# Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health







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### **Summary**

This national report summarizes key findings from the 2016 National Survey on Drug Use and Health (NSDUH) for indicators of substance use and mental health among people aged 12 years old or older in the civilian, noninstitutionalized population of the United States. Results are provided for the overall category of individuals aged 12 or older as well as by age subgroups. The NSDUH questionnaire underwent a partial redesign in 2015 to improve the quality of the NSDUH data and to address the changing needs of policymakers and researchers. For measures that started a new baseline in 2015, estimates are discussed only for 2016.

#### **Tobacco Use**

In 2016, an estimated 51.3 million people aged 12 or older were current cigarette smokers, including 29.7 million who were daily cigarette smokers and 12.2 million who smoked approximately a pack or more of cigarettes per day. Although about 1 in 5 people aged 12 or older were current cigarette smokers, cigarette use generally declined between 2002 and 2016 across all age groups.

#### **Alcohol Use**

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. In 2016, 136.7 million Americans aged 12 or older reported current use of alcohol, including 65.3 million who reported binge alcohol use in the past month and 16.3 million who reported heavy alcohol use in the past month.

In 2016, about 1 in 5 underage individuals aged 12 to 20 were current alcohol users. About 7.3 million people aged 12 to 20 reported drinking alcohol in the past month, including 4.5 million who reported binge alcohol use and 1.1 million who reported heavy alcohol use. The percentage of underage drinkers in 2016 was lower than the percentages in 2002 through 2014 but was similar to the percentage in 2015. About 2 out of 5 young adults aged 18 to 25 in 2016 were binge alcohol users, and about 1 in 10 were heavy alcohol users.

#### **Illicit Drug Use**

In 2016, 28.6 million people aged 12 or older used an illicit drug in the past 30 days, which corresponds to about 1 in 10 Americans overall (10.6 percent) but ranges as high as 1 in 4 for young adults aged 18 to 25. Regardless of age, the illicit drug use estimate for 2016 continues to be driven primarily by marijuana use and the misuse of prescription pain relievers. Among people aged 12 or older, 24.0 million were current marijuana users and 3.3 million were current misusers of prescription pain relievers. Smaller numbers of people were current users of cocaine, hallucinogens, methamphetamine, inhalants, or heroin or were current misusers of prescription tranquilizers, stimulants, or sedatives.

The percentage of people aged 12 or older who were current marijuana users in 2016 was higher than the percentages from 2002 to 2015. In contrast, the percentages among people aged 12 or older have shown little change since 2007 for current use of cocaine, since 2008 for current use of crack cocaine, and since 2014 for current use of heroin. The increase in marijuana use reflects increases in marijuana use among adults aged 26 or older and, to a lesser extent, among young adults aged 18 to 25. Marijuana use among adolescents aged 12 to 17 was lower in 2016 than in most years from 2009 to 2014.

NSDUH also allows for analysis of opioid misuse, which is the use of heroin or the misuse of prescription opioid pain relievers. In 2016, an estimated 11.8 million people misused opioids in the past year, including 11.5 million pain reliever misusers and 948,000 heroin users. Additional information is gathered in NSDUH for the misuse of pain relievers in the past year. Among people aged 12 or older who misused pain relievers in the past year, about 6 out of 10 people indicated that the main reason they misused pain relievers the last time was to relieve physical pain (62.3 percent), and about half (53.0 percent) indicated that they obtained the last pain relievers they misused from a friend or relative.

#### **Substance Use Disorders**

In 2016, approximately 20.1 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,<sup>1</sup> including 15.1 million people who had an alcohol use disorder and 7.4 million people who had an illicit drug use disorder. Among those who had an illicit drug use disorder, the most common disorder was for marijuana (4.0 million people). An estimated 2.1 million people had an opioid use disorder, which includes 1.8 million people with a prescription pain reliever use disorder and 0.6 million people with a heroin use disorder.

#### **Substance Use Treatment**

In 2016, an estimated 21.0 million people aged 12 or older needed substance use treatment. This translates to about 1 in 13 people needing treatment. Among young adults aged 18 to 25, however, about 1 in 7 people needed treatment. For NSDUH, 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 facility in the past year.<sup>2</sup>

In 2016, 1.4 percent of people aged 12 or older (3.8 million people) received any substance use treatment in the past year, and 0.8 percent (2.2 million) received substance use treatment at a specialty facility. Only about 1 in 10 people aged 12 or older who needed substance use treatment received treatment at a specialty facility in the past year (10.6 percent).

#### **Major Depressive Episode**

In 2016, 12.8 percent of adolescents aged 12 to 17 (3.1 million adolescents) and 10.9 percent of young adults aged 18 to 25 (3.7 million) had a major depressive episode (MDE) during the past year. The percentages of adolescents and young adults in 2016 who had a past year MDE were higher than the corresponding percentages prior to 2015. Percentages of adolescents and young adults with a past year MDE have subsequently shown less change. In contrast, the percentages of adults aged 26 to 49 and those aged 50 or older with a past year MDE have remained stable.

Among the 3.1 million adolescents and 3.7 million young adults in 2016 who had a past year MDE, 1.2 million adolescents (40.9 percent) and 1.6 million young adults (44.1 percent) received treatment for depression. The percentage of adolescents in 2016 with an MDE who received treatment for their depression was similar to the percentages in most prior years. Among young adults, the percentage with an MDE who received treatment for depression was similar to or lower than the percentages in prior years.

#### **Mental Illness among Adults**

In 2016, an estimated 44.7 million adults aged 18 or older (18.3 percent) had any mental illness (AMI) in the past year. An estimated 10.4 million adults in the nation had a serious mental illness (SMI) in the past year, representing 4.2 percent of all U.S. adults.<sup>3</sup> Although the 2016 percentages of adults with AMI or SMI among adults aged 18 or older were similar to the percentages since 2010, a higher percentage of young adults was experiencing AMI and SMI. The 2016 percentages of young adults with SMI was higher than the percentages in each year since 2008, and the 2016 percentage of young adults with AMI was higher than the percentages in 2008 to 2014.

#### **Mental Health Service Use among Adults**

In 2016, an estimated 35.0 million adults aged 18 or older (14.4 percent of adults) received mental health care during the past 12 months. Among the 44.7 million adults with AMI, 19.2 million (43.1 percent) received mental health services in the past year. About 6.7 million of the 10.4 million adults with past year SMI (64.8 percent) received mental health services in the past year. The percentages of adults with AMI or SMI who received mental health care in 2016 were similar to the corresponding percentages in most years from 2008 to 2015.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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 1 for the reference for the DSM-IV criteria.

#### Co-Occurring MDE and Substance Use among Adolescents

In 2016, the percentage of adolescents aged 12 to 17 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 (31.7 vs. 13.4 percent). An estimated 333,000 adolescents (1.4 percent of all adolescents) had an SUD and an MDE in the past year. Among adolescents who had a co-occurring MDE and an SUD in the past year, 71.9 percent received either substance use treatment at a specialty facility or mental health services in the past year.

### **Co-Occurring Mental Illness and Substance Use Disorders among Adults**

An estimated 8.2 million adults aged 18 or older (3.4 percent of all adults) had both AMI and SUDs in the past year, and 2.6 million adults (1.1 percent of all adults) had co-occurring SMI and SUDs in the past year. About half of the adults with co-occurring AMI and an SUD in the past year did not receive either mental health care or specialty substance use treatment, and about 1 in 3 adults with co-occurring SMI and an SUD did not receive either type of care.

#### **Suicidal Thoughts and Behavior among Adults**

In 2016, an estimated 9.8 million adults aged 18 or older reported they had thought seriously about trying to kill themselves, 2.8 million reported that they had made suicide plans, and 1.3 million made a nonfatal suicide attempt. The percentage of young adults aged 18 to 25 with serious thoughts of suicide was higher in 2016 than in 2008 to 2014. In contrast, similar percentages of adults aged 18 or older, those aged 26 to 49, and those aged 50 or older had serious thoughts of suicide in most years between 2008 and 2016. This page intentionally left blank

### 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.<sup>1,2,3</sup> 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 2016 National Survey on Drug Use and Health (NSDUH).

This report contains the first set of findings from the 2016 NSDUH for key substance use and mental health indicators in the United States. Comprehensive 2016 NSDUH detailed tables that show additional substance use and mental healthrelated outcomes, including data for various subpopulations covered in NSDUH, are available separately at https://www. samhsa.gov/data/.<sup>4</sup>

### **Survey Background**

NSDUH is an annual survey of the civilian,

noninstitutionalized population of the United States aged 12 years old or older.<sup>5</sup> 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., homeless people 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 that is designed to be representative of both the nation as a whole and for each of the 50 states and the District of Columbia. The 2016 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. From 2002 through 2013, the NSDUH sample was allocated equally across these three age groups. Although the sample design changed in 2014, NSDUH had the same total target sample size per year of 67,500 interviews between 2002 and 2016.<sup>6</sup>

NSDUH is a face-to-face household interview survey that is 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.7 NSDUH collects data using audio computerassisted 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 computerassisted 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 67,942 completed interviews from 2016 NSDUH respondents aged 12 or older.

In 2016, screening was completed at 135,188 addresses, and 67,942 completed interviews were obtained, including 17,109 interviews from adolescents aged 12 to 17 and 50,833 interviews from adults aged 18 or older. Weighted response rates for household screening and for interviewing were 77.9 and 68.4 percent, respectively, for an overall response rate of 53.3 percent for people aged 12 or older. The weighted interview response rates were 77.0 percent for adolescents and 67.6 percent for adults.<sup>8</sup> Further details about the 2016 NSDUH design and methods can be found on the web at https://www.samhsa.gov/data/.<sup>9</sup>

### **Data Presentation and Interpretation**

This report focuses on substance use and mental health in the United States based on NSDUH data from 2016 and earlier years.<sup>10</sup> Estimates of substance use and substance use treatment are presented for individuals aged 12 or older, adolescents, and adults.<sup>11</sup> However, estimates of mental health issues and mental health service use are not presented jointly for individuals 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 NSDUH survey data that are subject to sampling errors. The estimates have met the criteria for statistical precision. Estimates that do not meet these criteria have been suppressed and are not shown.<sup>12</sup>

One of NSDUH's strengths is the stability in the sample and survey designs. 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 NSDUH content to address changes in society and emerging issues. Consequently, the NSDUH questionnaire underwent a partial redesign in 2015 to improve the quality of the NSDUH data and to address the changing needs of policymakers and researchers with regard to substance use and mental health issues. New baselines were started in 2015 for estimates that were affected by changes to the 2015 NSDUH questionnaire.<sup>13,14,15</sup>

Trends are presented in this report for estimates from the 2016 NSDUH that are assumed to have remained comparable with estimates from 2015 and prior years.<sup>14,15</sup> All trends that are presented in the report compare 2016 estimates with estimates from 3 or more prior years. When new baselines started in 2015, estimates are discussed only for 2016. Trends that are discussed in this report focus on percentages because the percentages take into account changes in the size of the total population and facilitate the comparison of estimates across years.<sup>16</sup>

Analyses of trends in this report focus on long-term trends in substance use and mental health issues.

Statistical tests also have been conducted for comparisons that appear 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 longterm trends in this report summarize whether the 2016 estimates are different from or similar to estimates in most or all previous years,<sup>17</sup> while minimizing discussion of anomalous differences between any 2 years that can occur due to these estimates being based on samples.<sup>18,19</sup> Graphics and tables contain estimates that support the statements in this report, and supplementary tables of estimates (including standard errors) are included in Appendix A.

### **Tobacco Use in the Past Month**

Tobacco use continues to be the leading cause of preventable death in the United States.<sup>20</sup> NSDUH data can be used to estimate the percentage of individuals who used tobacco products and can be used to monitor changes in use over time. 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. 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 current cigarette smoking. Finally, this section presents estimates for current use of cigars, pipe tobacco, and smokeless tobacco. Estimates for smokeless tobacco use since 2015 are not comparable with estimates prior to 2015 because of questionnaire changes in 2015.

The majority of current (i.e., past month) tobacco users in 2016 were current cigarette smokers (Figure 1), as has been the case historically.<sup>21</sup> Among current users aged 12 or older of any tobacco product, 66.8 percent smoked cigarettes but did not use other tobacco products, 14.1 percent smoked cigarettes and used some other type of tobacco product, and 19.1 percent used only tobacco products other than cigarettes (Figure 2). This same pattern was observed across the two older age groups in 2016 (young adults aged 18 to 25 and adults aged 26 or older), with most current tobacco users smoking only cigarettes, followed by the use of tobacco products other than cigarettes or the use of both cigarettes and other tobacco products (Table A.5B in Appendix A). Among young adults and adults aged 26 or older who were current users of tobacco products, about 20 percent did not smoke cigarettes (21.6 and 18.1 percent, respectively). In contrast, among adolescents who were current tobacco users, 35.4 percent used tobacco products other than cigarettes but did not smoke cigarettes. In addition, about one fourth of adolescents and young adults who were current tobacco users smoked cigarettes and used other tobacco products (24.6 and 24.4 percent, respectively). Among adults aged





Note: Estimated numbers of people refer to people aged 12 or older in the civilian, noninstitutionalized population in the United States. The numbers do not sum to the total population of the United States because the population for NSDUH does not include people aged 11 years old or younger, people with no fixed household address (e.g., homeless or transient people not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term care hospitals.

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.

26 or older who were current tobacco users, about 1 in 8 (11.8 percent) were current cigarette smokers and current users of other tobacco products.

#### **Cigarette Use**

In 2016, an estimated 51.3 million people aged 12 or older were current cigarette smokers (Figure 1). This number corresponds to 19.1 percent of the population being current cigarette smokers (Figure 3). The percentage of people aged 12 or older who smoked cigarettes in the past month was lower in 2016 than in 2002 to 2014, but it was similar to the percentage in 2015. Stated another way, about 1 in 5 people aged 12 or older in 2016 were current cigarette smokers. In comparison, about 1 in 4 people aged 12 or older were current cigarette smokers in 2002 to 2008 (ranging from 24.0 to 26.0 percent).

#### Figure 2. Type of Past Month Tobacco Use among Current Tobacco Users Aged 12 or Older: Percentages, 2016



Although cigarette smoking has declined, some of this decline may reflect the use of electronic vaporizing devices for delivering nicotine, such as e-cigarettes. For example, research indicates that in 2013, more than a quarter million middle school and high school students (263,000) never smoked a conventional cigarette but used e-cigarettes, which may pertain

Figure 3. Past Month Cigarette Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 3 Table. Past Month Cigarette Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

to products with or without nicotine.<sup>22</sup> Future research on both cigarette use and e-cigarette use is needed to continue monitoring these developments; however, NSDUH does not currently ask direct questions about e-cigarette use.

#### Aged 12 to 17

In 2016, 855,000 adolescents aged 12 to 17 smoked cigarettes in the past month. This number represents 3.4 percent adolescents who were current cigarette smokers (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 3.4 percent in 2016 (or fewer than 1 in 20). The percentage of adolescents who were current cigarette smokers in 2016 also was lower than the percentages in each year from 2002 to 2015.

#### Aged 18 to 25

Among young adults aged 18 to 25 in 2016, 8.1 million individuals smoked cigarettes in the past month. This number of young adults who were current cigarette smokers represents about one quarter of young adults (23.5 percent) (Figure 3). The percentage of young adults who were current cigarette smokers in 2016 was lower than the percentages in 2002 to 2015.

#### Aged 26 or Older

In 2016, 42.4 million adults aged 26 or older smoked cigarettes in the past month. Stated another way, 1 out of 5 adults aged 26 or older (20.2 percent) were current cigarette smokers in 2016 (Figure 3). The 2016 estimate for current cigarette smoking among adults 26 or older was lower than the estimates from 2002 to 2014, but it was similar to the estimate for 2015.

#### **Daily Cigarette Use**

Among the 51.3 million current cigarette smokers aged 12 or older in 2016, 29.7 million were daily cigarette smokers. The 29.7 million daily smokers represent 57.9 percent of current cigarette smokers (Figure 4). Thus, nearly three fifths of current cigarette smokers in 2016 smoked cigarettes daily. The percentage of current smokers aged 12 or older in 2016 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 2015 (Table 1).

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: 2016



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

Table 1. Daily Cigarette Use among Past Month Cigarette Smokers Aged 12 or Older, by Age Group:	
Percentages, 2002-2016	

Age Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
12 or Older	63.4+	62.9+	62.3+	63.0+	62.3+	61.3+	61.5+	61.0+	59.5	60.7+	60.7+	59.6	58.8	58.1	57.9
12 to 17	31.8+	29.7+	27.6+	25.8+	26.5+	26.4+	22.3+	23.0+	22.5+	22.7+	22.0+	19.4+	24.1+	20.0+	15.0
18 to 25	51.8+	52.7+	51.6+	50.1+	48.8+	49.2+	47.8+	45.3+	45.8+	45.3+	45.1+	43.1+	43.0+	42.0	39.9
26 or Older	68.8+	68.0+	67.8+	68.9+	67.9+	66.3+	67.0+	67.2+	64.8+	66.5+	66.0+	64.9+	63.3	62.7	62.2

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Among the 29.7 million daily smokers aged 12 or older in 2016, 12.2 million reported smoking 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 (41.1 percent) reported smoking a pack or more of cigarettes per day (Figures 4 and 5). The percentage of daily smokers aged 12 or older who smoked one or more packs of cigarettes per day was lower in 2016 than the percentages in 2002 to 2011.

#### Aged 12 to 17

In 2016, about 129,000 adolescents aged 12 to 17 smoked cigarettes every day in the past month, which represents about 1 in 7 (15.0 percent) adolescents who were current smokers (Table 1). The 2016 percentage was lower than the percentages in 2002 to 2015. The percentage of adolescent daily smokers who smoked one or more packs of cigarettes per day was not reported for 2016 due to low precision (Figure 5).

#### Aged 18 to 25

About 3.2 million young adults aged 18 to 25 in 2016 were daily cigarette smokers in the past month, or 39.9 percent of young adults who were current cigarette smokers (Table 1).

#### Figure 5. Smokers of One or More Packs of Cigarettes per Day among Past Month Daily Cigarette Smokers Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 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, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
≥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

Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.
Low precision; no estimate reported.

Thus, about 2 in 5 young adults in 2016 who were current cigarette users smoked cigarettes daily. The percentage of young adult current smokers who smoked cigarettes daily in 2016 was lower than the percentages in years from 2002 to 2014, and it was similar to the percentage in 2015. The percentage of young adult daily smokers who smoked one or more packs of cigarettes per day was lower in 2016 (26.2 percent) than in 2002 to 2008, but it was higher than the percentages in 2013 to 2015 (Figure 5).

#### Aged 26 or Older

In 2016, about 26.3 million adults aged 26 or older smoked cigarettes every day in the past month, which represents 62.2 percent of the adults aged 26 or older who were current smokers (Table 1). The percentage of current smokers aged 26 or older in 2016 who smoked cigarettes every day was lower than the percentages in 2002 to 2013, but it was similar to the percentages in 2014 and 2015. 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 2016 were daily smokers. Among daily smokers aged 26 or older, the percentage who smoked one or more packs of cigarettes per day was lower in 2016 (43.1 percent) than in 2002 to 2011, but the percentage was stable between 2012 and 2016 (Figure 5).

#### **Cigar and Pipe Tobacco Use**

An estimated 12.3 million people aged 12 or older in 2016 were current cigar smokers, and 2.3 million were current pipe tobacco smokers (Figure 1). These numbers correspond to 4.6 percent of the population aged 12 or older who were current cigar smokers (Figure 6) and 0.8 percent who were current pipe tobacco smokers (Figure 7). Among people aged 12 or older, the percentage who were current cigar smokers was lower in 2016 than in 2002 through 2012, but it was similar to the percentages in 2013 to 2015. The percentage of people who were current pipe tobacco smokers in 2016 was similar to the percentages in most years between 2002 and 2015.

#### Aged 12 to 17

Among adolescents aged 12 to 17 in 2016, 448,000 individuals smoked cigars, and 123,000 smoked pipe tobacco in the past month. These numbers indicate that 1.8 percent of adolescents were current cigar smokers (Figure 6) and 0.5 percent were current pipe tobacco smokers in 2016 (Figure 7). A lower percentage of adolescents in 2016 were current cigar smokers than in 2002 to 2013, but the 2016 estimate was similar to the estimates in 2014 and 2015. The estimate for current pipe tobacco smoking among adolescents in 2016 was similar to or slightly lower than the estimates in 2002 to 2015.

#### Aged 18 to 25

In 2016, 3.0 million young adults aged 18 to 25 smoked cigars, and 573,000 smoked pipe tobacco. These numbers indicate that 8.8 percent of young adults were current cigar smokers (Figure 6) and 1.7 percent were current pipe tobacco smokers in 2016 (Figure 7). The percentage of young adults in 2016 who were current cigar smokers was lower than in 2002 to 2014, but it was similar to the percentage in 2015. The percentage of young adults in 2016 who were current pipe tobacco smokers was greater than the percentages in most years from 2002 to 2008, but the 2016 estimate was similar to the estimates in most years from 2009 to 2015. Although the percentage of young adults who were current pipe tobacco smokers increased relative to the percentages in 2002 to 2007 and was fairly stable after 2007, current smoking of pipe tobacco among young adults in 2016 was less common than the use of other types of tobacco.

#### Figure 6. Past Month Cigar Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 6 Table. Past Month Cigar Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥12	5.4+	5.4+	5.7+	5.6+	5.6+	5.4+	5.3+	5.3+	5.2+	5.0+	5.2+	4.7	4.5	4.7	4.6
12-17	4.5+	4.5+	4.8+	4.2+	4.1+	4.3+	3.8+	4.0+	3.2+	3.4+	2.6+	2.3+	2.1	2.1	1.8
18-25	11.0+	11.4+	12.7+	12.0+	12.1+	11.9+	11.4+	11.5+	11.3+	10.9+	10.7+	10.0+	9.7+	8.9	8.8
≥26	4.6	4.5	4.6+	4.7+	4.6+	4.4	4.4	4.4	4.4	4.2	4.5	4.1	3.9	4.3	4.2

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level

#### Aged 26 or Older

About 8.8 million adults aged 26 or older in 2016 smoked cigars, and 1.6 million smoked pipe tobacco. These numbers correspond to current cigar smoking by 4.2 percent of adults aged 26 or older (Figure 6) and current pipe tobacco smoking by 0.7 percent of adults in this age group (Figure 7). The 2016 estimates for current cigar use among adults aged 26 or older were similar to estimates in 2007 to 2015. The 2016 estimates for current pipe tobacco smoking among adults aged 26 or older were similar to estimates between 2002 and 2015.

#### **Smokeless Tobacco Use**

In 2015, questions on snuff and chewing tobacco were combined into a single set of questions about smokeless tobacco, and a moist tobacco powder referred to as snus was added to the question as an example of smokeless tobacco. Consequently, estimates of smokeless tobacco use in 2016 are not comparable with those prior to 2015.

