (0.00)	0.0 (0.01)	0.0 (0.00)
Ecstasy	nc	nc	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)	0.3 (0.02)
Inhalants	nc	nc	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)
Methamphetamine	nc	nc	0.3 (0.03)	0.2* (0.03)	0.3 (0.03)	0.4 (0.04)
Misuse of Psychotherapeutics	nc	nc	2.4* (0.08)	2.3* (0.08)	2.2 (0.08)	2.0 (0.08)
Pain Relievers	nc	nc	1.4* (0.06)	1.2* (0.06)	1.2 (0.06)	1.0 (0.06)
Stimulants	nc	nc	0.6 (0.04)	0.6 (0.04)	0.7 (0.04)	0.6 (0.04)
Tranquilizers or Sedatives	nc	nc	0.8* (0.05)	0.9* (0.05)	0.7 (0.04)	0.7 (0.05)
Tranquilizers	nc	nc	0.7 (0.04)	0.7* (0.04)	0.6 (0.04)	0.6 (0.04)
Sedatives	nc	nc	0.2* (0.02)	0.2* (0.03)	0.1 (0.02)	0.1 (0.02)
Benzodiazepines	--	--	--	--	--	--
Opioids	nc	nc	1.5* (0.06)	1.4* (0.06)	1.3* (0.06)	1.1 (0.06)
Illicit Drugs Other Than Marijuana	nc	nc	3.5 (0.10)	3.4 (0.10)	3.4 (0.10)	3.2 (0.10)
TOBACCO PRODUCTS	25.5* (0.32)	25.2* (0.28)	23.9* (0.26)	23.5* (0.27)	22.4* (0.26)	21.5 (0.27)
Cigarettes	21.3* (0.30)	20.8* (0.26)	19.4* (0.25)	19.1* (0.25)	17.9* (0.25)	17.2 (0.25)
Smokeless Tobacco	nc	nc	3.4* (0.11)	3.3* (0.10)	3.2* (0.09)	2.9 (0.09)
Cigars	4.7 (0.14)	4.5 (0.11)	4.7 (0.12)	4.6 (0.11)	4.6 (0.11)	4.5 (0.12)
Pipe Tobacco	0.9 (0.06)	0.8 (0.05)	0.8 (0.05)	0.8 (0.05)	0.9 (0.05)	0.8 (0.04)
ALCOHOL	52.2* (0.41)	52.7* (0.33)	51.7 (0.32)	50.7 (0.31)	51.7 (0.33)	51.1 (0.37)
Binge Alcohol Use	nc	nc	24.9 (0.27)	24.2 (0.26)	24.5 (0.27)	24.5 (0.26)
Heavy Alcohol Use	nc	nc	6.5* (0.14)	6.0 (0.14)	6.1 (0.13)	6.1 (0.14)
SUBSTANCE USE						
Illicit Drugs, Tobacco Products, or Alcohol	nc	nc	60.9 (0.30)	60.2 (0.30)	60.7 (0.32)	60.2 (0.35)
Illicit Drugs or Alcohol	nc	nc	54.1 (0.31)	53.4 (0.32)	54.3 (0.33)	53.9 (0.36)
Tobacco Products or Alcohol	60.6* (0.39)	61.0* (0.31)	59.8* (0.30)	58.9 (0.30)	59.4 (0.32)	58.8 (0.35)

**= Low precision; no estimate reported; -- = not available; nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Estimates of 0.0 percent round to less than 0.1 percent when shown to the nearest tenth of a percent.

NOTE: Additional estimates may be found in the detailed tables for the 2018 NSDUH at <https://www.samhsa.gov/data/>. Measures and terms are defined in Appendix A of the 2018 NSDUH detailed tables.

* The difference between this estimate and the 2018 estimate is statistically significant at the .05 level. Rounding may make the estimates appear identical.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002-2018.

Table A.2B Type of Tobacco Product Use among Past Month Tobacco Users Aged 12 or Older, by Age Group: 2018

Tobacco Product Use	Total	12 to 17	18 to 25	26 or Older
Only Cigarettes	65.5 (0.58)	37.3 (2.20)	50.3 (0.97)	68.9 (0.65)
Cigarettes and Some Other Type of Tobacco Product	14.4 (0.40)	26.5 (2.17)	23.8 (0.83)	12.4 (0.46)
Only Noncigarette Tobacco Products	20.1 (0.51)	36.1 (2.17)	25.9 (0.81)	18.7 (0.58)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Additional estimates may be found in the detailed tables for the 2018 NSDUH at <https://www.samhsa.gov/data/>. Measures and terms are defined in Appendix A of the 2018 NSDUH detailed tables.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2018.