In 2016, an estimated 8.8 million people aged 12 or older in 2016 were current smokeless tobacco users (Figure 1). This number of current smokeless tobacco users corresponds to

## Figure 7. Past Month Pipe Tobacco Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 7 Table. Past Month Pipe Tobacco Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥12	0.8	0.7+	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9	0.8	0.8	0.8
12-17	0.6	0.6	0.7+	0.6	0.7	0.7+	0.7+	0.9+	0.6	0.7+	0.7	0.6	0.7+	0.3	0.5
18-25	1.1+	0.9+	1.2+	1.5	1.3+	1.2+	1.4	1.8	1.8	1.9	1.8	2.2+	1.9	1.8	1.7
≥26	0.8	0.6	0.7	0.8	0.9	0.8	0.6	0.7	0.7	0.7	0.9	0.7	0.7	0.8	0.7

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

3.3 percent of the population aged 12 or older (Figure 8). About 352,000 adolescents aged 12 to 17 used smokeless tobacco in the past month, or 1.4 percent of adolescents. An estimated 1.8 million young adults aged 18 to 25 used smokeless tobacco in the past month, or 5.2 percent of young adults. About 6.6 million adults aged 26 or older used smokeless tobacco in the past month, which represents 3.1 percent of adults in this age group.

## Figure 8. Past Month Smokeless Tobacco Use among People Aged 12 or Older, by Age Group: Percentages, 2016



### **Alcohol 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.<sup>23</sup> Until the 2015 NSDUH, the threshold for binge drinking was defined the same for male and females. Consistent with federal definitions<sup>24</sup> and other federal data collections, the NSDUH definition for binge alcohol use since 2015 differs for males and females. Binge drinking for males is defined as drinking five or more drinks 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. Heavy alcohol use is defined as binge drinking on 5 or more days in the past 30 days based on the thresholds that were 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 9). Because of the 2015 changes to the definition of binge alcohol use in NSDUH, overall estimates of binge and heavy alcohol use in 2016 are presented in this report, but these 2016 estimates are not comparable with estimates prior to 2015.<sup>25</sup>

In 2016, 136.7 million Americans aged 12 or older reported current use of alcohol, 65.3 million reported binge alcohol use in the past month, and 16.3 million reported heavy alcohol use in the past month (Figure 9). Thus, nearly half of current alcohol users reported binge alcohol use (47.8 percent), and 1 in 8 current alcohol users reported heavy alcohol use (11.9 percent). Among binge alcohol users, about 1 in 4 (24.9 percent) were heavy users.

### Any Alcohol Use

The estimate of 136.7 million current alcohol users aged 12 or older in 2016 (Figure 9) corresponds to alcohol use in the past month by slightly more than half (50.7 percent) of people aged 12 or older (Figure 10). The 2016 estimate of past month alcohol use was similar to the estimates in most years between 2002 and 2008, but it was lower than the estimates in 2009 to 2015.

#### Aged 12 to 17

The percentage of adolescents aged 12 to 17 who were current alcohol users was 9.2 percent in 2016 (Figure 10), which corresponds to 2.3 million adolescents in 2016

## Figure 9. Current, Binge, and Heavy Alcohol Use among People Aged 12 or Older: 2016



Note: Since 2015, the threshold for determining binge alcohol use for males is consuming five or more drinks on an occasion and for females is consuming four or more drinks on an occasion.

who drank alcohol in the past month. The percentage of adolescents who were current alcohol users in 2016 was lower than the percentages in 2002 through 2014, but it was similar to the percentage in 2015. Although the estimate of current alcohol use among adolescents decreased between 2002 and 2016, about 1 in 11 adolescents were current alcohol users in 2016.

#### Aged 18 to 25

In 2016, 57.1 percent of young adults aged 18 to 25 were current alcohol users (Figure 10), which corresponds to about 19.8 million young adults. The percentage of young adults in 2016 who drank alcohol in the past month was similar to the percentage in 2015. Although the 2016 estimate was lower than the estimates in 2002 through 2014, about three fifths of young adults were current alcohol users in each year between 2002 and 2016 (ranging from 57.1 to 62.0 percent).

#### Aged 26 or Older

More than half (54.6 percent) of adults aged 26 or older in 2016 were current alcohol users (Figure 10). This percentage corresponds to about 114.7 million adults in this age group who drank alcohol in the past month. The percentage of

#### Figure 10. Past Month Alcohol Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 10 Table. Past Month Alcohol Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level

adults aged 26 or older in 2016 who were current alcohol users was similar to the percentages in most years from 2002 to 2015. In each year between 2002 and 2016, 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 2016, an estimated 65.3 million people aged 12 or older were binge alcohol users in the past 30 days (Figure 9). This number of people who were current binge drinkers corresponds to about 1 in 4 people aged 12 or older (24.2 percent) (Figure 11). About 1.2 million adolescents aged 12 to 17 were past month binge alcohol users, which corresponds to 4.9 percent of adolescents. Thus, about 1 in 20 adolescents aged 12 to 17 in 2016 were current binge drinkers. An estimated 38.4 percent of young adults aged 18 to 25 were binge alcohol users in the past month, which corresponds to about 13.3 million young adults. Stated another way, about 2 out of 5 young adults in 2016 were current binge alcohol users. About a quarter (24.2 percent) of adults aged 26 or older were current binge alcohol users. This percentage corresponds to about 50.9 million adults in this age group who were binge drinkers.

#### Figure 11. Past Month Binge and Heavy Alcohol Use among People Aged 12 or Older, by Age Group: Percentages, 2016



Note: Since 2015, the threshold for determining binge alcohol use for males is consuming five or more drinks on an occasion and for females is consuming four or more drinks on an occasion.

#### **Heavy Alcohol Use**

The estimate of 16.3 million people aged 12 or older in 2016 who were heavy alcohol users in the past month (Figure 9) represents 6.0 percent of the population aged 12 or older (Figure 11). In 2016, 191,000 adolescents aged 12 to 17 were current heavy alcohol users. Stated another way, about 1 out of 125 adolescents (0.8 percent) engaged in binge drinking on 5 or more days in the past 30 days. About 1 out of every 10 young adults aged 18 to 25 (10.1 percent) were heavy alcohol users in the past month, which corresponds to 3.5 million young adults. An estimated 6.0 percent of adults aged 26 or older in 2016 were current heavy alcohol users. This percentage corresponds to about 12.6 million adults aged 26 or older who were heavy alcohol users in the past month.

#### **Underage Alcohol Use**

All 50 states and the District of Columbia currently prohibit possession of alcoholic beverages by individuals younger than 21, and most prohibit underage consumption (i.e., consumption of alcoholic beverages prior to the age of 21).<sup>26</sup> In 2016, about 7.3 million people aged 12 to 20 reported drinking alcohol in the past month, including 4.5 million who reported binge alcohol use and 1.1 million who reported heavy alcohol use (Figure 12). Thus, about three fifths of underage current drinkers (62.5 percent) were binge alcohol users, and about 1 in 7 were heavy alcohol users (14.7 percent). About one fourth of underage binge alcohol users (23.5 percent) were heavy drinkers.

#### Figure 12. Current, Binge, and Heavy Alcohol Use among People Aged 12 to 20: 2016



Note: Since 2015, the threshold for determining binge alcohol use for males is consuming five or more drinks on an occasion and for females is consuming four or more drinks on an occasion.

The estimate of 7.3 million underage people in 2016 who reported current alcohol use represents 19.3 percent of 12 to 20 year olds (Figure 13). Among people aged 12 to 20 in 2016, 12.1 percent were binge drinkers, and 2.8 percent were heavy drinkers. The percentage of underage individuals who reported current alcohol use in 2016 was lower than the percentages in 2002 through 2014, but it was similar to the percentage in 2015 (Figure 14). Despite these declines over time, about 1 in 5 individuals aged 12 to 20 in 2016 drank alcohol in the past month.

#### Figure 13. Current, Binge, and Heavy Alcohol Use among People Aged 12 to 20: Percentages, 2016



Note: Since 2015, the threshold for determining binge alcohol use for males is consuming five or more drinks on an occasion and for females is consuming four or more drinks on an occasion.





+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 14 Table. Current Alcohol Use among People Aged 12 to 20: Percentages, 2002-2016

Use	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Current	28.8+	29.0+	28.7+	28.2+	28.4+	28.0+	26.5+	27.2+	26.2+	25.1+	24.3+	22.7+	22.8+	20.3	19.3
* Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.															





Note: Estimated numbers of people refer to people aged 12 or older in the civilian, noninstitutionalized population in the United States. The numbers do not sum to the total population of the United States because the population for NSDUH does not include people aged 11 years old or younger, people with no fixed household address (e.g., homeless or transient people not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term care hospitals.

Note: 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.

### **Illicit Drug Use in the Past Month**

NSDUH obtains information on 10 categories of illicit drugs: marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, and methamphetamine, as well as the misuse of prescription pain relievers, tranquilizers, stimulants, and sedatives; 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 10 drug categories. Because of changes in measurement in 2015 for 7 of the 10 illicit drug categories hallucinogens, inhalants, methamphetamine, and the misuse of prescription pain relievers, tranquilizers, stimulants, and sedatives—estimates of use of any illicit drug and these 7 illicit drug categories in 2016 are not comparable with estimates prior to 2015.

In 2016, an estimated 28.6 million Americans aged 12 or older were current (past month) illicit drug users, meaning that they had used an illicit drug during the month prior to the survey interview (Figure 15). The most commonly used illicit drug in the past month was marijuana, which was used by 24.0 million people aged 12 or older. An estimated 6.2 million people reported misusing psychotherapeutic drugs at least once in the past month, including 3.3 million people who were misusers of prescription pain relievers. Thus, the number of current misusers of pain relievers was second to marijuana among specific illicit drugs. Smaller numbers of people in 2016 were current users of the other illicit drugs shown in Figure 15.<sup>27</sup>

#### **Any Illicit Drug Use**

The estimated 28.6 million people aged 12 or older who were current illicit drug users in 2016 represent 10.6 percent of the population aged 12 or older (Figures 15 and 16). Stated another way, 1 in 10 individuals aged 12 or older in the United States used illicit drugs in the past month. Approximately 2.0 million adolescents aged 12 to 17 in 2016 were current users of illicit drugs, which represents 7.9 percent of adolescents. Approximately 1 in 4 young adults aged 18 to 25 (23.2 percent) were current users of illicit drugs in 2016. This percentage corresponds to about 8.0 million young adults who were current users of illicit drugs. An estimated 8.9 percent of adults aged 26 or older were current users of illicit drugs, or about 18.6 million adults in this age group.



## Figure 16. Past Month Illicit Drug Use among People Aged 12 or Older, by Age Group: 2016

#### Marijuana Use

As noted in the illicit drug use section, an estimated 24.0 million Americans aged 12 or older in 2016 were current users of marijuana (Figure 15). This number of past month marijuana users corresponds to 8.9 percent of the population aged 12 or older (Figure 17). The percentage of people aged 12 or older who were current marijuana users in 2016 was higher than the percentages from 2002 to 2015. This increase in marijuana use among people aged 12 or older reflects the increase in marijuana use by adults aged 26 or older and, to a lesser extent, the increase in marijuana use among young adults aged 18 to 25.

#### Aged 12 to 17

In 2016, 6.5 percent of adolescents aged 12 to 17 were current users of marijuana (Figure 17). This means that approximately 1.6 million adolescents used marijuana in the past month. The percentage of adolescents in 2016 who were current marijuana users was lower than the percentages in most years from 2009 to 2014, but it was similar to the percentage in 2015.

#### Aged 18 to 25

In 2016, about 1 in 5 young adults aged 18 to 25 (20.8 percent) were current users of marijuana (Figure 17). This means that 7.2 million young adults used marijuana





+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 17 Table. Past Month Marijuana Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥12	6.2+	6.2+	6.1+	6.0+	6.0+	5.8+	6.1+	6.7+	6.9+	7.0+	7.3+	7.5+	8.4+	8.3+	8.9
12-17	8.2+	7.9+	7.6+	6.8	6.7	6.7	6.7	7.4+	7.4+	7.9+	7.2+	7.1	7.4+	7.0	6.5
18-25	17.3+	17.0+	16.1+	16.6+	16.3+	16.5+	16.6+	18.2+	18.5+	19.0+	18.7+	19.1+	19.6	19.8	20.8
≥26	4.0+	4.0+	4.1+	4.1+	4.2+	3.9+	4.2+	4.6+	4.8+	4.8+	5.3+	5.6+	6.6+	6.5+	7.2

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level

in the past month. The percentage of young adults who were current marijuana users in 2016 was higher than the percentages between 2002 and 2013, but it was similar to the percentages in 2014 and 2015.

#### Aged 26 or Older

In 2016, 7.2 percent of adults aged 26 or older were current users of marijuana (Figure 17), which represents about 15.2 million adults in this age group. The percentage of adults aged 26 or older who were current marijuana users in 2016 was higher than the percentages in 2002 to 2015.

#### **Misuse of Psychotherapeutic Drugs**

NSDUH collects data on four categories of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives) covering numerous medications that currently are or have been available by prescription. NSDUH respondents are asked to report misuse of these drugs, defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater 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. NSDUH reports combine the four prescription drug groups into a category referred to as "psychotherapeutics." Because the NDSUH prescription drug measures were revised in 2015, the 2016 estimates of prescription drug misuse are not comparable with estimates prior to 2015.

In this section, a summary of current misuse of any prescription psychotherapeutic drug is presented first, followed by sections on the current misuse of pain relievers, tranquilizers, stimulants, and sedatives. In 2016, an estimated 6.2 million Americans aged 12 or older misused psychotherapeutic drugs at least once in the past month, which represent 2.3 percent of the population aged 12 or older (Figures 18 and 19). Of the four categories of prescription drugs that are presented in this report, prescription pain relievers were the most commonly misused by people aged 12 or older. The 6.2 million people aged 12 or older who misused prescription psychotherapeutic drugs in the past month included 3.3 million who misused prescription pain relievers in that period. Approximately 2.0 million people aged 12 or older misused prescription tranquilizers in the past month. An estimated 1.7 million people aged 12 or older misused prescription stimulants, and 497,000 (0.5 million) misused prescription sedatives in the past month.

An estimated 389,000 adolescents aged 12 to 17 misused psychotherapeutic drugs at least once in the past month,





Note: Estimated numbers of people refer to people aged 12 or older in the civilian, noninstitutionalized population in the United States. The numbers do not sum to the total population of the United States because the population for NSDUH does not include people aged 11 years old or younger, people with no fixed household address (e.g., homeless or transient people not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term care hospitals.

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

which rounds to the estimate of 0.4 million adolescents shown in Figure 19. Stated another way, about 1 in 60 adolescents (1.6 percent) were current misusers of psychotherapeutic drugs. An estimated 1.6 million young adults aged 18 to 25 were current misusers of psychotherapeutic drugs, which corresponds to 4.6 percent of young adults. There were 4.2 million adults aged 26 or older who were current misusers of psychotherapeutic drugs, or 2.0 percent of adults in this age group.

#### **Pain Reliever Misuse**

Overall estimates of current prescription psychotherapeutic drug misuse in 2016 among the population aged 12 or older





that were described previously were largely driven by the misuse of prescription pain relievers. In 2016, about half of the current misusers of psychotherapeutic drugs who were aged 12 or older (54.0 percent) reported misusing pain relievers at least once in the past month (Figure 20).

An estimated 3.3 million people aged 12 or older in 2016 were current misusers of pain relievers, which represents 1.2 percent of the population aged 12 or older (Figures 18 and 21). In 2016, an estimated 239,000 adolescents aged 12 to 17 were current misusers of pain relievers, which corresponds to 1.0 percent of adolescents (Figure 21). An estimated 631,000 young adults aged 18 to 25 misused pain relievers in the past month, which represents 1.8 percent

Figure 20. Misuse of Prescription Pain Relievers and Other Prescription Psychotherapeutics among People Aged 12 or Older Who Were Current Misusers of Any Prescription Psychotherapeutics: 2016



6.2 Million Current Misusers of Prescription Psychotherapeutics

of young adults. An estimated 2.5 million adults aged 26 or older were current misusers of pain relievers, which corresponds to 1.2 percent of adults aged 26 or older.

#### **Tranquilizer Misuse**

An estimated 2.0 million people aged 12 or older in 2016 were current misusers of tranquilizers, which represents 0.7 percent of people aged 12 or older (Figures 18 and 21). In 2016, an estimated 121,000 adolescents aged 12 to 17 were current misusers of tranquilizers, which represents 0.5 percent of adolescents (Figure 21). An estimated 536,000 young adults aged 18 to 25 misused tranquilizers in the past month, which represents 1.5 percent of young adults. An estimated 1.3 million adults aged 26 or older were current misusers of tranquilizers, which corresponds to 0.6 percent of adults in this age group.

#### **Stimulant Misuse**

In 2016, an estimated 1.7 million people aged 12 or older, or 0.6 percent of this population, were current misusers of stimulants (Figures 18 and 21). About 92,000 adolescents aged 12 to 17 were current misusers of stimulants, corresponding to about 0.4 percent of adolescents (Figure 21). There were about 767,000 young adults aged 18 to 25 who misused stimulants in the past month, which corresponds to about 2.2 percent of young adults. An estimated 876,000 adults aged 26 or older were current misusers of stimulants, which represents 0.4 percent of this age group.

#### **Sedative Misuse**

An estimated 497,000 people aged 12 or older were current misusers of sedatives in 2016, which rounds to the 0.5 million people shown in Figure 18. This number represents 0.2 percent of the population aged 12 or older

#### Figure 21. Past Month Prescription Psychotherapeutic Misuse among People Aged 12 or Older, by Age Group: Percentages, 2016



(Figure 21). There were an estimated 23,000 adolescents in 2016 who were current misusers of sedatives (0.1 percent of adolescents). An estimated 50,000 young adults aged 18 to 25 misused sedatives in the past month (0.1 percent of young adults). An estimated 425,000 adults aged 26 or older were current misusers of sedatives (0.2 percent of adults aged 26 or older).

#### **Cocaine Use**

In this report, estimates of the use of cocaine include use of crack cocaine. Estimates also are presented separately for crack use. In 2016, the estimate of about 1.9 million people aged 12 or older who were current users of cocaine (Figure 15) included about 432,000 current users of crack. The numbers correspond to about 0.7 percent of the population aged 12 or older who were current users of cocaine (Figure 22) and 0.2 percent who were current users of crack (Table A.7B in Appendix A). The 2016 estimate for current cocaine use was similar to the estimates in most years between 2007 and 2015, but it was lower than the estimates in 2002 to 2006. The 2016 estimate of crack use was similar to the estimates in most years between than the estimates in most years from 2008 to 2015, but it was lower than the estimates in most years between the the estimates in most years between 2007.

#### Figure 22. Past Month Cocaine Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 22 Table. Past Month Cocaine Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥12	0.9+	1.0+	0.8+	1.0+	1.0+	0.8	0.7	0.7	0.6	0.5+	0.6	0.6	0.6	0.7	0.7
12-17	0.6+	0.6+	0.5+	0.6+	0.4+	0.4+	0.4+	0.3+	0.2+	0.3+	0.1	0.2	0.2	0.2	0.1
18-25	2.0+	2.2+	2.1+	2.6+	2.2+	1.7	1.6	1.4	1.5	1.4	1.1+	1.1+	1.4	1.7	1.6
≥26	0.7	0.8	0.7	0.8	0.8+	0.7	0.7	0.6	0.5+	0.4+	0.6	0.5	0.5	0.6	0.6

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

#### Aged 12 to 17

There were 28,000 adolescents aged 12 to 17 who were current users of cocaine and 3,000 adolescents who were current crack users in 2016. These numbers represent 0.1 percent of adolescents who used cocaine and less than 0.1 percent who used crack (Figure 22). The 2016 estimate for current cocaine use among adolescents was similar to the estimates between 2012 and 2015, but the 2016 estimate was lower than the estimates in 2002 to 2011. Where estimates had sufficient precision to be reported, estimates of crack use among adolescents in 2002 to 2016 ranged from less than 0.1 percent to 0.1 percent (Table A.8B in Appendix A).

#### Aged 18 to 25

An estimated 1.6 percent of young adults aged 18 to 25 were current users of cocaine in 2016 (Figure 22), and less than 0.1 percent used crack in the past month (Table A.9B in Appendix A). These percentages represent 552,000 young adults who used cocaine, including 15,000 who used crack. The 2016 percentage of young adults who were current cocaine users was lower than the percentages in 2002 through 2006, and it was similar to the percentages in most years between 2007 and 2015. The estimate of current crack use among young adults in 2016 was lower than estimates in 2002 to 2010, but it was similar to the estimates in most years between 2011 and 2015.

#### Aged 26 or Older

In 2016, 0.6 percent of adults aged 26 or older were current users of cocaine (Figure 22), and 0.2 percent used crack in the past month (Table A.10B in Appendix A). These percentages represent 1.3 million adults aged 26 or older who currently used cocaine, including 414,000 who currently used crack. The 2016 estimates of current cocaine use and current crack use among adults aged 26 or older were similar to the estimates in most years between 2002 and 2015.

#### **Heroin Use**

Heroin is a highly addictive opioid that is illegal and has no accepted medical use in the United States. About 475,000 people aged 12 or older were current heroin users in 2016, which rounds to the 0.5 million people shown in Figure 15. This number corresponds to about 0.2 percent of the population aged 12 or older (Figure 23).

Despite the dangers associated with heroin use, its use has increased in recent years. The percentage of current heroin users aged 12 or older in 2016 was higher than the percentages in most years between 2002 and 2013, but it was similar to the percentages in 2014 and 2015 (Figure 23). However, even when there was a statistically significant difference between the 2016 estimate and estimates in prior years, the estimates ranged between 0.1 and 0.2 percent.

#### Aged 12 to 17

In 2016, less than 0.1 percent of adolescents aged 12 to 17 were current heroin users (Figure 23). This percentage represents 3,000 adolescents who were current users of heroin. The percentage of adolescents in 2016 who were current heroin users was similar to available percentages for heroin use in 2007 to 2015 and lower than the percentages in 2003 to 2006.

#### Aged 18 to 25

Among young adults aged 18 to 25 in 2016, 0.3 percent were current heroin users (Figure 23). This percentage represents 88,000 young adults who were current users of heroin. The percentage of young adults in 2016 who were current heroin users (0.3 percent) was higher than the percentages in 2002 through 2004, and it was similar to the percentages in 2005 through 2015.

#### Figure 23. Past Month Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 23 Table. Past Month Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

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

\* Difference between this estimate and the 2016 estimate is statistically significant at the .05 level. \* Low precision: no estimate reported.

Note: Estimates of less than 0.1 percent round to 0.0 percent when shown to the nearest tenth of a percent.

#### Aged 26 or Older

In 2016, 0.2 percent of adults aged 26 or older were current heroin users (Figure 23). This percentage represents 383,000 adults aged 26 or older who were current users of heroin. The percentage of adults aged 26 or older in 2016 who were current heroin users (0.2 percent) was higher than the percentages for most years between 2002 and 2013 (ranging from less than 0.1 to 0.1 percent), but it was similar to the percentages in 2014 and 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*.<sup>28</sup> In 2015, the NSDUH estimate of any hallucinogen use was expanded to include the use of ketamine, DMT/AMT/"Foxy," and *Salvia divinorum*. Because of the 2015 measurement change, the 2016 estimates of hallucinogen use are not comparable with estimates prior to 2015.

In 2016, an estimated 1.4 million people aged 12 or older were current users of hallucinogens (Figure 15), representing 0.5 percent of the population aged 12 or older (Figure 24). An estimated 114,000 adolescents aged 12 to 17 were current users of hallucinogens, or 0.5 percent of adolescents. An estimated 1.9 percent of young adults aged 18 to 25 were current users of hallucinogens, which represents 668,000 young adults who used hallucinogens. An estimated 0.3 percent of adults aged 26 or older were current users of hallucinogens, which represents 608,000 individuals in this age group who were using hallucinogens.

#### Inhalant Use

Inhalants include a variety of substances, such as nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint,

## Figure 24. Past Month Hallucinogen Use among People Aged 12 or Older, by Age Group: Percentages, 2016



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 2015, the NSDUH estimate of inhalant use was expanded to include the use of felt-tip pens or computer keyboard cleaner to get high. Because of this 2015 change, the 2016 estimates of inhalant use are not comparable with estimates prior to 2015.

In 2016, approximately 600,000 people aged 12 or older were current users of inhalants, which rounds to the estimate of 0.6 million people shown in Figure 15. This number represents 0.2 percent of the population aged 12 or older (Figure 25). Current use of inhalants in 2016 was more common among adolescents aged 12 to 17 than among people in other age groups. In 2016, 0.6 percent of adolescents, 0.4 percent of young adults aged 18 to 25, and 0.2 percent of adults aged 26 or older were current users of inhalants. About 149,000 adolescents, 121,000 young adults, and 329,000 adults aged 26 or older were current users of inhalants.

#### **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<sup>®</sup>). However, most methamphetamine that is now used in the United States is produced and distributed illicitly rather than through the pharmaceutical industry. Therefore, for 2015, a new set of questions specific to methamphetamine was created and administered separately from the questions about the misuse of prescription stimulants. Because of these 2015 measurement changes, the 2016 estimates of methamphetamine use are not comparable with estimates prior to 2015.



## Figure 25. Past Month Inhalant Use among People Aged 12 or Older, by Age Group: Percentages, 2016

In 2016, approximately 667,000 people aged 12 or older were current users of methamphetamine, which rounds to the estimate of 0.7 million people shown in Figure 15. This number represents 0.2 percent of the population aged 12 or older (Figure 26). About 9,000 adolescents aged 12 to 17 were current methamphetamine users. This number corresponds to less than 0.1 percent of adolescents being current methamphetamine users. There were about 65,000 young adults aged 18 to 25 who used methamphetamine in the past month, which corresponds to about 0.2 percent of young adults. An estimated 594,000 adults aged 26 or older used methamphetamine, which represents 0.3 percent of this age group.

### **Opioid Misuse in the Past Year**

Opioids are a group of chemically similar drugs that include heroin and prescription pain relievers such as hydrocodone (e.g., Vicodin<sup>®</sup>), oxycodone (e.g., OxyContin<sup>®</sup>), and morphine. Opioid misuse includes the misuse of prescription opioid pain relievers or the use of heroin. In 2016, there were 11.8 million past year opioid misusers aged 12 or older in the United States, the vast majority of whom misused prescription pain relievers (Figure 27). Specifically, 11.5 million people aged 12 or older in 2016 misused prescription pain relievers in the past year compared with 948,000 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 (10.9 million). Approximately 641,000 people had misused prescription pain relievers and also used heroin in the past year. About 307,000 people used heroin in the past year but had not misused prescription pain relievers. Although 5.6 percent of prescription pain reliever misusers

#### Figure 26. Past Month Methamphetamine Use among People Aged 12 or Older, by Age Group: Percentages, 2016



Note: Estimates of less than 0.1 percent round to 0.0 percent when shown to the nearest tenth of a percent. also used heroin in the past year, 67.6 percent of heroin users also misused pain relievers in the past year.

#### **Past Year Opioid Misuse**

This section presents additional 2016 estimates for past year opioid misuse, heroin use, and pain reliever misuse. Because most opioid misuse involves the misuse of prescription pain relievers, this section also provides further details on the misuse of pain relievers in the past year. Specifically, 2016 estimates are presented for the subtypes of prescription pain relievers that people misused, where people obtained the prescription pain relievers that they most recently misused, and the main reason for the most recent misuse of prescription pain relievers in the past year.

In 2016, approximately 11.8 million people aged 12 or older misused opioids in the past year (Figures 27 and 28). This number represents 4.4 percent of the population aged 12 or older. About 891,000 adolescents aged 12 to 17 misused opioids in the past year. This number corresponds to 3.6 percent of adolescents misusing opioids in the past year. About 2.5 million young adults aged 18 to 25 misused opioids in the past year, which corresponds to about 7.3 percent of young adults. An estimated 8.4 million adults aged 26 or older misused opioids in the past year, which represents 4.0 percent of this age group.

#### **Past Year Heroin Use**

In 2016, an estimated 948,000 people aged 12 or older used heroin in the past year (Figure 27). The estimate of past year heroin use in 2016 (0.4 percent) was higher than



## Figure 27. Past Year Opioid Misuse among People Aged 12 or Older: 2016

Note: Opioid misuse is defined as heroin use or prescription pain reliever misuse.

<sup>11.8</sup> Million People Aged 12 or Older with Past Year Opioid Misuse

## Figure 28. Past Year Opioid Misuse among People Aged 12 or Older, by Age Group: 2016



Note: Opioid misuse is defined as heroin use or prescription pain reliever misuse.

the estimates for all years between 2002 and 2013, but it was similar to the estimates in 2014 and 2015 (Figure 29).

#### Aged 12 to 17

In 2016, 0.1 percent of adolescents aged 12 to 17 were past year users (Figure 29). This percentage represents 13,000 adolescents who used heroin in the past year. The percentage of adolescents in 2016 who were past year heroin users was similar to or slightly lower than the percentages in 2002 through 2015.

#### Aged 18 to 25

Among young adults aged 18 to 25 in 2016, 0.7 percent were past year heroin users (Figure 29). This percentage represents 227,000 young adults who used heroin in the past year. The 2016 percentage of young adults who were past year heroin users was similar to the percentages between 2009 and 2015 (ranging from 0.5 to 0.8 percent), but this percentage in 2016 was higher than the percentages in most years from 2002 through 2008 (ranging from 0.3 to 0.5 percent).

#### Aged 26 or Older

In 2016, 0.3 percent of adults aged 26 or older were past year heroin users (Figure 29). This percentage represents 708,000 adults aged 26 or older who used heroin in the past year. The percentage of adults aged 26 or older in 2016 who were past year heroin users was similar to the percentages in 2014 and 2015, but it was higher than the percentages in all years from 2002 to 2013.

#### **Past Year Pain Reliever Misuse**

In 2016, approximately 11.5 million people misused prescription pain relievers in the past year, representing

4.3 percent of the population aged 12 or older (Figure 30). Among youths aged 12 to 17, 3.5 percent misused prescription pain relievers, corresponding to 881,000 youths. There were about 2.5 million young adults aged 18 to 25 who misused pain relievers in the past year, which corresponds to about 7.1 percent of young adults. An estimated 8.2 million adults aged 26 or older misused pain relievers in the past year, which represents 3.9 percent of this age group.

## Figure 29. Past Year Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 29 Table. Past Year Heroin Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

#### Figure 30. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older, by Age Group: 2016



#### Figure 31. Prescription Pain Reliever Subtypes in the 2016 NSDUH Questionnaire



Note: Prescription pain reliever categories shown in the red and blue boxes represent estimates for subtypes that are shown in Table A.12B in Appendix A.

Note: The following drugs in this figure are generic drugs: Hydrocodone, Oxycodone, Tramadol, Extended-Release Tramadol, Codeine Pills, Morphine, Extended-Release Morphine, Fentanyl, Buprenorphine, Buprenorphine Plus Naloxone, Oxymorphone, Extended-Release Oxymorphone, Hydromorphone, Extended-Release Hydromorphone, and Methadone.

#### **Misuse of Subtypes of Pain Relievers**

NSDUH asked respondents in 2016 to identify the specific prescription pain relievers that they used in the past year. Names of similar prescription drugs (e.g., Vicodin<sup>®</sup>, Lortab<sup>®</sup>, Norco<sup>®</sup>, Zohydro<sup>®</sup> ER, and generic hydrocodone) and electronic images of these drugs were presented to respondents to aid them in recalling which prescription pain relievers they used. For each specific pain reliever that respondents reported using in the past 12 months, respondents were asked whether they misused that pain reliever in that period. The specific pain relievers that individuals misused in the past year were categorized into 11 subtypes (i.e., not counting other prescription pain relievers), such as hydrocodone products (Figure 31).

This section presents estimates for individuals aged 12 or older. Estimates in this section are not presented for the specific prescription pain relievers that respondents reported misusing due to potential data quality issues. Specifically, respondents may have reported that they misused a brand name drug whose name they recognized (e.g., Vicodin<sup>®</sup>) when they may have misused a similar drug (e.g., generic hydrocodone). For classification purposes, however, these reports would be equivalent. For example, respondents who reported the misuse of the pain relievers Vicodin<sup>®</sup> or hydrocodone were classified as misusers of hydrocodone products.

In 2016, the most commonly misused subtype of prescription pain relievers consisted of hydrocodone products, which include Vicodin<sup>®</sup>, Lortab<sup>®</sup>, Norco<sup>®</sup>, Zohydro<sup>®</sup> ER, and generic hydrocodone (Figure 32). An estimated 6.9 million people aged 12 or older misused these products in the past year, representing 2.6 percent of the population. An estimated

#### Figure 32. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older, by Selected Pain Reliever Subtype: 2016



3.9 million people misused oxycodone products in the past year; this number represents 1.4 percent of people aged 12 or older. Oxycodone products include OxyContin<sup>®</sup>, Percocet<sup>®</sup>, Percodan<sup>®</sup>, Roxicodone<sup>®</sup>, and generic oxycodone. An estimated 0.3 percent of people aged 12 or older misused buprenorphine products in the past year, and 0.1 percent misused methadone.

There were 228,000 people who misused prescription fentanyl products in 2016, representing 0.1 percent of the population (Figure 32). Because NSDUH respondents were shown examples of prescription forms of fentanyl, however, this estimate for fentanyl misuse may underrepresent people who misused fentanyl that was illicitly manufactured in clandestine laboratories<sup>29</sup> (i.e., as opposed to the misuse of diverted fentanyl that was produced by the pharmaceutical industry). This estimate of fentanyl misuse also may not include people who unknowingly misused fentanyl, such as if heroin was mixed with illicitly manufactured fentanyl.

#### Main Reasons for the Last Misuse of Pain Relievers

Respondents in the 2016 NSDUH who reported prescription pain reliever misuse in the past year were asked to recall the last prescription pain reliever that they misused in the past year. Respondents were then asked to report their reasons for misusing the 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 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 2016 who misused prescription pain relievers in the past year, the most commonly reported reason for their last misuse of a pain reliever was to relieve physical pain (62.3 percent), which is the reason pain relievers are prescribed (Figure 33). Even if the reason for misuse was to relieve physical pain, use without a prescription of one's own or use at a higher dosage or more often than prescribed still constituted misuse. Other commonly reported reasons for the last misuse among people who misused pain relievers in the past year were to feel good or get high (12.9 percent) and to relax or relieve tension (10.8 percent). Less common reasons among past year misusers of pain relievers included to help with feelings or emotions (3.9 percent), to help with sleep (3.3 percent), to experiment or see what the drug was like (3.0 percent),





<sup>11.5</sup> Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year

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

because they were "hooked" or needed to have the drug (2.1 percent), and to increase or decrease the effects of other drugs (0.9 percent). In addition, 0.9 percent of past year misusers of pain relievers reported that some other reason was their main reason.

#### Source of the Last Pain Reliever That Was Misused

Among people aged 12 or older in 2016 who misused prescription pain relievers in the past year, the most common source for the last pain reliever that was misused was from a friend or relative (Figure 34). More than half (53.0 percent) of people who misused pain relievers in the past year reported that they obtained the pain relievers the last time from a friend or relative. Specifically, 40.4 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, 8.9 percent bought their last pain reliever from a friend or relative, and 3.7 percent took their last pain reliever from a friend or relative without asking. About one third of people who misused pain relievers in the past year (37.5 percent) indicated that they obtained pain relievers the last time through prescription(s) or stole from a health care provider, typically getting the pain relievers through

a prescription from one doctor (35.4 percent). About 1 in 16 people who misused pain relievers in the past year (6.0 percent) reported that they bought the last pain reliever they misused from a drug dealer or stranger.

#### Substance Use Disorders in the Past Year

Substance use disorders (SUDs) represent clinically significant 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 SUDs in the past 12 months. Respondents were asked questions about SUDs if they previously reported use in the past 12 months of alcohol or illicit drugs. Illicit drugs include marijuana, cocaine, heroin, hallucinogens, inhalants, methamphetamine, and the misuse of prescription psychotherapeutic drugs (i.e., pain relievers, tranquilizers, stimulants, and sedatives). These SUD questions classify people as having an SUD in the past 12 months and are based on criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV).<sup>30,31</sup>



Figure 34. Source Where Pain Relievers Were Obtained for Most Recent Misuse among People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year: Percentages: 2016

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

Note: Respondents with unknown data for Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded. Note: The percentages do not add to 100 percent due to rounding. Because of changes that were described previously to the questions for the use of hallucinogens, inhalants, and methamphetamine and the misuse of prescription drugs, the 2016 estimates for overall SUD (i.e., for alcohol or illicit drugs), any illicit drug use disorder, and SUDs for these specific illicit drugs are not comparable with the estimates from years prior to 2015. The questions did not change for identifying past year users of alcohol, marijuana, cocaine, and heroin. Therefore, estimates of SUDs for these substances in 2016 are assumed to have remained comparable with estimates from earlier years.

This section presents estimates for the most common SUDs among the population aged 12 or older. Estimates of less common SUDs are not discussed in this report (e.g., inhalant use disorder) but are available in Tables A.15B through A.18B in Appendix A.

#### **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, and 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 15.1 million people aged 12 or older had an alcohol use disorder in 2016, which represents 5.6 percent of people aged 12 or older (Figure 35), or about 1 in 18 people aged 12 or older. The percentage of people aged 12 or older with an alcohol use disorder in 2016 was lower than the percentages in 2002 to 2014, but it was similar to the percentage in 2015.

#### Aged 12 to 17

An estimated 488,000 adolescents aged 12 to 17 in 2016 had a past year alcohol use disorder, or 2.0 percent of adolescents (Figure 35). The percentage of adolescents with an alcohol use disorder in 2016 was lower than the percentages in 2002 to 2015. Although the percentages of adolescents with an alcohol use disorder in 2002 to 2010 were relatively low (ranging from 4.6 to 6.0 percent), the percentage of adolescents in 2016 with an alcohol use disorder was roughly a third to half of these percentages in 2002 to 2010.

#### Figure 35. Alcohol Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 35 Table. Alcohol Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

#### Aged 18 to 25

Approximately 3.7 million young adults aged 18 to 25 in 2016 had an alcohol use disorder in the past year. This number of young adults with an alcohol use disorder represents 10.7 percent of young adults (Figure 35). The percentage of young adults with an alcohol use disorder in 2016 was lower than the percentages in 2002 to 2014, but it was similar to the percentage in 2015. Nevertheless, nearly 1 in 9 young adults in 2016 had an alcohol use disorder.

#### Aged 26 or Older

In 2016, approximately 10.9 million adults aged 26 or older had an alcohol use disorder in the past year, which represents 5.2 percent of the adults in this age group (Figure 35). The percentage of adults aged 26 or older with an alcohol use disorder in 2016 was lower than the percentages in most years from 2002 to 2014, but it was similar to the percentage in 2015.

#### **Illicit Drug Use Disorder**

This section presents overall estimates for illicit drug use disorder and then provides SUD estimates for 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., pain relievers, tranquilizers, stimulants, and sedatives). 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 were defined as meeting the abuse criteria for that drug if they reported one or more of the following:

- 1. problems at work, home, and 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 2016 NSDUH.<sup>9</sup>

In 2016, an estimated 7.4 million people aged 12 or older had an illicit drug use disorder (Figure 36). This number represents 2.7 percent of people aged 12 or older. An estimated 3.2 percent of adolescents aged 12 to 17 had an illicit drug use disorder, or about 789,000 adolescents. Approximately 2.4 million young adults aged 18 to 25 had an illicit drug use disorder in the past year, which represents 7.0 percent of young adults. Approximately 4.2 million adults aged 26 or older had an illicit drug use disorder in the past year, which represents 2.0 percent of adults aged 26 or older.



#### Figure 36. Illicit Drug Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: 2016

#### 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 4.0 million people aged 12 or older in 2016 had a marijuana use disorder in the past year, which represents 1.5 percent of people aged 12 or older (Figure 37). The 2016 percentage of the population aged 12 or older with a marijuana use disorder was lower than the percentages in most years between 2002 and 2010 and was similar to the percentages in 2011 to 2015.

#### Aged 12 to 17

In 2016, 2.3 percent of adolescents aged 12 to 17 had a marijuana use disorder in the past year (Figure 37), or about 584,000 adolescents. The percentage of adolescents





+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 37 Table. Marijuana Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

\* Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

with a marijuana use disorder in 2016 was lower than the percentages in 2002 to 2013, but it was similar to the percentages in 2014 and 2015.

#### Aged 18 to 25

Approximately 1.7 million young adults aged 18 to 25 in 2016 had a marijuana use disorder in the past year, or 5.0 percent of young adults (Figure 37). The percentage of young adults with a marijuana use disorder in 2016 was lower than the percentages in 2002 through 2006, but it was similar to the percentages in most years from 2007 to 2015.

#### Aged 26 or Older

In 2016, approximately 1.7 million adults aged 26 or older had a marijuana use disorder in the past year, or 0.8 percent of adults in this age group (Figure 37). The 2016 percentage of adults aged 26 or older with a marijuana use disorder was similar to the percentages in all years between 2002 and 2015.

#### **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 867,000 people aged 12 or older in 2016 had a cocaine use disorder in the past year. This number of people with a cocaine use disorder represents 0.3 percent of the population aged 12 or older (Figure 38). The percentage of the population aged 12 or older with a cocaine use disorder remained fairly stable between 2010 and 2016. However, the percentage in 2016 was lower than the percentages in 2002 to 2009.

#### Aged 12 to 17

An estimated 0.1 percent of adolescents aged 12 to 17 in 2016 had a cocaine use disorder in the past year (Figure 38), or about 29,000 adolescents. The percentage of adolescents with a cocaine use disorder in 2016 was lower than the percentages in 2002 to 2008, but it was similar to the percentages in 2009 to 2015.

#### Aged 18 to 25

Approximately 215,000 young adults aged 18 to 25 in 2016 had a cocaine use disorder in the past year. This number

represents 0.6 percent of young adults (Figure 38). Similar to the pattern for adolescents aged 12 to 17, the percentage of young adults with a cocaine use disorder in 2016 was lower than the percentages in 2002 to 2009, but it was similar to the percentages in 2010 to 2015.

#### Aged 26 or Older

In 2016, approximately 623,000 adults aged 26 or older had a cocaine use disorder in the past year, which represents 0.3 percent of adults in this age group (Figure 38). The percentage of adults aged 26 or older with a cocaine use disorder in 2016 was lower than the percentages in 2002 to 2008, but it remained steady when compared with the percentages in most years between 2009 and 2015.

#### **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

#### Figure 38. Cocaine Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 38 Table. Cocaine Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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
≥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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

DSM-IV criteria for either dependence or abuse for heroin. Dependence and abuse criteria for illicit drugs (including heroin) were described previously.

About 626,000 people aged 12 or older in 2016 had a heroin use disorder. This number of people with a heroin use disorder represents 0.2 percent of people aged 12 or older (Figure 39). The percentage of people aged 12 or older with a heroin use disorder in 2016 was higher than the percentages in 2002 to 2010 (0.1 percent), but it was similar to the percentages in 2011 to 2015.

#### Aged 12 to 17

Less than 0.1 percent of adolescents aged 12 to 17 in 2016 had a heroin use disorder in the past year (Figure 39), which corresponds to about 1,000 adolescents. The percentage of adolescents with a heroin use disorder in 2016 was lower than the estimates in most years from 2002 to 2014, but it was similar to the percentage in 2015.

#### Aged 18 to 25

Approximately 152,000 young adults aged 18 to 25 in 2016 had a heroin use disorder in the past year, which represents 0.4 percent of young adults (Figure 39). The percentage of

#### Figure 39. Heroin Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 39 Table. Heroin Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: Percentages, 2002-2016

Age	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
≥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
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
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	0.5	0.4	0.4
≥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

\* Difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Note: Estimates of less than 0.1 percent round to 0.0 percent when shown to the nearest tenth of a percent. young adults with a heroin use disorder in 2016 was greater than the percentages in 2002 to 2007, but it was similar to the percentages in 2008 to 2015.

#### Aged 26 or Older

In 2016, approximately 473,000 adults aged 26 or older had a heroin use disorder in the past year, which represents 0.2 percent of adults in this age group (Figure 39). Between 2002 and 2016, 0.1 to 0.2 percent of adults aged 26 or older had a heroin use disorder in the past year. The 2016 estimate was higher than the estimates in 2002 to 2012, but it remained steady when compared with the percentages between 2013 and 2015.

#### **Methamphetamine Use Disorder**

With the addition of questions about methamphetamine use in 2015 that were separate from questions about the misuse of prescription stimulants, questions also were added in 2015 about SUD symptoms that respondents attributed specifically to their use of methamphetamine. Consequently, estimates for methamphetamine use disorder are available for 2015 and 2016 but are not available prior to 2015. Also, methamphetamine use disorder does not include stimulant use disorder, which is 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 2016, an estimated 684,000 people aged 12 or older had a methamphetamine use disorder. This number represents about 0.3 percent of people aged 12 or older (Table A.15B in Appendix A). Less than 0.1 percent of adolescents aged 12 to 17 in 2016 had a methamphetamine use disorder in the past year (Table A.16B), which represents about 10,000 adolescents. Approximately 135,000 young adults aged 18 to 25 and 539,000 adults aged 26 or older in 2016 had a methamphetamine use disorder in the past year. Adults with a methamphetamine use disorder correspond to 0.4 percent of young adults aged 18 to 25 (Table A.17B) and 0.3 percent of adults aged 26 or older (Table A.18B).

#### **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 pain relievers) were described previously.

In 2016, an estimated 1.8 million people aged 12 or older had a pain reliever use disorder, which represents 0.7 percent of people aged 12 or older (Figure 40). An estimated 0.6 percent of adolescents aged 12 to 17 had a pain reliever use disorder in the past year, which represents about 152,000 adolescents. Approximately 291,000 young adults aged 18 to 25 and 1.3 million adults aged 26 or older had a pain reliever use disorder in the past year. These numbers of adults with a pain reliever use disorder correspond to 0.8 percent of young adults and 0.6 percent of adults aged 26 or older.

#### **Tranquilizer Use Disorder**

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

Figure 40. Pain Reliever Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: 2016



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

In 2016, an estimated 618,000 people aged 12 or older had a tranquilizer use disorder. This number represents 0.2 percent of people aged 12 or older (Table A.15B in Appendix A). An estimated 0.3 percent of adolescents aged 12 to 17 had a tranquilizer use disorder in the past year (Table A.16B), which represents about 86,000 adolescents. Approximately 188,000 young adults aged 18 to 25 and 343,000 adults aged 26 or older had a tranquilizer use disorder in the past year. These numbers correspond to 0.5 percent of young adults (Table A.17B) and 0.2 percent of adults aged 26 or older (Table A.18B).

#### **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 stimulants) were described previously. (As noted in the section on methamphetamine use disorder, respondents who met criteria for methamphetamine use disorder do not necessarily have a stimulant use disorder.)