Table A.3A Average Number of Initiates per Day among Individuals Aged 12 or Older, by Age Group: 2018

Substance	Aged 12 or Older	Aged 12 to 17	Aged 18 or Older	Aged 18 to 25	Aged 26 or Older
TOBACCO PRODUCTS					
Cigarettes	5,000 (243)	1,564 (104)	3,436 (210)	3,126 (179)	310 (79)
Daily Cigarette Use	1,357 (117)	171 (30)	1,186 (115)	967 (95)	220 (65)
Smokeless Tobacco	2,515 (182)	841 (68)	1,674 (165)	1,134 (105)	540 (126)
Cigars	6,229 (276)	1,350 (84)	4,879 (259)	3,414 (175)	1,465 (171)
ALCOHOL	13,365 (355)	6,521 (207)	6,845 (258)	6,673 (234)	171 (43)
ILLICIT DRUGS					
Marijuana	8,387 (282)	3,668 (153)	4,719 (246)	3,281 (175)	1,438 (167)
Cocaine	2,394 (183)	204 (41)	2,190 (180)	1,686 (137)	504 (92)
Crack	276 (72)	** (**)	266 (72)	98 (28)	168 (64)
Heroin	321 (66)	** (**)	302 (65)	97 (27)	205 (59)
Hallucinogens	3,057 (197)	640 (64)	2,417 (186)	1,732 (139)	685 (118)
LSD	2,131 (166)	388 (49)	1,743 (160)	1,281 (116)	462 (97)
PCP	39 (16)	** (**)	** (**)	** (**)	** (**)
Ecstasy	1,979 (159)	289 (48)	1,690 (152)	1,260 (123)	430 (90)
Inhalants	1,579 (124)	843 (78)	737 (92)	577 (75)	160 (52)
Methamphetamine	561 (84)	85 (22)	477 (80)	186 (39)	291 (70)
Misuse of Psychotherapeutics					
Pain Relievers	5,228 (330)	849 (77)	4,378 (316)	1,271 (98)	3,108 (298)
Tranquilizers	3,315 (242)	590 (64)	2,725 (234)	1,190 (103)	1,535 (209)
Stimulants	2,743 (175)	497 (53)	2,246 (166)	1,418 (110)	828 (127)
Sedatives	689 (104)	98 (27)	591 (99)	199 (43)	391 (90)

** = Low precision; no estimate reported.

NOTE: Estimates shown are unrounded averages with standard errors included in parentheses.

NOTE: Additional estimates may be found in the detailed tables for the 2018 NSDUH at <https://www.samhsa.gov/data/>. Measures and terms are defined in Appendix A of the 2018 NSDUH detailed tables.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2018.

Table A.4 Perceived Recovery from Substance Use Problems or Mental Health Issues among Adults Aged 18 or Older, by Age Group: Numbers in Thousands and Percentages: 2018

Measure	Aged 18 or Older		Aged 18 to 25		Aged 26 to 49		Aged 50 or Older	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Ever Had a Drug/Alcohol Use Problem³	27,207 (540)	11.0 (0.22)	2,367 (86)	7.0 (0.25)	12,662 (279)	12.7 (0.28)	12,178 (454)	10.8 (0.40)
In Recovery from a Drug/Alcohol Use Problem⁴	20,221 (468)	8.2 (0.19)	1,627 (74)	4.8 (0.22)	8,961 (236)	9.0 (0.24)	9,633 (397)	8.5 (0.35)
Adults with a Drug/Alcohol Use Problem ⁵	20,221 (501)	74.5 (0.87)	1,627 (78)	68.9 (1.77)	8,961 (255)	70.9 (1.03)	9,633 (422)	79.4 (1.55)
Ever Had a Mental Health Issue⁶	43,649 (628)	17.7 (0.25)	8,898 (156)	26.4 (0.46)	20,239 (344)	20.2 (0.34)	14,512 (451)	12.8 (0.40)
In Recovery from a Mental Health Issue⁷	30,833 (549)	12.5 (0.22)	5,859 (130)	17.4 (0.39)	13,643 (290)	13.6 (0.29)	11,331 (418)	10.0 (0.37)
Adults with a Mental Health Issue ⁸	30,833 (597)	71.1 (0.64)	5,859 (156)	66.4 (0.87)	13,643 (325)	67.8 (0.85)	11,331 (440)	78.6 (1.38)

NOTE: Respondents were excluded from the analysis if they had unknown information about (a) ever having a drug or alcohol use problem or a mental health issue or (b) perceived recovery from a problem or issue.

¹ Estimates shown are numbers in thousands with standard errors in parentheses.

² Estimates shown are percentages with standard errors in parentheses.

³ The question in the survey asks all adults aged 18 or older, "Do you think you ever had a problem with your own drug or alcohol use?"

⁴ The question in the survey asks all adults aged 18 or older, "At this time do you consider yourself to be in recovery or recovered from your own problem with drugs or alcohol use?"

⁵ Estimates shown are respondents who answered "yes" to being in "recovery or recovered" among those who answered "yes" to ever having a problem with their own drug or alcohol use.

⁶ The question in the survey asks all adults aged 18 or older, "Do you think you ever had a problem with your own mental health?"

⁷ The question in the survey asks all adults aged 18 or older, "At this time do you consider yourself to be in recovery or recovered from your own mental health problem?"

⁸ Estimates shown are respondents who answered "yes" to being in "recovery or recovered" from a mental health problem among those who answered "yes" to ever having a mental health problem.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2018.

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