In 2016, an estimated 540,000 people aged 12 or older had a stimulant use disorder in the past year. This number of people with a stimulant use disorder represents 0.2 percent of people aged 12 or older (Table A.15B in Appendix A). An estimated 0.2 percent of adolescents aged 12 to 17 had a stimulant use disorder in the past year (Table A.16B), which represents about 56,000 adolescents. Approximately 170,000 young adults aged 18 to 25 and 315,000 adults aged 26 or older had a stimulant use disorder in the past year. These numbers correspond to 0.5 percent of young adults (Table A.17B) and 0.1 percent of adults aged 26 or older (Table A.18B).

#### **Opioid Use Disorder**

Opioids include two categories of drugs: heroin and opioid prescription pain relievers. NSDUH collects dependence and abuse information for these two categories of drugs. A respondent was classified as having an opioid use disorder if he or she met DSM-IV criteria for heroin use disorder or pain reliever use disorder, as described previously. In 2016, an estimated 2.1 million people aged 12 or older had an opioid use disorder, or 0.8 percent of people aged 12 or older (Figure 41). An estimated 0.6 percent of adolescents aged 12 to 17 in 2016 had an opioid use disorder in the past year, which represents about 153,000 adolescents. About 392,000 young adults aged 18 to 25 had an opioid use disorder in the past year. This number corresponds to 1.1 percent of young adults. An estimated 1.6 million adults aged 26 or older had an opioid use disorder, which corresponds to 0.8 percent of adults in this age group.

#### 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 2016, approximately 20.1 million people aged 12 or older had an SUD in the past year, including 15.1 million people who had an alcohol use disorder and 7.4 million people who had an illicit drug use disorder (Figure 42). Among the 7.4 million people aged 12 or older who had an illicit drug use disorder, the most common disorders were for marijuana (4.0 million people) and prescription pain relievers (1.8 million people). Smaller numbers of people in 2016 had disorders related to their use of cocaine, methamphetamine, or heroin or related to their misuse of prescription stimulants.

An estimated 2.3 million people aged 12 or older had both an alcohol use disorder and an illicit drug use disorder in the past year (Figure 43). Thus, among people aged 12 or older in 2016 who had an SUD in the past year, nearly 3 out of 4 had an alcohol use disorder, and about 1 out of 3

#### Figure 41. Opioid Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: 2016



Note: Opioid use disorder is defined as meeting DSM-IV criteria for heroin use disorder or pain reliever use disorder in the past 12 months.





Note: Estimated numbers of people refer to people aged 12 or older in the civilian, noninstitutionalized population in the United States. The numbers do not sum to the total population of the United States because the population for NSDUH does not include people aged 11 years old or younger, people with no fixed household address (e.g., homeless or transient people not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term care hospitals.

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.

had an illicit drug use disorder. About 1 in 9 people aged 12 or older who had SUDs in the past year had both an alcohol use disorder and an illicit drug use disorder.

The 20.1 million people who had SUDs in 2016 (Figure 42) represent 7.5 percent of people aged 12 or older (Figure 44). This percentage of people in 2016 who had SUDs corresponds to about 1 in 13 people aged 12 or older. An estimated 1.1 million adolescents aged 12 to 17 had SUDs in 2016, which represents 4.3 percent of adolescents. In 2016, 5.2 million young adults aged 18 to 25 had SUDs. This number represents 15.1 percent of young adults. An estimated 13.8 million adults aged 26 or older in 2016 had

#### Figure 43. Alcohol Use Disorder and Illicit Drug Use Disorder in the Past Year among People Aged 12 or Older with a Past Year Substance Use Disorder (SUD): 2016



20.1 Million People Aged 12 or Older with Past Year SUDs

SUDs, which represents 6.6 percent of adults in this age group. Stated another way, about 1 in 23 adolescents, 1 in 7 young adults, and 1 in 15 adults aged 26 or older had an SUD in the past year.

### **Substance Use Treatment in the Past Year**

Substance use treatment services are intended to help people address problems associated with their substance use. NSDUH provides two measures related to substance use treatment: (a) the need for substance use treatment and (b) the receipt of substance use treatment. The substance use treatment estimates in this section are presented for 2016 but are not considered to be comparable with estimates prior to



## Figure 44. Substance Use Disorder in the Past Year among People Aged 12 or Older, by Age Group: 2016

2015 because changes in the measurement of substance use may have affected the group of respondents who were asked the substance use treatment questions. Also, estimates of the need for substance use treatment in 2016 are not comparable with estimates prior to 2015 because of the noncomparability of several SUD estimates in 2016 with those prior to 2015.

#### **Need for Substance Use Treatment**

NSDUH includes questions that are used to identify people who needed substance use treatment (i.e., treatment for problems related to the use of alcohol or illicit drugs) in the past year. For NSDUH, 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 facility<sup>32</sup> in the past year.<sup>33,34</sup>

In 2016, an estimated 21.0 million people aged 12 or older needed substance use treatment. Stated another way, about 1 in 13 people aged 12 or older (7.8 percent) needed substance use treatment (Figure 45).<sup>34</sup> About 1.1 million adolescents aged 12 to 17 needed treatment for a substance use problem in the past year, representing 4.4 percent of adolescents. About 5.3 million young adults aged 18 to 25 needed treatment for a substance use problem in the past year, representing 15.5 percent of young adults. Stated another way, about 1 in 7 young adults needed substance use treatment. About 14.5 million adults aged 26 or older needed substance use treatment in the past year, which represents 6.9 percent of adults in this age group.

#### **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

## Figure 45. Need for Substance Use Treatment in the Past Year among People Aged 12 or Older, by Age Group: 2016



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 categories of use; substance use treatment at a specialty facility is included in estimates of any substance use treatment. Receipt of any substance use treatment includes treatment that was 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 a self-help group (e.g., such as Alcoholics Anonymous or Narcotics Anonymous). Receipt of substance use treatment at a specialty facility is defined as substance use treatment that 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. People could report receiving treatment at more than one location. This section presents estimates of the receipt of any substance use treatment among all people aged 12 or older, receipt of specialty substance use treatment among people aged 12 or older, and receipt of specialty substance use treatment among people aged 12 or older who needed substance use treatment in the past year.

In 2016, approximately 3.8 million people aged 12 or older received any substance use treatment in the past year, or 1.4 percent of people aged 12 or older (Figure 46). Among adolescents aged 12 to 17, 180,000 received any substance

### Figure 46. Received Any Substance Use Treatment in the Past Year among People Aged 12 or Older, by Age Group: 2016


use treatment in the past year, or 0.7 percent of adolescents. An estimated 624,000 young adults aged 18 to 25 received any substance use treatment in the past year; this number represents 1.8 percent of young adults receiving any substance use treatment. About 3.0 million adults aged 26 or older received any substance use treatment in the past year, or 1.4 percent of adults in this age group.

Approximately 2.2 million people aged 12 or older in 2016 received substance use treatment at a specialty facility, or 0.8 percent of the population aged 12 or older (Figure 47). Among adolescents aged 12 to 17, 89,000 (0.4 percent) received substance use treatment at a specialty facility. An estimated 383,000 young adults aged 18 to 25 received substance use treatment at a specialty facility; this number represents 1.1 percent of young adults receiving substance use treatment at a specialty facility. About 1.8 million adults aged 26 or older received substance use treatment at a specialty facility in the past year, or 0.8 percent of adults in this age group.

The estimated 2.2 million people aged 12 or older in 2016 who received substance use treatment at a specialty facility in the past year also represents 10.6 percent of the people who needed treatment (Figure 48). Among people in specific age groups who needed substance use treatment, 8.2 percent of adolescents aged 12 to 17, 7.2 percent of young adults aged 18 to 25, and 12.1 percent of adults aged 26 or older received substance use treatment at a specialty facility in the past year. These percentages represent 89,000 adolescents, 383,000 young adults, and 1.8 million adults aged 26 or older received treatment at a specialty facility in the past year.

# Figure 47. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older, by Age Group: 2016



### Figure 48. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older Who Needed Substance Use Treatment in the Past Year, by Age Group: 2016



## **Major Depressive Episode in the Past Year**

Mental disorders, such as major depressive episode (MDE), are generally characterized by changes in mood, thought, or behavior. They can make carrying out daily activities difficult and can impair an individual's ability to work or function in school, interact with family, and fulfill other major life functions. Adults and adolescents were defined as having an MDE if they had a period of 2 weeks or longer in the past 12 months when they experienced a depressed mood or loss of interest or pleasure in daily activities, and they had at least some additional symptoms, such as problems with sleep, eating, energy, concentration, and self-worth. NSDUH uses different age-adapted questions based on using the diagnostic criteria from DSM-IV to ask adults and adolescents about their experiences with MDE.<sup>30</sup> Stated another way, some wordings of depression questions for adolescents were designed to make them more developmentally appropriate for youths.<sup>35</sup>

NSDUH also collects data on impairment in four major life activities or role domains because of an MDE in the past year. These four 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, manage well at work, have relationships with others, or have a social life.<sup>36</sup> 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.<sup>37</sup> Given the differences in item wording, estimates of MDE and MDE with severe impairment are provided separately for adults and adolescents. NSDUH has measured adolescent MDE since 2004 and adolescent MDE with severe impairment since 2006. NSDUH has measured adult MDE since 2005 and adult MDE with severe impairment since 2009.

### MDE and MDE with Severe Impairment among Adolescents

In 2016, 12.8 percent of adolescents aged 12 to 17 (3.1 million adolescents) had an MDE during the past year, and 9.0 percent of adolescents (2.2 million adolescents) had a past year MDE with severe impairment (Figure 49). Thus, adolescents in 2016 who had an MDE with severe impairment represented more than two thirds (70.5 percent) of adolescents who had a past year MDE.<sup>38</sup>

The percentage of adolescents aged 12 to 17 in 2016 who had a past year MDE was higher than the percentages in 2004 to 2014, but it was similar to the estimate in 2015 (Figure 50). The percentage of adolescents in 2016 who had a past year MDE with severe impairment was higher than the percentages in 2006 to 2013, which ranged from 5.5 to 7.7 percent. However, the 2016 estimate for MDE with severe impairment among adolescents was similar to the estimates in 2014 and 2015.

### MDE and MDE with Severe Impairment among Adults

In 2016, 6.7 percent of adults aged 18 or older (16.2 million adults) had at least one MDE in the past year, and 4.3 percent of adults (10.3 million adults) had an MDE with

# Figure 49. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17: 2016



3.1 Million Youths with a Past Year MDE (12.8% of All Youths)

Note: Youth respondents with unknown past year MDE data or unknown impairment data were excluded. Note: The percentages do not add to 100 percent due to rounding.

severe impairment in the past year (Figure 51). Adults in 2016 who had an MDE with severe impairment represented nearly two thirds (64.0 percent) of adults who had a past year MDE.<sup>38</sup>

### Figure 50. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17: Percentages, 2004-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 50 Table. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17: Percentages, 2004-2016

MDE Status	04	05	06	07	08	09	10	11	12	13	14	15	16
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
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

N/A = not available.

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

# Figure 51. Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Adults Aged 18 or Older: 2016



16.2 Million Adults with a Past Year MDE (6.7% of All Adults)

Note: Adult respondents with unknown past year MDE data or unknown impairment data were excluded. Note: The percentages do not add to 100 percent due to rounding. The percentage of adults 18 or older who had a past year MDE remained stable between 2005 and 2016 (Figure 52). The percentage of adults with a past year MDE with severe impairment also remained stable between 2009 and 2016 (Figure 53).

### Aged 18 to 25

In 2016, an estimated 3.7 million young adults aged 18 to 25 had a past year MDE, or 10.9 percent of young adults (Figure 52). The percentage of young adults with a past year MDE was greater in 2016 than in 2005 to 2014, but it was similar to the percentage in 2015.

An estimated 2.4 million young adults aged 18 to 25 in 2016 had a past year MDE with severe impairment, or 7.0 percent of young adults (Figure 53). The percentage of young adults with a past year MDE with severe impairment was greater in 2016 than in 2009 to 2014, but it was similar to the percentage in 2015.

### Aged 26 to 49

In 2016, an estimated 7.2 million adults aged 26 to 49 had a past year MDE, or 7.4 percent of adults in this age group

### Figure 52. Major Depressive Episode in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2005-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 52 Table. Major Depressive Episode in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2005-2016

Age Group	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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
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
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
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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

(Figure 52). The percentage of adults aged 26 to 49 in 2016 who had a past year MDE was similar to the corresponding percentages in 2005 to 2015.

An estimated 4.6 million adults aged 26 to 49 in 2016 had a past year MDE with severe impairment, or 4.7 percent of adults in this age group (Figure 53). The percentage of adults aged 26 to 49 in 2016 who had a past year MDE with severe impairment was similar to the percentages in 2009 to 2015.

### Aged 50 or Older

In 2016, an estimated 5.3 million adults aged 50 or older had a past year MDE, or 4.8 percent of adults in this age group (Figure 52). The percentage of adults aged 50 or older in 2016 who had a past year MDE was similar to the corresponding percentages in 2005 to 2015.

An estimated 3.3 million adults aged 50 or older in 2016 had a past year MDE with severe impairment, or 3.0 percent of adults in this age group (Figure 53). The percentage of adults aged 50 or older in 2016 who had a past year MDE with severe impairment was similar to the percentages in 2009 to 2015.

### Figure 53. Major Depressive Episode with Severe Impairment in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2009-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 53 Table. Major Depressive Episode with Severe Impairment in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2009-2016

Age Group	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	4.0	4.2	4.2	4.5	4.3	4.3	4.3	4.3
18 to 25	5.2+	5.2+	5.2+	5.8+	5.7+	6.0+	6.5	7.0
26 to 49	4.8	4.7	5.2	5.1	4.9	4.6	4.9	4.7
50 or Older	2.6	3.5	2.9	3.4	3.2	3.5	3.0	3.0

### 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.<sup>39</sup> The NSDUH interview does not include questions or methods for estimating the occurrence of mental disorders among adolescents other than whether adolescents had an MDE. Therefore, NSDUH does not include any measure for adolescents that is equivalent to AMI or SMI of any mental illness for adults.

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).<sup>30</sup> 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. This section includes past year estimates of adults with AMI, SMI, and AMI excluding SMI.<sup>40</sup>

### Mental Illness among All Adults

In 2016, an estimated 44.7 million adults aged 18 or older had AMI in the past year (Figure 54). This number represents 18.3 percent of adults in the United States. An estimated 10.4 million adults in the nation had SMI in the past year, and 34.3 million adults had AMI excluding SMI

# Figure 54. Any Mental Illness (AMI), Serious Mental Illness (SMI), and AMI Excluding SMI in the Past Year among Adults Aged 18 or Older: 2016



44.7 Million Adults with AMI in the Past Year (18.3% of All Adults)

in the past year. The number of adults with SMI represents 4.2 percent of adults in 2016, and the number of adults with AMI excluding SMI represents 14.0 percent of adults. Among adults with AMI in the past year, 23.2 percent had SMI, and 76.8 percent did not have SMI.<sup>41,42</sup>

In 2016, the percentages of adults with AMI and adults who had AMI excluding SMI were similar to the percentages from 2008 to 2015 (Figures 55 and 57). The percentage of adults in 2016 with SMI was similar to the percentages from 2010 to 2015 but higher than the percentages in 2008 and 2009 (Figure 56).

### Mental Illness among Adult Age Groups

### Aged 18 to 25

In 2016, an estimated 7.6 million young adults aged 18 to 25 (22.1 percent) had AMI in the past year (Figure 55), and an estimated 2.0 million young adults (5.9 percent) had SMI in the past year (Figure 56). An estimated 5.6 million young adults (16.2 percent) had AMI excluding SMI in the past year (Figure 57).

## Figure 55. Any Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 55 Table. Any Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	17.7	18.1	18.1	17.8	18.6	18.5	18.1	17.9	18.3
18 to 25	18.5+	18.0+	18.1+	18.5+	19.6+	19.4+	20.1+	21.7	22.1
26 to 49	20.7	21.6	20.9	20.3	21.2	21.5	20.4	20.9	21.1
50 or Older	14.1	14.5	15.1	15.0	15.8	15.3	15.4	14.0	14.5

Percentages of young adults aged 18 to 25 in 2016 who had AMI, SMI, or AMI excluding SMI were greater than the corresponding percentages in most or all years from 2008 to 2013. The percentage of young adults in 2016 who had AMI was greater than the percentages from 2008 to 2014, but it was similar to the percentage in 2015. The estimate of SMI among young adults in 2016 was higher than the estimates in all years between 2008 and 2015. The 2016 percentage of young adults with AMI excluding SMI was higher than the percentages in most years between 2008 and 2013, but it was similar to the percentages in 2014 and 2015.

#### Aged 26 to 49

In 2016, 20.9 million adults aged 26 to 49 (21.1 percent) had AMI in the past year (Figure 55), and an estimated 5.3 million adults aged 26 to 49 (5.3 percent) had SMI in the past year (Figure 56). An estimated 15.6 million adults aged 26 to 49 (15.8 percent) had AMI excluding SMI in





+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 56 Table. Serious Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	3.7+	3.7+	4.1	3.9	4.1	4.2	4.1	4.0	4.2
18 to 25	3.8+	3.3+	3.9+	3.8+	4.1+	4.2+	4.8+	5.0+	5.9
26 to 49	4.8+	4.9	5.2	5.0	5.2	5.3	4.9	5.0	5.3
50 or Older	2.5	2.5	3.0	2.8	3.0	3.2	3.1	2.8	2.7

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

the past year (Figure 57). Estimates of AMI, SMI, and AMI excluding SMI among adults aged 26 to 49 in 2016 were similar to the estimates in most years between 2008 and 2015.

### Aged 50 or Older

In 2016, an estimated 16.1 million adults aged 50 or older (14.5 percent) had AMI in the past year (Figure 55), and an estimated 3.0 million adults aged 50 or older (2.7 percent) had SMI in the past year (Figure 56). An estimated 13.1 million adults aged 50 or older (11.8 percent) had AMI excluding SMI in the past year (Figure 57).

The 2016 estimate of AMI among adults aged 50 or older was similar to the estimates between 2008 and 2015. The percentages of adults aged 50 or older with past year SMI and AMI excluding SMI in 2016 were also similar to the percentages in 2008 to 2015.

### Figure 57. Any Mental Illness Excluding Serious Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 57 Table. Any Mental Illness Excluding Serious Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	14.0	14.4	14.0	13.9	14.5	14.2	14.0	13.9	14.0
18 to 25	14.8+	14.6+	14.1+	14.8+	15.5	15.2+	15.3	16.7	16.2
26 to 49	16.0	16.7+	15.7	15.3	16.0	16.2	15.5	15.9	15.8
50 or Older	11.6	12.0	12.2	12.3	12.8	12.1	12.3	11.1	11.8

### Mental Health Service Use in the Past Year

### **Treatment for Depression among Adolescents**

Adolescents 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.<sup>43</sup> Estimates of treatment for depression among adolescents are presented for 2004 to 2016 among adolescents with MDE and for 2006 to 2016 among adolescents with MDE with severe impairment.

Of the 3.1 million adolescents aged 12 to 17 with past year MDE in 2016, an estimated 1.2 million youths received treatment for depression. Stated another way, 40.9 percent of youths who had a past year MDE received treatment for depression (Figure 58). The 2016 percentage was similar to the percentages in most years from 2004 to 2015.

Figure 58. 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: Percentages, 2004-2016



<sup>+</sup> Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 58 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: Percentages, 2004-2016

MDE Status	04	05	06	07	08	09	10	11	12	13	14	15	16
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
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

N/A = not available

<sup>+</sup> Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

In 2016, about 1.0 million youths aged 12 to 17 who had a past year MDE with severe impairment received treatment for depression, or 46.7 percent of youths who had a past year MDE with severe impairment. The percentage of adolescents with an MDE with severe impairment in 2016 who received treatment for depression was similar to the percentages in most years from 2006 to 2015.

### **Treatment for Depression among Adults**

Adults 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.<sup>43</sup> Estimates of treatment for depression among adults are presented for 2009 to 2016 for adults with an MDE and adults with an MDE with severe impairment.

Of the 16.2 million adults aged 18 or older in 2016 who had a past year MDE, 10.6 million received treatment for depression, or 65.3 percent of adults who had a past year MDE (Figure 59). The percentage of adults with a past year MDE

Figure 59. Received Treatment in the Past Year for Depression among Adults Aged 18 or Older with a Past Year Major Depressive Episode (MDE) or MDE with Severe Impairment: Percentages, 2009-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 59 Table. Received Treatment in the Past Year for Depression among Adults Aged 18 or Older with a Past Year Major Depressive Episode (MDE) or MDE with Severe Impairment: Percentages, 2009-2016

MDE Status	2009	2010	2011	2012	2013	2014	2015	2016
MDE	64.3	68.2	68.1	68.0	68.6+	68.6+	67.2	65.3
MDE with Severe Impairment	71.5	72.9	73.7	73.1	76.4+	73.7	72.7	72.2

who received treatment for depression in 2016 was similar to the percentages in most years between 2009 and 2015.

Among the 10.3 million adults in 2016 who had a past year MDE with severe impairment, 7.5 million received treatment for depression, or 72.2 percent of adults with a past year MDE with severe impairment. The percentage of adults with an MDE with severe impairment in 2016 who received treatment for depression was similar to the percentages in most years from 2009 to 2015.

### Aged 18 to 25

Of the 3.7 million young adults aged 18 to 25 with a past year MDE, about 1.6 million received treatment for depression in the past year, or 44.1 percent of young adults with a past year MDE. The percentage of young adults with MDE in 2016 who received treatment for depression was similar to or lower than the percentages in 2009 to 2014 (Table A.24B in Appendix A).

In 2016, 1.2 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 about half (51.3 percent). The percentage of young adults with an MDE with severe impairment in 2016 who received treatment for depression was similar to the percentages in most years from 2009 to 2015.

### Aged 26 to 49

In 2016, about 4.9 million of the 7.2 million adults aged 26 to 49 with a past year MDE received treatment for depression in the past year, or about two thirds of the adults in this age group who had a past year MDE (67.4 percent) (Table A.24B). The percentage of adults aged 26 to 49 with a past year MDE in 2016 who received treatment for depression was similar to the percentages in 2009 to 2015.

In 2016, 3.4 million adults aged 26 to 49 with a past year MDE with severe impairment received treatment for depression in the past year, or about three fourths of adults in this age group who had a past year MDE with severe impairment (74.3 percent). The percentage of adults in this age group with an MDE with severe impairment in 2016 who received treatment for depression was similar to the percentages in 2009 to 2015.

### Aged 50 or Older

Of the 5.3 million adults aged 50 or older with a past year MDE, about 4.1 million received treatment for depression in the past year. The percentage of adults aged 50 or older with an MDE who received treatment for depression (77.3 percent) was similar to the percentages in 2009 to 2015 (Table A.24B).

In 2016, 2.8 million of the 3.3 million adults aged 50 or older with a past year MDE with severe impairment received treatment for depression in the past year, or 84.1 percent of adults in this age group with a past year MDE with severe impairment. The percentage of adults in this age group with an MDE with severe impairment in 2016 who received treatment for depression was similar to the percentages in 2009 to 2015.

### **Any Mental Health Service Use among All Adolescents**

In addition to asking youths about treatment for depression, NSDUH includes questions for adolescents aged 12 to 17 that ask about any receipt of services for emotional and behavioral problems (i.e., not just depression) that were 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;<sup>44</sup> (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 other than whether adolescents had an MDE. Therefore, NSDUH does not include any measure for adolescents that is equivalent to AMI or SMI for adults. Consequently, this section focuses on mental health care among all adolescents. In 2016, 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 (Figure 60):

- 3.6 million adolescents (14.7 percent) received mental health services in a specialty mental health setting (inpatient or outpatient care),
- 3.2 million adolescents (13.1 percent) received mental health services in an education setting,
- 708,000 adolescents (2.9 percent) received mental health services in a general medical setting,
- 108,000 adolescents (0.4 percent) received mental health services in a child welfare setting, and
- 53,000 adolescents (0.2 percent) received mental health services in a juvenile justice setting.

In addition, 1.5 million youths aged 12 to 17 (6.2 percent) received mental health services in both specialty and nonspecialty settings (i.e., an education, general medical, or child welfare setting). The percentage of youths who received mental health services in both specialty and nonspecialty settings in 2016 was higher than the estimates in 2009 to 2011, but it was similar to the percentages in 2012 to 2015 (Table A.25B in Appendix A).

# Figure 60. Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17: 2016



Note: Mental health service for youths aged 12 to 17 is defined as having received treatment/ counseling for emotional or behavioral problems not caused by substance use.

Note: Nonspecialty settings do not include youths who received mental health services in the past year from a juvenile justice setting.

The percentage of adolescents in 2016 who received mental health services in a specialty mental health setting in the past 12 months (14.7 percent) was higher than the percentages in 2009 to 2015, which ranged from 12.0 to 13.7 percent (Figure 61). The percentages of youths aged 12 to 17 in 2016 who received mental health services in an education setting (13.1 percent), a general medical setting (2.9 percent), a child welfare setting (0.4 percent), and a juvenile justice setting (0.2 percent) were similar to the corresponding percentages in most years from 2009 to 2015.

## Figure 61. Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17: Percentages, 2009-2016



<sup>+</sup> Difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Note: Mental health service for youths aged 12 to 17 is defined as having received treatment/ counseling for emotional or behavioral problems not caused by substance use.

Note: Nonspecialty settings do not include youths who received mental health services in the past year from a juvenile justice setting.

Figure 61 Table. Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17: Percentages, 2009-2016

Source	2009	2010	2011	2012	2013	2014	2015	2016
Specialty Mental Health Setting	12.0+	12.1+	12.6+	12.7+	13.6+	13.7+	13.3+	14.7
Education Setting	12.1+	12.4	11.9+	12.9	13.0	13.2	13.2	13.1
General Medical Setting	2.5	2.5	2.5	2.5	2.8	2.9	2.7	2.9
Child Welfare Setting	0.4	0.4	0.6	0.4	0.4	0.4	0.3	0.4
Juvenile Justice Setting	0.4+	0.3	0.4+	0.3	0.2	0.3	0.2	0.2
Specialty and Nonspecialty Settings	5.0+	5.3+	5.4+	5.7	6.1	5.9	5.7	6.2

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Note: Mental health service for youths aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by substance use.

Note: Nonspecialty settings do not include youths who received mental health services in the past year from a juvenile justice setting.

### Any Mental Health Service Use among All Adults

Adults 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 questions about treatment for depression that were discussed previously, general questions for the receipt of treatment or counseling for mental health issues among adults do not ask specifically 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." This section compares the 2016 estimates of mental health service use with estimates from 2002 to 2015 for the entire adult population. The next section presents estimates of mental health service use for adults with mental illness.

In 2016, an estimated 35.0 million adults aged 18 or older (14.4 percent of adults) received mental health services during the past 12 months (Figure 62). The estimate of 14.4 percent of adults aged 18 or older in 2016 who received mental health services in the past 12 months was greater than the estimates in most years between 2002 and 2011, but it was similar to the estimates in 2012 to 2015.

### Aged 18 to 25

In 2016, 4.4 million young adults aged 18 to 25 used mental health services in the past year. This number represents 12.9 percent of young adults receiving mental health services in 2016 (Table A.26B in Appendix A). The percentage of young adults in 2016 who received mental health services in the past year was higher than the percentages in most years from 2002 to 2015.

### Aged 26 to 49

In 2016, 15.2 million adults aged 26 to 49 used mental health services in the past year. This number represents 15.4 percent of adults aged 26 to 49 (Table A.26B). The 2016 estimate of

the receipt of mental health services among adults in this age group was higher than estimates from 2004 to 2008, but it was similar to the estimates from 2009 to 2015.

### Aged 50 or Older

In 2016, 15.4 million adults aged 50 or older used mental health services in the past year. This number represents 14.0 percent of adults aged 50 or older (Table A.26B). The 2016 estimate of the receipt of mental health services among adults in this age group was higher than the estimates in 2002 to 2006, but it was similar to the estimates in most years from 2007 to 2015.

### Figure 62. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older: Percentages, 2002-2016



<sup>+</sup> Difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

Figure 62 Table. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older: Percentages, 2002-2016

Service	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
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
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
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
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

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

### Any Mental Health Service Use among Adults with Mental Illness

NSDUH data may also be used to assess mental health service use among adults with AMI or SMI. In 2016, among the 44.7 million adults with AMI, 19.2 million (43.1 percent) received mental health services in the past year (Figure 63). About 6.7 million of the 10.4 million adults with past year SMI (64.8 percent) received mental health services in the past year (Figure 64).

The percentage of adults with AMI in 2016 who received mental health care in the past year (43.1 percent) was similar to the percentages in most years from 2008 to 2015 (Figure 63). The percentage of adults with SMI in 2016 who received mental health services in the past year (64.8 percent) also was similar to the estimates in 2008 to 2015 (Figure 64). In any given year, about two thirds of adults with past year SMI received mental health services in

### Figure 63. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: Percentages, 2008-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

Figure 63 Table. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Any Mental Illness in the Past Year: Percentages, 2008-2016

Service Type	2008	2009	2010	2011	2012	2013	2014	2015	2016
Any Mental Health Services	40.9	40.2+	42.4	40.8+	41.0	44.7	44.7	43.1	43.1
Inpatient	3.7	3.2	2.7	3.3	3.0	3.3	3.8	3.4	3.3
Outpatient	24.1	22.5+	23.4	24.0	22.4+	24.4	24.3	25.4	24.5
Prescription Medication	35.5	34.8+	36.9	35.6	35.3	38.9	38.7	36.7	37.1

+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

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 2016, 2.7 million young adults aged 18 to 25 with AMI used mental health services in the past year, including 1.0 million young adults with SMI. These numbers of young adults who used mental health services represent 35.1 percent of young adults with AMI in the past year and 51.5 percent of those with SMI (Table A.27B in Appendix A). The percentage of young adults with AMI in 2016 who received mental health care was higher than estimates in 2008 and 2009, but it was similar to the percentage of young adults with SMI in 2016 who received mental health care was similar to the percentage of young adults with SMI in 2016 who received mental health services in the past year was similar to the estimates from 2008 to 2015.

### Figure 64. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: Percentages, 2008-2016



Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

Figure 64 Table. Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older with Serious Mental Illness in the Past Year: Percentages, 2008-2016

Service Type	2008	2009	2010	2011	2012	2013	2014	2015	2016
Any Mental Health Services	65.7	66.5	67.5	64.9	62.9	68.5	68.5	65.3	64.8
Inpatient	8.6	8.6	6.7	8.8	6.2	8.3	8.8	7.0	7.6
Outpatient	46.2	44.6	42.5	44.1	39.0	46.9	44.2	43.6	42.6
Prescription Medication	59.7	61.1	61.0	58.2	57.8	62.1	61.4	57.3	58.0

Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

### Aged 26 to 49

In 2016, 9.0 million adults aged 26 to 49 with AMI used mental health services in the past year, including 3.5 million adults in this age group with SMI. These numbers of adults in this age group who received mental health services in the past year correspond to 43.1 percent of those with AMI and 66.1 percent of those with SMI (Table A.27B). The percentage of adults aged 26 to 49 with AMI in 2016 who received mental health care in the past year was similar to the percentages from 2008 to 2015. The percentage of adults aged 26 to 49 with SMI who received mental health services in the past year also remained steady from 2008 to 2016.

### Aged 50 or Older

In 2016, 7.5 million adults aged 50 or older with AMI used mental health services in the past year, including 2.2 million adults in this age group with SMI. These numbers of adults aged 50 or older who used mental health services represent nearly half of those with AMI (46.8 percent) and nearly three fourths of those with SMI (71.5 percent) (Table A.27B). The percentage of adults aged 50 or older with AMI in 2016 who received mental health care in the past year was similar to the percentages from 2008 to 2015. The percentage of adults aged 50 or older with SMI in 2016 who received mental health services in the past year also remained steady compared with estimates from 2008 to 2015.

# **Co-Occurring MDE and Substance Use among Adolescents**

This section describes co-occurring MDE and substance use and co-occurring MDE and SUDs (i.e., illicit drug use disorder or alcohol use disorder) among adolescents aged 12 to 17. Estimates of co-occurring MDE and SUDs are presented among all adolescents. Additionally, this section presents estimates of having a past year MDE among adolescents with SUDs. This section also presents estimates of substance use and SUDs among adolescents with an MDE. Because of the 2015 changes to the SUD estimates, the 2016 estimates of co-occurring MDE and SUD are not comparable with estimates from years prior to 2015.

An estimated 333,000 adolescents aged 12 to 17 in 2016 had an SUD and an MDE in the past year. This number represents 1.4 percent of adolescents in the United States (Figure 65). An estimated 278,000 adolescents in 2016

(1.1 percent of adolescents) had an SUD and an MDE with severe impairment in the past year.

# MDE among Adolescents with a Substance Use Disorder

The 333,000 adolescents in 2016 who had a co-occurring MDE and an SUD in the past year represent about one third (33.0 percent) of the 1.1 million adolescents who had a past year SUD (Figure 66 and Table A.29B). Among adolescents without a past year SUD, 11.9 percent (2.8 million adolescents) had an MDE in the past year.

# Figure 65. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) Status among Youths Aged 12 to 17: Percentages, 2016





Figure 66. Past Year Substance Use Disorder (SUD) and Major Depressive Episode (MDE) among Youths Aged 12 to 17: Numbers in Millions, 2016

Note: Youth respondents with unknown MDE data were excluded.

# Substance Use and Substance Use Disorders among Adolescents with MDE

Estimates of illicit drug use among adolescents that were previously described in this report focused on use in the past month (i.e., current use). Because MDE estimates are for the past year, however, this section focuses mainly on co-occurring MDE and substance use in the past year among adolescents. In 2016, the percentage of adolescents aged 12 to 17 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 (31.7 vs. 13.4 percent) (Figure 67). Youths with a past year MDE in 2016 were more likely than those without an MDE to be users of marijuana, misusers of prescription psychotherapeutic drugs (i.e., pain relievers, tranquilizers, stimulants, and sedatives), users of inhalants, and users of hallucinogens in the past year.

Unlike the illicit drug use estimates described previously, NSDUH estimates of daily cigarette smoking and heavy alcohol use are available only for the past month. Among adolescents aged 12 to 17 in 2016, 0.9 percent of those with a past year MDE were daily cigarette smokers in the past month compared with 0.4 percent of those without a past year MDE (Table A.30B in Appendix A). In addition, 1.7 percent of adolescents aged 12 to 17 with a past year MDE were heavy alcohol drinkers in the past month compared with 0.6 percent of those without a past year MDE.

Among the 3.1 million adolescents aged 12 to 17 in 2016 who had a past year MDE, a total of 333,000 adolescents (10.8 percent) had a past year SUD. In contrast, among

# Figure 67. Past Year Illicit Drug Use among Youths Aged 12 to 17, by Past Year Major Depressive Episode (MDE) Status: Percentages, 2016



adolescents without a past year MDE, 676,000 (3.2 percent) had an SUD in the past year (Figure 66 and Table A.29B in Appendix A).

### Receipt of Services among Adolescents with Co-Occurring MDE and a Substance Use Disorder

This section presents data from the 2016 NSDUH on the receipt of mental health care or specialty substance use treatment among adolescents aged 12 to 17 who had a co-occurring MDE and an SUD. Among the 333,000 adolescents in 2016 who had a co-occurring MDE and an SUD in the past year, 239,000 received either substance use treatment at a specialty facility or mental health services in the past year. This number of adolescents who received mental health care or specialty substance use treatment corresponds to 71.9 percent of adolescents who had a co-occurring MDE and an SUD (Table A.31B in Appendix A). Stated another way, however, nearly a quarter of adolescents with both an MDE and an SUD in the past year did not receive either type of service. Among adolescents with a co-occurring MDE and an SUD in 2016, 4.6 percent received both mental health care and specialty substance use treatment, and 65.8 percent received only mental health care. An estimated 1.5 percent of adolescents with a co-occurring MDE and an SUD received only specialty substance use treatment.

### **Co-Occurring Mental Health Issues and Substance Use Disorders among Adults**

The coexistence of both a mental disorder among adults and an SUD is referred to as co-occurring disorders. Because NSDUH data allow estimates to be made for the presence of a mental disorder (as defined by AMI and SMI) and SUDs, percentages of adults with co-occurring disorders can be estimated. This section presents findings on mental disorders (i.e., AMI and SMI) that co-occurred with SUDs (i.e., alcohol use disorder or illicit drug use disorder) among adults aged 18 or older in the United States. Because of the 2015 changes to SUD estimates, the 2016 estimates of co-occurring mental disorders and SUDs among adults are not comparable with estimates prior to 2015.

### **Co-Occurring Mental Health Issues and Substance Use Disorders among All Adults**

As noted previously, 44.7 million adults aged 18 or older in 2016 had AMI in the past year, including 10.4 million who

had SMI. In addition, 19.0 million adults had a past year SUD. Among these adults in 2016 who had either AMI or SUDs in the past year, 8.2 million had both AMI and SUDs (Figure 68). This number of adults with AMI and SUDs corresponds to 3.4 percent of adults (Table A.32B in Appendix A). An estimated 2.6 million adults aged 18 or older had co-occurring SMI and SUDs in the past year (Figure 69), which corresponds to 1.1 percent of adults.

### Aged 18 to 25

In 2016, 7.6 million young adults aged 18 to 25 had AMI in the past year, and 5.2 million had a past year SUD. Among young adults who had either AMI or SUDs, 2.1 million had both AMI and SUDs in the past year. This number of adults with both AMI and SUDs corresponds to 6.1 percent of young adults (Table A.32B). An estimated 711,000 young adults had co-occurring SMI and SUDs in the past year, which corresponds to 2.1 percent of young adults.

### Aged 26 to 49

In 2016, 20.9 million adults aged 26 to 49 had AMI in the past year, and 9.3 million had a past year SUD. Among aged 26 to 49 who had either AMI or SUDs, 4.5 million had both AMI and SUDs in the past year. This number of adults aged 26 to 49 with both AMI and SUDs corresponds to 4.5 percent of adults in this age group (Table A.32B). An estimated 1.4 million adults aged 26 to 49 in 2016 had co-occurring SMI and SUDs in the past year, which corresponds to 1.4 percent of adults in this age group.

### Aged 50 or Older

In 2016, 16.1 million adults aged 50 or older had AMI in the past year, and 4.5 million had a past year SUD. Among





adults aged 50 or older who had either AMI or SUDs, 1.7 million had both AMI and SUDs in the past year. This number of adults aged 50 or older with both AMI and SUDs corresponds to 1.5 percent of adults in this age group (Table A.32B). An estimated 496,000 adults aged 50 or older in 2016 had co-occurring SMI and SUDs in the past year, which corresponds to 0.4 percent of adults in this age group.

# Mental Illness among Adults with a Substance Use Disorder

In 2016, among the 19.0 million adults with a past year SUD, 8.2 million (43.3 percent) had AMI in the past year (Figure 68 and Table A.33B in Appendix A). In contrast, among adults without a past year SUD, 16.1 percent (36.4 million adults) had AMI in the past year.

Among the 19.0 million adults who had a past year SUD, 2.6 million (13.8 percent) also had SMI in the past year (Figure 69). In contrast, among adults without a past year SUD, 3.4 percent (7.7 million adults) had SMI in the past year.

### Aged 18 to 25

In 2016, among the 5.2 million young adults aged 18 to 25 with a past year SUD, 2.1 million (40.6 percent) had AMI in the past year (Table A.33B). In contrast, among young adults without a past year SUD, 18.8 percent (5.5 million adults) had AMI in the past year.

In 2016, among the 5.2 million adults aged 18 to 25 with a past year SUD, 711,000 (13.6 percent) had SMI in the past year. In contrast, among young adults without a past year SUD, 4.5 percent (1.3 million adults) had SMI in the past year.

Figure 69. Past Year Substance Use Disorder (SUD) and Serious Mental Illness (SMI) among Adults Aged 18 or Older: Numbers in Millions, 2016



### Aged 26 to 49

Among the 9.3 million adults aged 26 to 49 with a past year SUD, 4.5 million (47.9 percent) had AMI in the past year (Table A.33B). Among adults aged 26 to 49 without a past year SUD, 18.3 percent (16.4 million adults) had AMI in the past year.

Among the 9.3 million adults aged 26 to 49 with a past year SUD, 1.4 million (15.3 percent) had SMI in the past year. Among adults aged 26 to 49 without a past year SUD, 4.3 percent (3.9 million adults) had SMI in the past year.

### Aged 50 or Older

Among the 4.5 million adults aged 50 or older with a past year SUD, 1.7 million (37.0 percent) had AMI in the past year (Table A.33B). Among adults aged 50 or older without a past year SUD, 13.6 percent (14.5 million adults) had AMI in the past year.

Among the 4.5 million adults aged 50 or older with a past year SUD, 496,000 (11.0 percent) had SMI in the past year. Among adults aged 50 or older without a past year SUD, 2.4 percent (2.6 million adults) had SMI in the past year.

# Substance Use Disorders among Adults with Mental Illness

The 8.2 million adults with AMI who met the criteria for an SUD in the past year represent 18.5 percent of the 44.7 million adults with AMI (Figure 70). In contrast, 5.4 percent of adults who did not have past year AMI (10.8 million adults) met the criteria for an SUD (Table A.34B in Appendix A and Figure 68). The 2.6 million

### Figure 70. Past Year Substance Use Disorder among Adults Aged 18 or Older with Any Mental Illness in the Past Year, by Age Group: 2016



adults with SMI who met the criteria for an SUD in the past year represent 25.4 percent of the 10.4 million adults with SMI (Figure 71). In contrast, 7.0 percent of adults who did not have past year SMI (16.4 million adults) met the criteria for SUD (Figure 69).

### Aged 18 to 25

In 2016, about 2.1 million young adults aged 18 to 25 with AMI had a past year SUD. This number of young adults with a past year SUD represents 27.8 percent of young adults with AMI (Figure 70). Among young adults with SMI, about 711,000 (34.9 percent) had an SUD (Figure 71). Among young adults with no mental illness, about 3.1 million (11.6 percent) had an SUD.

### Aged 26 to 49

Among adults aged 26 to 49 in 2016 with AMI, about 4.5 million had an SUD. This number of adults with a past year SUD represents 21.3 percent of adults aged 26 to 49 with AMI (Figure 70). Among adults aged 26 to 49 with SMI, about 1.4 million (26.9 percent) had an SUD (Figure 71). Among adults aged 26 to 49 with no mental illness, about 4.9 million (6.2 percent) had an SUD.

### Aged 50 or Older

In 2016, about 1.7 million adults aged 50 or older with AMI had an SUD. This number of adults with a past year SUD presents 10.3 percent of adults aged 50 or older with AMI (Figure 70). Among adults aged 50 or older with SMI, 496,000 (16.3 percent) had an SUD (Figure 71). Among adults aged 50 or older with no mental illness, about 2.8 million (3.0 percent) had an SUD.



### Figure 71. Past Year Substance Use Disorder among Adults Aged 18 or Older with Serious Mental Illness in the Past Year, by Age Group: 2016

### Receipt of Services among Adults with Co-Occurring Mental Illness and a Substance Use Disorder

This section presents data on the receipt of mental health services or specialty substance use treatment among adults with an SUD who have co-occurring AMI and co-occurring SMI. Because of the 2015 questionnaire changes for substance use and SUDs that were described previously, the 2016 NSDUH estimates of the receipt of services among adults with co-occurring mental disorders and SUDs are not comparable with estimates prior to 2015.

Among the 8.2 million adults with co-occurring AMI and an SUD in the past year, 48.1 percent received either substance use treatment at a specialty facility<sup>45</sup> or mental health care in the past year (Figure 72). In other words, however, about half of the adults with co-occurring AMI and an SUD in the past year did not receive either type of service.<sup>46</sup> An estimated 6.9 percent of adults with these co-occurring disorders received both mental health care and specialty substance use treatment, 38.2 percent received only mental health care, and 2.9 percent received only specialty substance use treatment.

Among the 2.6 million adults who had co-occurring SMI and an SUD in the past year, 65.6 percent received either substance use treatment at a specialty facility or mental health care in the past year (Figure 73). Stated another way, however, about 1 in 3 adults with co-occurring SMI and an SUD did

### Figure 72. 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 Disorders: Percentages, 2016



8.2 Million Adults with Co-Occurring Mental Illness and Substance Use Disorders

Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Specialty substance use treatment refers to treatment at a hospital (inpatient only), rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use.

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

not receive either type of care in the past year. Among adults with co-occurring SMI and an SUD, 12.0 percent received both mental health care and specialty substance use treatment, 51.2 percent received only mental health care, and 2.3 percent received only specialty substance use treatment.

### Aged 18 to 25

Among young adults aged 18 to 25 in 2016 who had co-occurring AMI and an SUD in the past year, 42.0 percent received substance use treatment at a specialty facility or mental health care in the past year (Table A.35B in Appendix A). Among young adults who had co-occurring AMI and an SUD, 35.1 percent received only mental health care, 3.8 percent received both mental health care and specialty substance use treatment, and 3.1 percent received only specialty substance use treatment in the past year. Among young adults with co-occurring SMI and an SUD in 2016, 55.7 percent received either mental health care or specialty substance treatment, 3.8 percent received both mental health care and specialty substance use treatment, 49.6 percent received only mental health care, and 2.3 percent received only specialty substance use treatment in the past year.

### Aged 26 to 49

Among adults aged 26 to 49 in 2016 who had co-occurring AMI and an SUD in the past year, 47.9 percent received mental health care or substance use treatment at a specialty

Figure 73. 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 Disorders: Percentages, 2016



2.6 Million Adults with Co-Occurring Serious Mental Illness and Substance Use Disorders

Note: Mental health service is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Specialty substance use treatment refers to treatment at a hospital (inpatient only), rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use.

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

facility in the past year (Table A.35B). Among adults 26 to 49 who had co-occurring AMI and an SUD, 37.0 percent received only mental health care, 8.0 percent received both mental health care and specialty substance use treatment, and 2.8 percent received only specialty substance use treatment in the past year. Among adults aged 26 to 49 with co-occurring SMI and an SUD in 2016, 69.0 percent received either mental health care or specialty substance treatment, 12.7 percent received both mental health care and specialty substance use treatment, 54.1 percent received only mental health care, and 2.2 percent received only specialty substance use treatment in the past year.

### Aged 50 or Older

Among adults aged 50 or older in 2016 who had co-occurring AMI and an SUD in the past year, 56.3 percent received mental health care or substance use treatment at a specialty facility in the past year (Table A.35B). Among adults aged 50 or older who had co-occurring AMI and an SUD, 45.1 percent received only mental health care, 8.1 percent received both mental health care and specialty substance use treatment, and 3.0 percent received only specialty substance use treatment in the past year. 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.<sup>12</sup>

### 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. Although deaths from suicide average to about 100 people each day,<sup>47</sup> individuals who die from suicide represent a fraction of those who consider or attempt suicide.<sup>48</sup> 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.<sup>49</sup> Individuals are likely to have thought about suicide before attempting suicide. NSDUH has collected information on past year suicidal thoughts and behavior among adults aged 18 or older in the United States since 2008.

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 2016, 9.8 million adults aged 18 or older (4.0 percent) reported they had thought seriously about trying to kill themselves (Figures 74 and 75). Of the 9.8 million adults with serious thoughts of suicide, 2.8 million reported that they had made suicide plans, and 1.3 million made a nonfatal suicide attempt. Among the 1.3 million adults

### Figure 74. Suicidal Thoughts, Plans, and Attempts in the Past Year among Adults Aged 18 or Older: Numbers in Millions, 2016



9.8 Million Adults Had Serious Thoughts of Committing Suicide





+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 75 Table. Suicidal Thoughts in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	3.7	3.7	3.8	3.7+	3.9	3.9	3.9	4.0	4.0
18 to 25	6.8+	6.1+	6.7+	6.8+	7.2+	7.4+	7.5+	8.3	8.8
26 to 49	4.0	4.3	4.1	3.7+	4.2	4.0	4.0	4.1	4.2
50 or Older	2.3	2.3	2.6	2.6	2.4	2.7	2.7	2.6	2.4

aged 18 or older who attempted suicide in the past year, 1.0 million reported making suicide plans, and 0.3 million did not make suicide plans.<sup>50</sup> Stated another way, about one fourth of adults who had serious thoughts of suicide made suicide plans, and about 1 in 7 adults who had serious thoughts of suicide made a suicide attempt.

### **Serious Thoughts of Suicide**

The estimated 9.8 million adults aged 18 or older in 2016 who had serious thoughts of suicide in the past year (Figure 74) represent 4.0 percent of adults aged 18 or older (Figure 75). The percentage of adults aged 18 or older in 2016 who had serious thoughts of suicide was similar to the percentages in most years between 2008 and 2015.

### Aged 18 to 25

An estimated 3.0 million young adults aged 18 to 25 in 2016 had serious thoughts of suicide in the past year, which represents 8.8 percent of young adults (Figure 75). The percentage of young adults with serious thoughts of suicide was higher in 2016 than the percentages in 2008 to 2014 but was similar to the percentage in 2015.

### Aged 26 to 49

In 2016, 4.2 million adults aged 26 to 49 had serious thoughts of suicide in the past year, or 4.2 percent of adults in this age group (Figure 75). The percentage of adults aged 26 to 49 with serious thoughts of suicide was stable in most years between 2008 and 2016.

### Aged 50 or Older

In 2016, 2.6 million adults aged 50 or older had serious thoughts of suicide in the past year, which represents 2.4 percent of adults in this age group (Figure 75). The percentage of adults aged 50 or older with serious thoughts of suicide remained stable from 2008 to 2016.

### **Suicide Plans**

The estimated 2.8 million adults in 2016 who made suicide plans in the past year (Figure 74) represent 1.1 percent of adults aged 18 or older (Figure 76). The percentage of adults aged 18 or older who made suicide plans remained stable between 2008 and 2016.

### Aged 18 to 25

In 2016, about 981,000 young adults aged 18 to 25 made suicide plans in the past year, which corresponds to 2.9 percent of young adults (Figure 76). The percentage of young adults in 2016 who made suicide plans was higher than the percentages in most years from 2008 to 2014, but it was similar to the percentage in 2015.

### Aged 26 to 49

In 2016, about 1.3 million adults aged 26 to 49 made suicide plans in the past year, which represents 1.3 percent of adults in this age group (Figure 76). The percentage of adults in this age group who made suicide plans in the past year was similar to or slightly higher than the percentages in 2008 through 2015.

### Aged 50 or Older

In 2016, about 504,000 adults aged 50 or older made suicide plans in the past year, which represents 0.5 percent of adults aged 50 or older (Figure 76). The percentage of adults aged 50 or older in 2016 who made suicide plans in the past year was similar to the percentages in most years from 2008 to 2015.

# Figure 76. Suicide Plans in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 76 Table. Suicide Plans in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

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

### **Suicide Attempts**

The estimated 1.3 million adults aged 18 or older in 2016 who attempted suicide in the past year (with or without first making suicide plans) (Figure 74) represent 0.5 percent of all adults (Figure 77). The percentage of adults aged 18 or older who attempted suicide remained stable between 2008 and 2016.

### Aged 18 to 25

In 2016, about 616,000 young adults aged 18 to 25 in 2016 attempted suicide in the past year. This number represents 1.8 percent of young adults (Figure 77). The percentage of young adults who attempted suicide was higher in 2016 than the percentages in most years from 2008 to 2014, but it was similar to the percentage in 2015.

### Aged 26 to 49

In 2016, about 496,000 adults aged 26 to 49 attempted suicide in the past year, which represents 0.5 percent of adults in this age group (Figure 77). The percentages of adults aged 26 to 49 who attempted suicide in the past year were stable from 2008 to 2016.

### Aged 50 or Older

In 2016, about 208,000 adults aged 50 or older attempted suicide in the past year, which represents 0.2 percent of adults in that age group (Figure 77). The percentages of adults aged 50 or older who attempted suicide in the past year were stable from 2008 to 2016.





 $^{+}\,\textsc{Difference}$  between this estimate and the 2016 estimate is statistically significant at the .05 level.

Figure 77 Table. Suicide Attempts in the Past Year among Adults Aged 18 or Older, by Age Group: Percentages, 2008-2016

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

### **Endnotes**

- World Health Organization. (2013). Mental health action plan 2013–2020. Retrieved from http://www.who.int/mental\_health/ publications/action\_plan/en/
- 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.
- 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
- 4. 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 2016 NSDUH available at https://www.samhsa.gov/data/.
- 5. 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 that is 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 that 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
- 6. Details about the sample design, weighting, and interviewing results for the 2016 NSDUH are provided in Sections A.1, A.3.4, and B.3.1 of CBHSQ (2017). In particular, Tables A.1 and A.2 in CBHSQ (2017) provide sample design information on the targeted numbers of completed interviews by state and by age group, respectively. See 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/
- 7. The screening procedure involves listing all household members in order to determine whether zero, one, or two individuals aged 12 or older should be selected for the interview.
- 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. (2017). 2016 National Survey on Drug Use and Health: Methodological summary and definitions. Retrieved from https://www.samhsa.gov/data/
- 10. Trend data are presented for 2002 to 2016. Methodological changes to the survey in 2002 affect the comparability of the 2002 to 2016 estimates with estimates from prior surveys, including the addition of a \$30 incentive to respondents and the change in the survey's name from the National Household Survey on Drug Abuse (NHSDA) to NSDUH. 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 that are 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 B.2.2 in CBHSQ (2017). See 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/
- 13. Center for Behavioral Health Statistics and Quality. (2016). 2015 National Survey on Drug Use and Health: Summary of the effects of the 2015 NSDUH questionnaire redesign: Implications for data users. Retrieved from https://www.samhsa.gov/data/
- 14. Center for Behavioral Health Statistics and Quality. (2015, August). National Survey on Drug Use and Health: 2014 and 2015 redesign changes. Retrieved from https://www.samhsa.gov/data/
- 15. Details about the questionnaire changes for 2015 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/
- 16. 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.
- 17. The term "most years" is used when the 2016 estimate is either similar to or significantly different from the estimates in the majority of prior years. However, estimates may not follow the overall pattern in up to 3 nonsequential years for estimates that are available in 2002 to 2016 and in up to 1 or 2 nonsequential years for mental health estimates that are available in 2008 (or 2009) to 2016.
- 18. Anomalous differences between 2 years of data usually "correct" themselves with 1 or 2 additional years of data.
- 19. Some tables in Appendix A present 2015 and 2016 estimates and statistical comparisons for measures that started new baselines in 2015. However, caution is advised in drawing conclusions based on only these 2 years of data because both sets of estimates are based on samples of respondents.
- U.S. Department of Health and Human Services. (2014, January). The health consequences of smoking—50 years of progress: A report of the Surgeon General, 2014. Retrieved from https://www.surgeongeneral.gov/library/ reports/50-years-of-progress/
- 21. 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/

- 22. Bunnell, R. E., Agaku, I. T., Arrazola, R. A., Apelberg, B. J., Caraballo, R. S., Corey, C. G., Coleman, B. N., Dube, S. R., & King, B. A. (2015). Intentions to smoke cigarettes among never-smoking US middle and high school electronic cigarette users: National Youth Tobacco Survey, 2011-2013. *Nicotine & Tobacco Research*, *17*, 228-235. https://doi.org/10.1093/ntr/ntu166
- 23. 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.
- 24. 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. (2016). *Drinking levels defined*. Retrieved from https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

- 25. 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 females. Estimates from 2002 to 2016 for binge and heavy alcohol use among males are available in the 2016 NSDUH detailed tables at https://www.samhsa.gov/data/.
- 26. Alcohol Policy Information System, National Institute on Alcohol Abuse and Alcoholism. (2015, December 23). *State profiles of underage drinking laws*. Retrieved from https://alcoholpolicy.niaaa.nih.gov/state\_profiles\_ of\_underage\_drinking\_laws.html
- 27. 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.
- 28. 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 Section D of CBHSQ (2017). See 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/
- Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, R. M. (2016). Increases in drug and opioid overdose deaths—United States, 2000-2014. *Morbidity and Mortality Weekly Report*, 64(50-51), 1378-1382. https:// doi.org/10.1111/ajt.13776
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (DSM-IV) (4th ed.). Washington, DC: Author.

- 31. 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 B.4.3 and the definitions for abuse and dependence in Section D of CBHSQ (2017). See 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/
- 32. 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.
- 33. 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 B.4.3 and the definitions for abuse and dependence in Section D of CBHSQ (2017). 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. (2017). 2016 National Survey on Drug Use and Health: Methodological summary and definitions. Retrieved from https://www.samhsa.gov/data/

- 34. Because there were 20.1 million people aged 12 or older in 2016 with an SUD in the past year, about 96 percent of the people in 2016 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.
- 35. 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 that they had some of their other lifetime MDE symptoms in the past 12 months. These adolescents were defined as having past year MDE.

- 36. 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 that 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. Data on MDE with severe impairment for adults are available since 2009.
- 37. Questions measuring adolescents' impairment in carrying out life activities because of MDE were added to the survey in 2006.
- 38. Percentages shown in Figure 49 and in Figure 51 (which is discussed for adults in the next section of the report) may differ from percentages that are calculated from the estimated numbers of people because the estimated numbers are rounded. Also, respondents with unknown information for past year MDE or MDE with severe impairment were excluded.
- 39. In order to generate estimates of AMI and SMI in the United States, SAMHSA designed and implemented the Mental Health Surveillance Study (MHSS). Over the 5-year period from 2008 to 2012, a subsample of adults was selected from the main 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 that were collected from 2008 to 2012 was applied to data from the 2008 to 2015 NSDUHs to produce estimates of AMI for the entire NSDUH adult sample in these years. See the following reference: 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.
- 40. Details about the definitions and estimation methods for mental illness estimates are provided in Section B.4.7 and Section D of CBHSQ (2017). Some estimates of mental health service use among youths in this report may differ from estimates in reports prior to the 2014 NSDUH due to changes in the definitions for the settings where youths received services. See 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/
- 41. In this section, estimated numbers or percentages of adults with SMI and the corresponding estimates for adults who had AMI without SMI may not sum to the overall estimates for adults with AMI because of rounding.
- 42. Percentages shown in Figure 54 may differ from percentages that are calculated from the estimated numbers of people because the estimated numbers are rounded.

- 43. 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.
- 44. 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.
- 45. A specialty facility refers to a hospital (only as an inpatient), a drug or alcohol rehabilitation facility (as an inpatient or outpatient), or a mental health center.
- 46. 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.
- 47. National Center for Injury Prevention and Control. (2016). *Suicide: Facts at a glance 2015*. Retrieved from https://www.cdc.gov/violenceprevention/pdf/Suicide-DataSheet-a.pdf
- 48. 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(13), 1-22.
- 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
- 50. The estimate for the number of adults aged 18 or older in 2016 who attempted suicide (regardless of whether they made a suicide plan) is presented in the 2016 detailed tables at https://www.samhsa.gov/data/. However, the estimates for the numbers of adults who attempted suicide and made a plan or who attempted suicide without making a plan were made specifically for this report and are not included in the 2016 detailed tables.

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Appendix A: Supplemental Tables of Estimates for Key Substance Use and Mental Health Indicators in the United States

Substance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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)	25.5* (0.32)	25.2* (0.28)	23.9 (0.26)	23.5 (0.27)
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)	21.3* (0.30)	20.8* (0.26)	19.4 (0.25)	19.1 (0.25)
Daily Cigarette Smoking <sup>1</sup>	63.4* (0.66)	62.9* (0.67)	62.3* (0.63)	63.0* (0.62)	62.3* (0.59)	61.3* (0.65)	61.5* (0.70)	61.0* (0.68)	59.5 (0.71)	60.7* (0.71)	60.7* (0.71)	59.6 (0.73)	58.8 (0.59)	58.1 (0.64)	57.9 (0.66)
Smoked 1+ Packs of Cigarettes per Day <sup>2</sup>	53.1* (0.91)	53.5* (0.82)	54.0* (0.87)	51.4* (0.86)	50.6* (0.85)	50.9* (0.88)	49.2* (0.94)	45.9* (0.98)	45.1* (0.94)	43.8* (0.90)	42.0 (0.94)	41.3 (1.00)	40.3 (0.83)	41.1 (0.87)	41.1 (0.89)
Smokeless Tobacco	nc	3.4 (0.11)	3.3 (0.10)												
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)	4.7 (0.14)	4.5 (0.11)	4.7 (0.12)	4.6 (0.11)
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)	0.9 (0.06)	0.8 (0.05)	0.8 (0.05)	0.8 (0.05)
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)	52.2* (0.41)	52.7* (0.33)	51.7* (0.32)	50.7 (0.31)
Binge Alcohol Use	nc	24.9 (0.27)	24.2 (0.26)												
Heavy Alcohol Use	nc	6.5* (0.14)	6.0 (0.14)												

Table A.1B Tobacco Product and Alcohol Use in the Past Month among Individuals Aged 12 or Older

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Percentages for daily cigarette smoking are among past month cigarette smokers.

<sup>2</sup> Percentages for smoking one or more packs of cigarettes per day are among daily cigarette smokers in the past month. Respondents with missing data for number of cigarettes smoked per day were excluded from the analysis.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002-2016.

Table A.2B	Tobacco Product and Alcohol Use in the Past Month among Youths Aged	12 to 17
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Substance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TOBACCO PRODUCTS	15.2*(0.33)	14.4*(0.32)	14.4*(0.32)	13.1*(0.31)	12.9*(0.29)	12.4*(0.30)	11.5*(0.28)	11.8*(0.29)	10.7*(0.28)	10.0*(0.27)	8.6* (0.25)	7.8*(0.24)	7.0*(0.25)	6.0*(0.23)	5.3 (0.21)
Cigarettes	13.0*(0.30)	12.2*(0.29)	11.9*(0.30)	10.8*(0.28)	10.4*(0.26)	9.9*(0.27)	9.2*(0.25)	9.0* (0.26)	8.4* (0.26)	7.8*(0.24)	6.6* (0.22)	5.6* (0.20)	4.9*(0.21)	4.2*(0.20)	3.4 (0.18)
Daily Cigarette Smoking <sup>1</sup>	31.8*(1.03)	29.7*(1.06)	27.6*(1.13)	25.8*(1.12)	26.5*(1.19)	26.4*(1.16)	22.3*(1.11)	23.0*(1.17)	22.5*(1.29)	22.7*(1.28)	22.0*(1.33)	19.4*(1.35)	24.1*(1.89)	20.0*(1.84)	15.0 (1.64)
Smoked 1+ Packs of Cigarettes per Day <sup>2</sup>	21.8 (1.61)	22.0 (1.68)	19.4 (1.80)	20.1 (1.87)	17.9 (1.94)	18.7 (2.14)	18.4 (2.08)	17.9 (2.12)	16.7 (2.24)	14.8 (1.97)	10.8 (1.88)	11.9 (2.47)	11.9 (2.52)	7.8 (2.51)	** (**)
Smokeless Tobacco	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	1.5 (0.10)	1.4 (0.11)
Cigars	4.5* (0.19)	4.5*(0.17)	4.8*(0.18)	4.2*(0.18)	4.1*(0.16)	4.3*(0.18)	3.8* (0.16)	4.0* (0.16)	3.2*(0.15)	3.4*(0.16)	2.6* (0.13)	2.3*(0.13)	2.1 (0.13)	2.1 (0.14)	1.8 (0.12)
Pipe Tobacco	0.6 (0.06)	0.6 (0.07)	$0.7^{*}(0.08)$	0.6 (0.07)	0.7 (0.07)	0.7*(0.08)	0.7*(0.07)	0.9* (0.09)	0.6 (0.07)	0.7*(0.07)	0.7 (0.07)	0.6 (0.07)	0.7*(0.08)	0.3 (0.06)	0.5 (0.06)
ALCOHOL	17.6* (0.32)	17.7* (0.33)	17.6* (0.32)	16.5* (0.32)	16.7* (0.32)	16.0* (0.34)	14.7* (0.32)	14.8* (0.32)	13.6* (0.33)	13.3* (0.31)	12.9* (0.31)	11.6* (0.29)	11.5* (0.33)	9.6 (0.29)	9.2 (0.30)
Binge Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	5.8* (0.23)	4.9 (0.22)
Heavy Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.9 (0.10)	0.8 (0.09)

\*\* Low precision; no estimate reported.

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Percentages for daily cigarette smoking are among past month cigarette smokers.

<sup>2</sup> Percentages for smoking one or more packs of cigarettes per day are among daily cigarette smokers in the past month. Respondents with missing data for number of cigarettes smoked per day were excluded from the analysis.

### Table A.3B Tobacco Product and Alcohol Use in the Past Month among Young Adults Aged 18 to 25

Substance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TOBACCO PRODUCTS	45.3* (0.48)	44.8* (0.48)	44.6* (0.50)	44.3* (0.48)	44.0* (0.49)	41.9* (0.50)	41.4* (0.47)	41.6* (0.50)	40.9* (0.49)	39.5* (0.49)	38.1* (0.47)	37.0* (0.49)	35.0* (0.54)	33.0* (0.48)	30.0 (0.48)
Cigarettes	40.8* (0.48)	40.2* (0.47)	39.5* (0.49)	39.0* (0.47)	38.5* (0.48)	36.2* (0.49)	35.7* (0.45)	35.8* (0.48)	34.3* (0.47)	33.5* (0.47)	31.8* (0.47)	30.6* (0.46)	28.4* (0.53)	26.7* (0.46)	23.5 (0.47)
Daily Cigarette Smoking <sup>1</sup>	51.8* (0.72)	52.7* (0.69)	51.6* (0.72)	50.1* (0.73)	48.8* (0.77)	49.2* (0.76)	47.8* (0.81)	45.3 <sup>*</sup> (0.80)	45.8* (0.80)	45.3* (0.86)	45.1* (0.88)	43.1* (0.83)	43.0* (0.91)	42.0 (1.02)	39.9 (1.03)
Smoked 1+ Packs of Cigarettes per Day <sup>2</sup>	39.1* (0.93)	37.1* (0.88)	34.9* (0.86)	36.9* (0.93)	34.4* (0.93)	32.9* (0.92)	31.6* (0.91)	29.5 (0.92)	27.3 (0.94)	26.1 (0.97)	25.1 (0.90)	22.3* (0.90)	22.5* (1.16)	22.5* (1.11)	26.2 (1.42)
Smokeless Tobacco	nc	nc	nc	nc	nc	nc	5.4 (0.22)	5.2 (0.22)							
Cigars	11.0* (0.27)	11.4* (0.26)	12.7* (0.30)	12.0* (0.28)	12.1* (0.29)	11.9* (0.28)	11.4* (0.29)	11.5* (0.29)	11.3* (0.30)	10.9* (0.29)	10.7* (0.27)	10.0* (0.29)	9.7* (0.30)	8.9 (0.27)	8.8 (0.27)
Pipe Tobacco	1.1* (0.08)	0.9* (0.08)	1.2* (0.09)	1.5 (0.11)	1.3* (0.10)	1.2* (0.10)	1.4 (0.10)	1.8 (0.12)	1.8 (0.12)	1.9 (0.14)	1.8 (0.11)	2.2* (0.14)	1.9 (0.13)	1.8 (0.13)	1.7 (0.12)
ALCOHOL	60.5* (0.53)	61.4* (0.50)	60.5* (0.51)	60.9* (0.51)	62.0* (0.51)	61.3* (0.52)	61.1* (0.49)	61.8* (0.52)	61.4* (0.50)	60.7* (0.54)	60.2* (0.49)	59.6* (0.53)	59.6* (0.56)	58.3 (0.53)	57.1 (0.55)
Binge Alcohol Use	nc	nc	nc	nc	nc	nc	39.0 (0.51)	38.4 (0.54)							
Heavy Alcohol Use	nc	nc	nc	nc	nc	nc	10.9 (0.33)	10.1 (0.32)							

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Percentages for daily cigarette smoking are among past month cigarette smokers.

<sup>2</sup> Percentages for smoking one or more packs of cigarettes per day are among daily cigarette smokers in the past month. Respondents with missing data for number of cigarettes smoked per day were excluded from the analysis.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002-2016.

#### Table A.4B Tobacco Product and Alcohol Use in the Past Month among Adults Aged 26 or Older

Substance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TOBACCO PRODUCTS	29.9* (0.44)	29.3* (0.41)	28.5* (0.41)	29.0* (0.43)	29.4* (0.43)	28.6* (0.42)	28.4* (0.44)	27.3* (0.40)	27.2* (0.42)	26.3* (0.41)	27.0* (0.42)	25.7* (0.40)	25.8* (0.33)	24.5 (0.32)	24.6 (0.33)
Cigarettes	25.2* (0.42)	24.7* (0.41)	24.1* (0.39)	24.3* (0.39)	24.7* (0.40)	24.1* (0.40)	23.8* (0.41)	23.0* (0.39)	22.8* (0.38)	21.9* (0.39)	22.4* (0.40)	21.6* (0.38)	21.5* (0.32)	20.0 (0.31)	20.2 (0.31)
Daily Cigarette Smoking <sup>1</sup>	68.8 <sup>*</sup> (0.87)	68.0 <sup>*</sup> (0.86)	67.8* (0.80)	68.9 <sup>*</sup> (0.79)	67.9* (0.74)	66.3 <sup>*</sup> (0.83)	67.0 <sup>*</sup> (0.86)	67.2* (0.84)	64.8* (0.86)	66.5 <sup>*</sup> (0.88)	66.0 <sup>*</sup> (0.85)	64.9* (0.88)	63.3 (0.72)	62.7 (0.76)	62.2 (0.75)
Smoked 1+ Packs of Cigarettes per Day <sup>2</sup>	57.1* (1.12)	58.0* (0.99)	59.2* (1.05)	55.1* (1.02)	54.5* (1.00)	55.1* (1.06)	53.0* (1.10)	49.4* (1.16)	48.8* (1.09)	47.4* (1.05)	45.2 (1.09)	44.7 (1.15)	43.3 (0.93)	44.1 (0.98)	43.1 (1.00)
Smokeless Tobacco	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	3.2 (0.13)	3.1 (0.12)
Cigars	4.6 (0.18)	4.5 (0.18)	4.6* (0.17)	4.7* (0.18)	4.6* (0.18)	4.4 (0.16)	4.4 (0.18)	4.4 (0.18)	4.4 (0.17)	4.2 (0.18)	4.5 (0.19)	4.1 (0.17)	3.9 (0.12)	4.3 (0.14)	4.2 (0.13)
Pipe Tobacco	0.8 (0.09)	0.6 (0.07)	0.7 (0.08)	0.8 (0.08)	0.9 (0.09)	0.8 (0.09)	0.6 (0.07)	0.7 (0.07)	0.7 (0.07)	0.7 (0.07)	0.9 (0.09)	0.7 (0.07)	0.7 (0.06)	0.8 (0.06)	0.7 (0.06)
ALCOHOL	53.9 (0.53)	52.5* (0.49)	53.0* (0.51)	55.1 (0.51)	53.7 (0.49)	54.1 (0.52)	54.7 (0.50)	54.9 (0.48)	54.9 (0.48)	55.1 (0.49)	55.6 (0.48)	55.9* (0.50)	56.5* (0.39)	55.6 (0.38)	54.6 (0.38)
Binge Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	24.8 (0.32)	24.2 (0.32)
Heavy Alcohol Use	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	6.4 (0.17)	6.0 (0.17)

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Percentages for daily cigarette smoking are among past month cigarette smokers.

<sup>2</sup> Percentages for smoking one or more packs of cigarettes per day are among daily cigarette smokers in the past month. Respondents with missing data for number of cigarettes smoked per day were excluded from the analysis.

### Table A.5B Type of Tobacco Product Use among Past Month Tobacco Users Aged 12 or Older, by Age Group

Tobacco Product Use	Total	12 to 17	18 to 25	26 or Older
Only Cigarettes	66.8 (0.55)	40.0 (1.88)	54.0 (0.90)	70.0 (0.65)
Cigarettes and Some Other Type of Tobacco Product	14.1 (0.38)	24.6 (1.62)	24.4 (0.75)	11.8 (0.44)
Only Noncigarette Tobacco Products	19.1 (0.46)	35.4 (1.88)	21.6 (0.79)	18.1 (0.54)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

### Table A.6B Alcohol Use in the Past Month among Individuals Aged 12 to 20

Alcohol Use	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ALCOHOL	28.8* (0.39)	29.0* (0.41)	28.7* (0.39)	28.2* (0.41)	28.4* (0.42)	28.0* (0.46)	26.5* (0.40)	27.2* (0.43)	26.2* (0.41)	25.1* (0.47)	24.3* (0.48)	22.7* (0.40)	22.8* (0.46)	20.3 (0.42)	19.3 (0.45)
Binge Alcohol Use	nc	13.4* (0.36)	12.1 (0.35)												
Heavy Alcohol Use	nc	3.3* (0.20)	2.8 (0.17)												

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Drug	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	10.1* (0.17)	10.6 (0.18)												
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)	7.5* (0.17)	8.4* (0.16)	8.3* (0.15)	8.9 (0.16)
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)	0.6 (0.05)	0.6 (0.04)	0.7 (0.05)	0.7 (0.04)
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)	0.1 (0.02)	0.1 (0.02)	0.1 (0.02)	0.2 (0.02)
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)	0.1* (0.02)	0.2 (0.02)	0.1 (0.02)	0.2 (0.02)
Hallucinogens	nc	0.5 (0.03)	0.5 (0.03)												
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)	0.1* (0.01)	0.1 (0.02)	0.1 (0.01)	0.1 (0.02)
РСР	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)	0.0 (0.01)	** (**)	0.0 (0.00)	0.0 (0.00)
Ecstasy	nc	0.2 (0.02)	0.2 (0.02)												
Inhalants	nc	0.2 (0.02)	0.2 (0.02)												
Methamphetamine	nc	0.3* (0.03)	0.2 (0.03)												
Misuse of Psychotherapeutics	nc	2.4 (0.08)	2.3 (0.08)												
Pain Relievers	nc	1.4 (0.06)	1.2 (0.06)												
Tranquilizers	nc	0.7 (0.04)	0.7 (0.04)												
Stimulants	nc	0.6 (0.04)	0.6 (0.04)												
Sedatives	nc	0.2 (0.02)	0.2 (0.03)												
Opioids (Heroin Use or Pain Reliever Misuse)	nc	1.5 (0.06)	1.4 (0.06)												

### Table A.7B Types of Illicit Drug Use in the Past Month among Individuals Aged 12 or Older

LSD = lysergic acid diethylamide; PCP = phencyclidine.

\*\* Low precision; no estimate reported.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Rounding may make the estimates appear identical.

Drug	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	nc	nc	8.8* (0.27)	7.9 (0.26)										
Marijuana	8.2* (0.24)	7.9* (0.24)	7.6* (0.23)	6.8 (0.22)	6.7 (0.21)	6.7 (0.22)	6.7 (0.22)	7.4* (0.24)	7.4* (0.25)	7.9* (0.24)	7.2* (0.22)	7.1 (0.23)	7.4* (0.27)	7.0 (0.24)	6.5 (0.24)
Cocaine	0.6* (0.07)	0.6* (0.06)	0.5* (0.06)	0.6* (0.06)	0.4* (0.05)	0.4* (0.05)	0.4* (0.05)	0.3* (0.05)	0.2* (0.05)	0.3* (0.05)	0.1 (0.03)	0.2 (0.04)	0.2 (0.04)	0.2 (0.05)	0.1 (0.03)
Crack	0.1* (0.03)	0.1* (0.03)	0.1* (0.02)	0.1* (0.03)	0.0* (0.02)	0.1* (0.02)	0.0 (0.01)	0.0 (0.02)	0.0 (0.01)	0.0 (0.01)	** (**)	0.0 (0.01)	0.0 (0.02)	0.0 (0.01)	0.0 (0.01)
Heroin	0.0 (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.0 (0.01)	0.1 (0.03)	0.1 (0.02)	0.0 (0.01)	0.1 (0.03)	** (**)	0.1 (0.02)	0.1 (0.02)	0.0 (0.01)	0.0 (0.01)
Hallucinogens	nc	nc	nc	0.5 (0.07)	0.5 (0.06)										
LSD	0.2 (0.05)	0.2 (0.04)	0.2 (0.03)	0.1 (0.03)	0.1 (0.03)	0.1 (0.03)	0.2 (0.04)	0.1 (0.03)	0.2 (0.04)	0.1 (0.03)	0.1 (0.02)	0.2 (0.04)	0.3 (0.06)	0.2 (0.05)	0.2 (0.04)
РСР	0.1* (0.02)	0.1* (0.02)	0.0 (0.02)	0.1 (0.02)	0.0 (0.02)	0.0 (0.02)	0.1 (0.02)	0.1 (0.02)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.02)	0.0 (0.01)
Ecstasy	nc	nc	nc	0.1 (0.04)	0.1 (0.03)										
Inhalants	nc	nc	nc	0.7 (0.08)	0.6 (0.07)										
Methamphetamine	nc	nc	nc	0.1 (0.02)	0.0 (0.01)										
Misuse of Psychotherapeutics	nc	nc	nc	2.0* (0.15)	1.6 (0.12)										
Pain Relievers	nc	nc	nc	1.1 (0.11)	1.0 (0.09)										
Tranquilizers	nc	nc	nc	0.7 (0.09)	0.5 (0.07)										
Stimulants	nc	nc	nc	0.5 (0.07)	0.4 (0.06)										
Sedatives	nc	nc	nc	0.1 (0.03)	0.1 (0.03)										
Opioids (Heroin Use or Pain Reliever Misuse)	nc	nc	nc	1.1 (0.11)	1.0 (0.09)										

### Table A.8B Types of Illicit Drug Use in the Past Month among Youths Aged 12 to 17

LSD = lysergic acid diethylamide; PCP = phencyclidine.

\*\* Low precision; no estimate reported.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Rounding may make the estimates appear identical.

Drug	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	nc	22.3 (0.42)	23.2 (0.43)											
Marijuana	17.3* (0.36)	17.0* (0.37)	16.1* (0.37)	16.6* (0.37)	16.3* (0.35)	16.5* (0.37)	16.6* (0.37)	18.2* (0.38)	18.5* (0.38)	19.0* (0.39)	18.7* (0.39)	19.1* (0.39)	19.6 (0.45)	19.8 (0.40)	20.8 (0.42)
Cocaine	2.0* (0.12)	2.2* (0.13)	2.1* (0.13)	2.6* (0.15)	2.2* (0.13)	1.7 (0.12)	1.6 (0.12)	1.4 (0.11)	1.5 (0.11)	1.4 (0.12)	1.1* (0.09)	1.1* (0.10)	1.4 (0.11)	1.7 (0.14	1.6 (0.13)
Crack	0.2* (0.03)	0.2* (0.04)	0.3* (0.04)	0.3* (0.05)	0.2* (0.04)	0.2* (0.03)	0.2* (0.03)	0.1* (0.03)	0.2* (0.05)	0.1 (0.02)	0.1* (0.03)	0.1 (0.03)	0.1 (0.03)	0.1 (0.04	0.0 (0.02)
Heroin	0.1* (0.03)	0.1* (0.02)	0.1* (0.03)	0.2 (0.03)	0.2 (0.04)	0.1 (0.03)	0.2 (0.04)	0.2 (0.04)	0.3 (0.05)	0.3 (0.06)	0.4 (0.06)	0.3 (0.05)	0.2 (0.05)	0.3 (0.05)	0.3 (0.05)
Hallucinogens	nc	nc	1.8 (0.14	1.9 (0.14)											
LSD	0.1* (0.03)	0.2* (0.04)	0.3* (0.04)	0.2* (0.04)	0.2* (0.04)	0.2* (0.04)	0.3* (0.05)	0.3* (0.05)	0.3* (0.05)	0.3* (0.04)	0.3* (0.05)	0.3* (0.05)	0.3* (0.05)	0.6 (0.08)	0.6 (0.07)
РСР	0.0 (0.02)	0.1 (0.03)	0.1 (0.02)	0.0 (0.02)	0.0 (0.02)	0.0 (0.02)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.02)	0.0 (0.01)	0.0 (0.01)	0.0 (0.01)	0.0 (0.00)	) ** (**)
Ecstasy	nc	nc	0.9 (0.10)	0.9 (0.10)											
Inhalants	nc	nc	0.4 (0.06)	0.4 (0.07)											
Methamphetamine	nc	nc	0.4* (0.07)	0.2 (0.04)											
Misuse of Psychotherapeutics	nc	nc	5.1 (0.21)	4.6 (0.21)											
Pain Relievers	nc	nc	2.4* (0.13)	1.8 (0.13)											
Tranquilizers	nc	nc	1.7 (0.13)	1.5 (0.12)											
Stimulants	nc	nc	2.2 (0.15)	2.2 (0.17)											
Sedatives	nc	nc	0.2 (0.05	0.1 (0.03)											
Opioids (Heroin Use or Pain Reliever Misuse)	nc	nc	2.5* (0.14)	) 2.0 (0.14)											

### Table A.9B Types of Illicit Drug Use in the Past Month among Young Adults Aged 18 to 25

LSD = lysergic acid diethylamide; PCP = phencyclidine.

\*\* Low precision; no estimate reported.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

### Table A.10B Types of Illicit Drug Use in the Past Month among Adults Aged 26 or Older

Drug	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	8.2* (0.19)	8.9 (0.21)
Marijuana	4.0* (0.16)	4.0* (0.16)	4.1* (0.17)	4.1* (0.17)	4.2* (0.17)	3.9* (0.16)	4.2* (0.18)	4.6* (0.18)	4.8* (0.19)	4.8* (0.19)	5.3* (0.20)	5.6* (0.20)	6.6* (0.18)	6.5* (0.17)	7.2 (0.19)
Cocaine	0.7 (0.07)	0.8 (0.08)	0.7 (0.06)	0.8 (0.07)	$0.8^{*}$ (0.08)	0.7 (0.08)	0.7 (0.06)	0.6 (0.07)	0.5* (0.05)	0.4* (0.05)	0.6 (0.07)	0.5 (0.06)	0.5 (0.05)	0.6 (0.06)	0.6 (0.05)
Crack	0.3 (0.04)	0.3 (0.05)	0.2 (0.03)	0.3 (0.05)	0.3* (0.05)	0.3 (0.04)	0.2 (0.03)	0.2 (0.04)	0.2 (0.03)	0.1* (0.02)	0.2 (0.05)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)
Heroin	0.1* (0.02)	0.0* (0.01)	0.1* (0.02)	0.0* (0.01)	0.1 (0.04)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.2 (0.03)	0.1 (0.02)	0.2 (0.03)
Hallucinogens	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.2 (0.03)	0.3 (0.04)
LSD	0.0* (0.01)	0.0* (0.00)	0.0* (0.01)	0.0* (0.00)	0.0* (0.01)	0.0 (0.02)	** (**)	0.0* (0.01)	** (**)	0.0* (0.01)	0.0* (0.01)	0.0 (0.02)	0.1 (0.02)	0.0 (0.01)	0.1 (0.01)
РСР	0.0 (0.01)	** (**)	0.0 (0.01)	0.0 (0.01)	** (**)	0.0 (0.01)	** (**)	0.0 (0.01)	0.0 (0.01)	** (**)	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	nc	nc	0.1 (0.02)	0.1 (0.02)
Inhalants	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.1 (0.02)	0.2 (0.03)
Methamphetamine	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.4 (0.04)	0.3 (0.03)
Misuse of Psychotherapeutics	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	2.0 (0.09)	2.0 (0.09)
Pain Relievers	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	1.3 (0.07)	1.2 (0.07)
Tranquilizers	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.5 (0.05)	0.6 (0.05)
Stimulants	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.4 (0.04)	0.4 (0.04)
Sedatives	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0.2 (0.03)	0.2 (0.03)
Opioids (Heroin Use or Pain Reliever Misuse)	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	1.3 (0.08)	1.3 (0.08)

LSD = lysergic acid diethylamide; PCP = phencyclidine.

\*\* Low precision; no estimate reported.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Opioid Misuse Status/Age Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
OPIOID MISUSE (HEROIN USE OR PAIN RELIEVER															
MISUSE)	nc	nc	4.7* (0.12)	4.4 (0.11)											
12-17	nc	nc	3.9 (0.19)	3.6 (0.17)											
18-25	nc	nc	8.7* (0.27)	7.3 (0.27)											
26 or Older	nc	nc	4.2 (0.14)	4.0 (0.13)											
HEROIN USE	0.2* (0.02)	0.1* (0.02)	0.2* (0.02)	0.2* (0.02)	0.2* (0.03)	0.2* (0.02)	0.2* (0.02)	0.2* (0.03)	0.2* (0.03)	0.2* (0.03)	0.3* (0.03)	0.3* (0.03)	0.3 (0.03)	0.3 (0.03)	0.4 (0.03)
12-17	0.2* (0.04)	0.1* (0.03)	0.2* (0.04)	0.1* (0.03)	0.1* (0.03)	0.1 (0.02)	0.2* (0.04)	0.1* (0.03)	0.1 (0.03)	0.2* (0.05)	0.1 (0.04)	0.1* (0.03)	0.1 (0.03)	0.1 (0.03)	0.1 (0.02)
18-25	0.4* (0.05)	0.3* (0.04)	0.4* (0.05)	0.5 (0.06)	0.4* (0.06)	0.4* (0.06)	0.5* (0.06)	0.5 (0.06)	0.6 (0.07)	0.7 (0.07)	0.8 (0.08)	0.7 (0.08)	0.8 (0.09)	0.6 (0.08)	0.7 (0.08)
26 or Older	0.1* (0.03)	0.1* (0.02)	0.1* (0.03)	0.1* (0.02)	0.2* (0.04)	0.1* (0.03)	0.1* (0.03)	0.2* (0.04)	0.2* (0.04)	0.2* (0.03)	0.2* (0.04)	0.2* (0.03)	0.3 (0.03)	0.3 (0.04)	0.3 (0.04)
PAIN RELIEVER MISUSE	nc	nc	4.7* (0.11)	4.3 (0.11)											
12-17	nc	nc	3.9 (0.19)	3.5 (0.17)											
18-25	nc	nc	8.5* (0.26)	7.1 (0.27)											
26 or Older	nc	nc	4.1 (0.14)	3.9 (0.13)											

nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Rounding may make the estimates appear identical.

#### Table A.12B Misuse of Pain Relievers in the Past Year among Individuals Aged 12 or Older, by Pain Reliever Subtype

Pain Reliever Subtype	Numbers <sup>1</sup>	Percentages <sup>2</sup>
MISUSE OF ANY PAIN RELIEVER <sup>3</sup>	11,517 (286)	4.3 (0.11)
Hydrocodone Products	6,924 (220)	2.6 (0.08)
Oxycodone Products	3,905 (162)	1.4 (0.06)
Tramadol Products	1,591 (108)	0.6 (0.04)
Codeine Products	2,767 (146)	1.0 (0.05)
Morphine Products	536 (58)	0.2 (0.02)
Fentanyl Products	228 (35)	0.1 (0.01)
Buprenorphine Products	712 (65)	0.3 (0.02)
Oxymorphone Products	302 (40)	0.1 (0.01)
Demerol®	95 (40)	0.0 (0.01)
Hydromorphone Products	239 (44)	0.1 (0.02)
Methadone	346 (52)	0.1 (0.02)
Any Other Prescription Pain Reliever <sup>4</sup>	793 (78)	0.3 (0.03)

<sup>1</sup> Estimates shown are numbers in thousands with standard errors included in parentheses.

<sup>2</sup> Estimates shown are percentages with standard errors included in parentheses.

<sup>3</sup> Includes hydrocodone products (Vicodin<sup>®</sup>, Lortab<sup>®</sup>, Norco<sup>®</sup>, Zohydro<sup>®</sup> ER, generic hydrocodone, or other similar products); oxycodone products (OxyContin<sup>®</sup>, Percodan<sup>®</sup>, Roxicodone<sup>®</sup>, generic oxycodone, or other similar products); tranadol products (Ultram<sup>®</sup> ER, Ultram<sup>®</sup> ER, Encire Arended-release tramadol, or other similar products (Duragesic<sup>®</sup>, Fentora<sup>®</sup>, generic fentanyl, or other similar products); buprenorphine products (Suboxone<sup>®</sup>, generic buprenorphine, generic buprenorphine plus naloxone, or other similar products); oxymorphone products (Opana<sup>®</sup>, Opana<sup>®</sup> ER, generic oxymorphone, generic extended-release oxymorphone, or other similar products); methadone or other similar products); or any other prescription pain reliever. Over-the-counter drugs are not included.

<sup>4</sup> Includes misuse of pain relievers containing other active ingredients. A small number of respondents who reported misuse of "any other prescription pain reliever" corresponding only to the specific pain reliever categories shown in the table are included in estimates for Any Other Prescription Pain Reliever and are also included in the relevant pain reliever subtype category.

#### Table A.13B Main Reasons for Pain Reliever Misuse for the Last Episode of Misuse among Individuals Aged 12 or Older Who Misused Pain Relievers in the Past Year

Main Reason for Misuse	Past Year Misusers of Pain Relievers
Relieve Physical Pain	62.3 (1.24)
Relax or Relieve Tension	10.8 (0.80)
Help with Sleep	3.3 (0.41)
Help with Feelings or Emotion	3.9 (0.46)
Experiment or See What It's Like	3.0 (0.35)
Feel Good or Get High	12.9 (0.74)
Increase or Decrease Effect of Other Drug	0.9 (0.19)
Because I Am Hooked or Have to Have It	2.1 (0.35)
Some Other Reason	0.9 (0.17)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown information for their main reason for misuse were excluded from the analysis, including respondents who reported some other reason but had unknown data in their write-in responses.

NOTE: Responses to the Some Other Reason category for one drug type may fall into a response category that is asked only for another drug type (e.g., "to relieve physical pain" for tranquilizer misuse).

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.14B Source Where Pain Relievers Were Obtained for Most Recent Misuse among Individuals Aged 12 or Older Who Misused Pain Relievers in the Past Year

Source for Most Recent Misuse	Past Year Misusers of Pain Relievers
GOT THROUGH PRESCRIPTION(S) OR STOLE FROM A HEALTH CARE PROVIDER	37.5 (1.35)
Prescription from One Doctor	35.4 (1.34)
Prescriptions from More Than One Doctor	1.4 (0.27)
Stole from Doctor's Office, Clinic, Hospital, or Pharmacy	0.7 (0.20)
GIVEN BY, BOUGHT FROM, OR TOOK FROM A FRIEND OR RELATIVE	53.0 (1.31)
From Friend or Relative for Free	40.4 (1.28)
Bought from Friend or Relative	8.9 (0.70)
Took from Friend or Relative without Asking	3.7 (0.43)
BOUGHT FROM DRUG DEALER OR OTHER STRANGER	6.0 (0.54)
SOME OTHER WAY <sup>1</sup>	3.4 (0.43)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents were asked to choose one of eight sources as their best answer. Respondents with unknown data on Source for Most Recent Misuse and respondents with unknown or invalid responses to the corresponding other-specify questions were excluded from the analysis.

<sup>1</sup> Some Other Way includes write-in responses not already listed in this table or responses with insufficient information that could allow them to be placed in another category.

Past Year Use Disorder	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	2.9 (0.08)	2.7 (0.08)												
Marijuana	1.8* (0.07)	1.8* (0.06)	1.9* (0.07)	1.7* (0.06)	1.7* (0.06)	1.6 (0.06)	1.7* (0.06)	1.7* (0.06)	1.8* (0.07)	1.6 (0.06)	1.7 (0.07)	1.6 (0.07)	1.6 (0.06)	1.5 (0.05)	1.5 (0.06)
Cocaine	0.6* (0.05)	0.6* (0.05)	0.7* (0.05)	0.6* (0.04)	0.7* (0.05)	0.6* (0.05)	0.6* (0.04)	0.4* (0.04)	0.4 (0.04)	0.3 (0.03)	0.4* (0.05)	0.3 (0.03)	0.3 (0.03)	0.3 (0.03)	0.3 (0.03)
Heroin	0.1* (0.02)	0.1* (0.02)	0.1* (0.02)	0.1* (0.01)	0.1* (0.03)	0.1* (0.02)	0.1* (0.02)	0.1* (0.03)	0.1* (0.02)	0.2 (0.02)	0.2 (0.03)	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)
Hallucinogens	nc	0.1 (0.01)	0.1 (0.02)												
Inhalants	nc	0.0 (0.01)	0.0 (0.01)												
Methamphetamine														0.3 (0.03)	0.3 (0.02)
Misuse of Psychotherapeutics	nc	1.0 (0.05)	0.9 (0.05)												
Pain Relievers	nc	0.8 (0.04)	0.7 (0.04)												
Tranquilizers	nc	0.3 (0.02)	0.2 (0.02)												
Stimulants	nc	0.2 (0.02)	0.2 (0.02)												
Sedatives	nc	0.1 (0.01)	0.1 (0.02)												
Opioids (Heroin Use or Pain Reliever Misuse)	nc	0.9 (0.05)	0.8 (0.05)												
ALCOHOL	7.7* (0.18)	7.5* (0.16)	7.8* (0.17)	7.7* (0.16)	7.7* (0.17)	7.5* (0.17)	7.4* (0.16)	7.5* (0.17)	7.1* (0.16)	6.5* (0.15)	6.8* (0.16)	6.6* (0.16)	6.4* (0.14)	5.9 (0.13)	5.6 (0.13)
BOTH ILLICIT DRUGS AND ALCOHOL	nc	1.0 (0.05)	0.9 (0.04)												
ILLICIT DRUGS OR ALCOHOL	nc	7.8 (0.15)	7.5 (0.15)												

#### Table A.15B Substance Use Disorder for Specific Substances in the Past Year among Individuals Aged 12 or Older

nc = not comparable due to methodological changes.

-- = not available.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Past Year Use Disorder	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	3.4 (0.17)	3.2 (0.18)												
Marijuana	4.3* (0.18)	3.8* (0.15)	3.9* (0.16)	3.6* (0.16)	3.4* (0.16)	3.1* (0.14)	3.4* (0.16)	3.4* (0.16)	3.6* (0.16)	3.5* (0.16)	3.2* (0.16)	2.9* (0.15)	2.7 (0.16)	2.6 (0.15)	2.3 (0.15)
Cocaine	0.4* (0.07)	0.3* (0.05)	0.4* (0.05)	0.4* (0.05)	0.4* (0.05)	0.4* (0.05)	0.3* (0.05)	0.2 (0.04)	0.1 (0.03)	0.2 (0.04)	0.2 (0.04)	0.1 (0.02)	0.1 (0.03)	0.1 (0.04)	0.1 (0.03)
Heroin	0.1* (0.02)	0.0* (0.01)	0.1* (0.03)	0.0* (0.01)	0.0* (0.01)	0.0* (0.01)	0.1* (0.02)	0.1* (0.02)	0.0 (0.01)	0.1* (0.04)	0.1* (0.03)	0.0* (0.02)	0.1* (0.03)	0.0 (0.01)	0.0 (0.00)
Hallucinogens	nc	0.3 (0.06)	0.3 (0.05)												
Inhalants	nc	0.2 (0.04)	0.2 (0.04)												
Methamphetamine														0.1 (0.03)	0.0 (0.02)
Misuse of Psychotherapeutics	nc	0.9 (0.09)	0.9 (0.10)												
Pain Relievers	nc	0.5 (0.07)	0.6 (0.08)												
Tranquilizers	nc	0.3 (0.06)	0.3 (0.06)												
Stimulants	nc	0.2 (0.04)	0.2 (0.04)												
Sedatives	nc	0.1 (0.03)	0.1 (0.04)												
Opioids (Heroin Use or Pain Reliever Misuse)	nc	0.5 (0.07)	0.6 (0.08)												
ALCOHOL	5.9* (0.20)	5.9* (0.20)	6.0* (0.20)	5.5* (0.20)	5.4* (0.19)	5.4* (0.19)	4.9* (0.20)	4.6* (0.20)	4.6* (0.20)	3.8* (0.18)	3.4* (0.16)	2.8* (0.14)	2.7* (0.17)	2.5* (0.15)	2.0 (0.13)
BOTH ILLICIT DRUGS AND ALCOHOL	nc	1.0 (0.10)	0.9 (0.09)												
ILLICIT DRUGS OR ALCOHOL	nc	5.0* (0.20)	4.3 (0.20)												

#### Table A.16B Substance Use Disorder for Specific Substances in the Past Year among Youths Aged 12 to 17

nc = not comparable due to methodological changes.

-- = not available.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level. Rounding may make the estimates appear identical.

Past Year Use Disorder	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	7.2 (0.26)	7.0 (0.27)												
Marijuana	6.0* (0.20)	5.9* (0.20)	6.0* (0.23)	5.9* (0.22)	5.7* (0.21)	5.6 (0.21)	5.6 (0.22)	5.6 (0.22)	5.7* (0.22)	5.7* (0.21)	5.5 (0.23)	5.4 (0.22)	4.9 (0.22)	5.1 (0.21)	5.0 (0.24)
Cocaine	1.2* (0.09)	1.2* (0.09)	1.4* (0.10)	1.5* (0.10)	1.3* (0.10)	1.4* (0.10)	1.2* (0.10)	0.9* (0.08)	0.7 (0.08)	0.6 (0.07)	0.6 (0.08)	0.7 (0.08)	0.5 (0.07)	0.7 (0.08)	0.6 (0.08)
Heroin	0.2* (0.04)	0.1* (0.03)	0.2* (0.04)	0.3* (0.04)	0.2* (0.04)	0.2* (0.04)	0.3 (0.05)	0.3 (0.05)	0.3 (0.05)	0.4 (0.06)	0.5 (0.06)	0.5 (0.07)	0.5 (0.07)	0.4 (0.06)	0.4 (0.06)
Hallucinogens	nc	0.3 (0.05)	0.5 (0.07)												
Inhalants	nc	0.0 (0.02)	0.0 (0.01)												
Methamphetamine														0.4 (0.07)	0.4 (0.06)
Misuse of Psychotherapeutics	nc	2.0* (0.14)	1.6 (0.12)												
Pain Relievers	nc	1.2* (0.11)	0.8 (0.09)												
Tranquilizers	nc	0.7 (0.08)	0.5 (0.07)												
Stimulants	nc	0.5 (0.06)	0.5 (0.07)												
Sedatives	nc	0.1 (0.02)	0.1 (0.03)												
Opioids (Heroin Use or Pain Reliever Misuse)	nc	1.5* (0.12)	1.1 (0.10)												
ALCOHOL	17.7* (0.36)	17.2* (0.34)	17.4* (0.37)	17.5* (0.37)	17.6* (0.37)	16.9* (0.35)	17.4* (0.35)	16.1* (0.35)	15.7* (0.37)	14.4* (0.34)	14.3* (0.33)	13.0* (0.35)	12.3* (0.34)	10.9 (0.32)	10.7 (0.32)
BOTH ILLICIT DRUGS AND ALCOHOL	nc	2.9 (0.16)	2.5 (0.16)												
ILLICIT DRUGS OR ALCOHOL	nc	15.3 (0.37)	15.1 (0.37)												

#### Table A.17B Substance Use Disorder for Specific Substances in the Past Year among Young Adults Aged 18 to 25

nc = not comparable due to methodological changes.

-- = not available.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.
Past Year Use Disorder	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ILLICIT DRUGS	nc	2.1 (0.09)	2.0 (0.09)												
Marijuana	0.8 (0.07)	0.7 (0.06)	0.8 (0.07)	0.7 (0.06)	0.8 (0.07)	0.7 (0.07)	0.8 (0.06)	0.8 (0.07)	0.9 (0.08)	0.7 (0.06)	0.8 (0.07)	0.8 (0.08)	0.9 (0.06)	0.8 (0.05)	0.8 (0.06)
Cocaine	0.6* (0.06)	0.6* (0.06)	0.6* (0.06)	0.5* (0.05)	0.6* (0.07)	0.6* (0.06)	0.5* (0.05)	0.4 (0.05)	0.4 (0.05)	0.3 (0.04)	0.4* (0.06)	0.3 (0.04)	0.3 (0.04)	0.3 (0.04)	0.3 (0.04)
Heroin	0.1* (0.02)	0.1* (0.02)	0.1* (0.03)	0.1* (0.02)	0.1* (0.03)	0.1* (0.02)	0.1* (0.02)	0.1* (0.03)	0.1* (0.03)	0.1* (0.03)	0.1* (0.03)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)	0.2 (0.03)
Hallucinogens	nc	0.0 (0.01)	0.1 (0.01)												
Inhalants	nc	0.0 (0.01)	0.0 (0.01)												
Methamphetamine														0.3 (0.04)	0.3 (0.03)
Misuse of Psychotherapeutics	nc	0.9 (0.06)	0.8 (0.06)												
Pain Relievers	nc	0.7 (0.05)	0.6 (0.05)												
Tranquilizers	nc	0.2 (0.03)	0.2 (0.02)												
Stimulants	nc	0.1 (0.02)	0.1 (0.02)												
Sedatives	nc	0.1 (0.01)	0.1 (0.02)												
Opioids (Heroin Use or Pain Reliever Misuse)	nc	0.8 (0.06)	0.8 (0.06)												
ALCOHOL	6.2* (0.22)	6.0* (0.20)	6.3* (0.21)	6.2* (0.19)	6.2* (0.20)	6.2* (0.20)	6.0* (0.19)	6.3* (0.20)	5.9* (0.20)	5.4 (0.18)	5.9* (0.19)	6.0* (0.19)	5.9* (0.16)	5.4 (0.15)	5.2 (0.15)
BOTH ILLICIT DRUGS AND ALCOHOL	nc	0.7 (0.05)	0.6 (0.05)												
ILLICIT DRUGS OR ALCOHOL	nc	6.9 (0.17)	6.6 (0.17)												

#### Table A.18B Substance Use Disorder for Specific Substances in the Past Year among Adults Aged 26 or Older

nc = not comparable due to methodological changes.

-- = not available.

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.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

#### Table A.19B Need for and Receipt of Treatment at a Specialty Facility for a Substance Use Problem in the Past Year among Individuals Aged 12 or Older, by Age Group

Needed/Received Substance Use Treatment	Aged 12 or Older, Numbers <sup>1</sup>	Percentage among Individuals Aged 12 or Older <sup>2</sup>	Aged 12-17, Numbers <sup>1</sup>	Percentage among Youths Aged 12-17 <sup>2</sup>	Aged 18-25, Numbers <sup>1</sup>	Percentage among Adults Aged 18-25 <sup>2</sup>	Aged 26 or Older, Numbers <sup>1</sup>	Percentage among Adults Aged 26 or Older <sup>2</sup>
Needed Treatment for a Substance Use Problem <sup>3</sup>	20,959 (407)	7.8 (0.15)	1,085 (50)	4.4 (0.20)	5,343 (130)	15.5 (0.37)	14,531 (377)	6.9 (0.18)
Received Treatment for a Substance Use Problem at a Specialty Facility among Individuals Who Needed Substance Use Treatment	2,229 (123)	10.6 (0.59)	89 (13)	8.2 (1.18)	383 (33)	7.2 (0.62)	1,756 (118)	12.1 (0.81)

<sup>1</sup> Estimates shown are numbers in thousands with standard errors included in parentheses.

<sup>2</sup> Estimates shown are percentages with standard errors included in parentheses.

<sup>3</sup> Respondents were classified as needing treatment for a substance use problem if they met the criteria for a substance use disorder as defined in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) or received treatment for illicit drug or alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center).

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.20B Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17

MDE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MDE	9.0* (0.25)	8.8* (0.25)	7.9* (0.24)	8.2* (0.25)	8.3* (0.25)	8.1* (0.24)	8.0* (0.24)	8.2* (0.24)	9.1* (0.26)	10.7* (0.30)	11.4* (0.32)	12.5 (0.33)	12.8 (0.32)
MDE with Severe Impairment <sup>1</sup>			5.5* (0.20)	5.5* (0.20)	6.0* (0.22)	5.8* (0.20)	5.7* (0.20)	5.7* (0.19)	6.3* (0.22)	7.7* (0.26)	8.2 (0.27)	8.8 (0.28)	9.0 (0.27)

-- = not available.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year MDE data were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Impairment is based on the Sheehan Disability Scale (SDS) role domains, which measure the impact of a disorder on a youth's life. Impairment is defined as the highest severity level of role impairment across four domains: (1) chores at home, (2) school or work, (3) close relationships with family, and (4) social life. Ratings  $\geq$  7 on a 0 to 10 scale were considered Severe Impairment. Respondents with unknown impairment data were excluded.

MDE/Age Group	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MDE	6.6 (0.19)	6.5 (0.18)	6.7 (0.18)	6.5 (0.18)	6.6 (0.18)	6.8 (0.19)	6.6 (0.18)	6.9 (0.19)	6.7 (0.19)	6.6 (0.15)	6.7 (0.15)	6.7 (0.15)
18-25	8.8* (0.26)	8.1* (0.23)	8.0* (0.24)	8.4* (0.25)	8.0* (0.24)	8.3* (0.25)	8.3* (0.25)	8.9* (0.27)	8.7* (0.26)	9.3* (0.29)	10.3 (0.28)	10.9 (0.31)
26-49	7.6 (0.27)	7.7 (0.29)	7.6 (0.26)	7.4 (0.27)	7.6 (0.26)	7.5 (0.27)	7.7 (0.28)	7.6 (0.27)	7.6 (0.29)	7.2 (0.21)	7.5 (0.21)	7.4 (0.21)
50 or Older	4.5 (0.32)	4.5 (0.29)	5.2 (0.34)	4.8 (0.35)	4.9 (0.32)	5.6 (0.35)	4.8 (0.30)	5.5 (0.34)	5.1 (0.31)	5.2 (0.24)	4.8 (0.26)	4.8 (0.25)
MDE WITH SEVERE IMPAIRMENT <sup>1</sup>					4.0 (0.14)	4.2 (0.15)	4.2 (0.15)	4.5 (0.15)	4.3 (0.15)	4.3 (0.12)	4.3 (0.12)	4.3 (0.12)
18-25					5.2* (0.20)	5.2* (0.21)	5.2* (0.20)	5.8* (0.21)	5.7* (0.22)	6.0* (0.24)	6.5 (0.23)	7.0 (0.27)
26-49					4.8 (0.21)	4.7 (0.21)	5.2 (0.23)	5.1 (0.23)	4.9 (0.24)	4.6 (0.17)	4.9 (0.17)	4.7 (0.16)
50 or Older					2.6 (0.23)	3.5 (0.28)	2.9 (0.24)	3.4 (0.28)	3.2 (0.25)	3.5 (0.21)	3.0 (0.21)	3.0 (0.22)

Table A.21B Major Depressive Episode (MDE) and MDE with Severe Impairment in the Past Year among Adults Aged 18 or Older, by Age Group

-- = not available.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year MDE data were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Impairment is based on the Sheehan Disability Scale (SDS) role domains, which measure the impact of a disorder on an adult's life. Impairment is defined as the highest severity level of role impairment across four domains: (1) home management, (2) work, (3) close relationships with others, and (4) social life. Ratings  $\geq$  7 on a 0 to 10 scale were considered Severe Impairment. Respondents with unknown impairment data were excluded.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2005-2016.

#### Table A.22B Level of Mental Illness in the Past Year among Adults Aged 18 or Older, by Age Group

Mental Illness/Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
AMI	17.7 (0.30)	18.1 (0.31)	18.1 (0.30)	17.8 (0.30)	18.6 (0.31)	18.5 (0.31)	18.1 (0.23)	17.9 (0.25)	18.3 (0.24)
18-25	18.5* (0.34)	18.0* (0.32)	18.1* (0.35)	18.5* (0.37)	19.6* (0.35)	19.4* (0.36)	20.1* (0.39)	21.7 (0.38)	22.1 (0.43)
26-49	20.7 (0.42)	21.6 (0.43)	20.9 (0.42)	20.3 (0.43)	21.2 (0.44)	21.5 (0.45)	20.4 (0.34)	20.9 (0.34)	21.1 (0.33)
50 or Older	14.1 (0.59)	14.5 (0.54)	15.1 (0.55)	15.0 (0.53)	15.8 (0.55)	15.3 (0.52)	15.4 (0.40)	14.0 (0.42)	14.5 (0.40)
SMI	3.7* (0.14)	3.7* (0.14)	4.1 (0.16)	3.9 (0.14)	4.1 (0.14)	4.2 (0.16)	4.1 (0.12)	4.0 (0.12)	4.2 (0.12)
18-25	3.8* (0.16)	3.3* (0.15)	3.9* (0.17)	3.8* (0.17)	4.1* (0.17)	4.2* (0.18)	4.8* (0.21)	5.0* (0.21)	5.9 (0.24)
26-49	4.8* (0.21)	4.9 (0.22)	5.2 (0.23)	5.0 (0.22)	5.2 (0.23)	5.3 (0.25)	4.9 (0.18)	5.0 (0.18)	5.3 (0.18)
50 or Older	2.5 (0.24)	2.5 (0.23)	3.0 (0.27)	2.8 (0.22)	3.0 (0.25)	3.2 (0.26)	3.1 (0.19)	2.8 (0.20)	2.7 (0.20)
AMI EXCLUDING SMI	14.0 (0.27)	14.4 (0.27)	14.0 (0.27)	13.9 (0.26)	14.5 (0.28)	14.2 (0.27)	14.0 (0.21)	13.9 (0.22)	14.0 (0.21)
18-25	14.8* (0.31)	14.6* (0.29)	14.1* (0.31)	14.8* (0.33)	15.5 (0.33)	15.2* (0.33)	15.3 (0.35)	16.7 (0.36)	16.2 (0.36)
26-49	16.0 (0.38)	16.7* (0.38)	15.7 (0.37)	15.3 (0.37)	16.0 (0.38)	16.2 (0.40)	15.5 (0.29)	15.9 (0.30)	15.8 (0.29)
50 or Older	11.6 (0.54)	12.0 (0.50)	12.2 (0.49)	12.3 (0.48)	12.8 (0.50)	12.1 (0.48)	12.3 (0.37)	11.1 (0.37)	11.8 (0.37)

AMI = any mental illness; SMI = serious mental illness.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

# Table A.23B Receipt of Treatment for Depression in the Past Year among Youths Aged 12 to 17 with Major Depressive Episode (MDE) or MDE with Severe Impairment in the Past Year

MDE	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MDE	40.3 (1.38)	37.8 (1.42)	38.8 (1.60)	39.0 (1.52)	37.7 (1.48)	34.6* (1.52)	37.8 (1.51)	38.4 (1.47)	37.0* (1.34)	38.1 (1.35)	41.2 (1.42)	39.3 (1.40)	40.9 (1.30)
MDE with Severe Impairment <sup>1</sup>			46.5 (1.95)	43.9 (1.90)	42.6 (1.73)	38.8* (1.83)	41.1* (1.80)	43.5 (1.79)	41.0* (1.66)	45.0 (1.61)	44.7 (1.67)	44.6 (1.63)	46.7 (1.58)

-- = not available.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year depression treatment data, unknown past year MDE data, and/or past year MDE with impairment data were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Impairment is based on the Sheehan Disability Scale (SDS) role domains, which measure the impact of a disorder on a youth's life. Impairment is defined as the highest severity level of role impairment across four domains: (1) chores at home, (2) school or work, (3) close relationships with family, and (4) social life. Ratings ≥ 7 on a 0 to 10 scale were considered Severe Impairment. Respondents with unknown impairment data were excluded.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2004-2016.

### Table A.24B Receipt of Treatment for Depression in the Past Year among Adults Aged 18 or Older with Major Depressive Episode (MDE) or MDE with Severe Impairment in the Past Year

MDE/Age Group	2009	2010	2011	2012	2013	2014	2015	2016
MDE	64.3 (1.31)	68.2 (1.25)	68.1 (1.24)	68.0 (1.24)	68.6* (1.22)	68.6* (1.03)	67.2 (1.08)	65.3 (1.09)
18-25	47.0 (1.57)	48.7* (1.57)	47.8 (1.64)	49.8* (1.52)	50.8* (1.50)	49.5* (1.64)	46.8 (1.58)	44.1 (1.45)
26-49	64.8 (1.72)	68.1 (1.69)	68.1 (1.74)	68.8 (1.75)	66.7 (1.80)	67.9 (1.36)	67.4 (1.36)	67.4 (1.35)
50 or Older	73.8 (2.83)	78.4 (2.55)	80.0 (2.50)	76.8 (2.52)	81.3 (2.64)	80.8 (2.04)	80.9 (2.32)	77.3 (2.23)
MDE WITH SEVERE IMPAIRMENT <sup>1</sup>	71.5 (1.49)	72.9 (1.47)	73.7 (1.44)	73.1 (1.47)	76.4* (1.36)	73.7 (1.19)	72.7 (1.22)	72.2 (1.23)
18-25	51.2 (1.95)	53.9 (1.94)	54.2 (2.08)	55.5 (1.89)	56.8* (1.80)	55.3 (2.02)	52.0 (1.98)	51.3 (1.75)
26-49	72.4 (1.97)	74.2 (1.89)	74.1 (1.96)	73.7 (2.14)	74.4 (2.12)	72.3 (1.68)	72.0 (1.63)	74.3 (1.52)
50 or Older	84.4 (3.20)	81.4 (3.01)	85.0 (3.00)	82.4 (2.91)	90.8 (2.48)	85.9 (2.17)	87.9 (2.26)	84.1 (2.57)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year depression treatment data, unknown past year MDE data, and/or past year MDE with impairment data were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Impairment is based on the Sheehan Disability Scale (SDS) role domains, which measure the impact of a disorder on an adult's life. Impairment is defined as the highest severity level of role impairment across four domains: (1) home management, (2) work, (3) close relationships with others, and (4) social life. Ratings  $\geq$  7 on a 0 to 10 scale were considered Severe Impairment. Respondents with unknown impairment data were excluded.

#### Table A.25B Sources of Mental Health Services in the Past Year among Youths Aged 12 to 17

Source of Mental Health Service	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
SPECIALTY MENTAL HEALTH SERVICE	11.8* (0.28)	12.4* (0.28)	13.4* (0.31)	13.4* (0.30)	13.0* (0.29)	12.4* (0.31)	12.7* (0.29)	12.0* (0.30)	12.1* (0.30)	12.6* (0.31)	12.7* (0.28)	13.6* (0.32)	13.7* (0.34)	13.3* (0.32)	14.7 (0.33)
Outpatient	10.8* (0.27)	11.3* (0.27)	12.1* (0.30)	12.1* (0.29)	11.7* (0.29)	11.2* (0.29)	11.5* (0.29)	10.9* (0.29)	10.9* (0.28)	11.5* (0.30)	11.5* (0.27)	12.5 (0.31)	12.7 (0.33)	12.0* (0.31)	13.2 (0.32)
Inpatient or Residential (Overnight or Longer Stay)		2.2* (0.13)	2.5* (0.14)	2.5* (0.14)	2.4* (0.14)	2.3* (0.13)	2.2* (0.13)	2.1* (0.13)	2.2* (0.13)	2.1* (0.13)	2.2* (0.13)	2.3* (0.14)	2.5* (0.15)	2.6 (0.15)	3.0 (0.16)
NONSPECIALTY SERVICE	nc	14.2* (0.33)	14.5 (0.32)	14.2* (0.31)	15.0 (0.30)	15.0 (0.33)	15.4 (0.35)	15.2 (0.35)	15.4 (0.35)						
Education <sup>1</sup>	nc	12.1* (0.30)	12.4 (0.29)	11.9* (0.28)	12.9 (0.29)	13.0 (0.32)	13.2 (0.33)	13.2 (0.34)	13.1 (0.33)						
General Medicine															
Pediatrician or Other Family Doctor	2.7 (0.13)	2.9 (0.15)	3.4* (0.15)	3.2 (0.17)	2.8 (0.14)	2.8 (0.14)	2.9 (0.14)	2.5 (0.14)	2.5 (0.14)	2.5 (0.14)	2.5 (0.13)	2.8 (0.15)	2.9 (0.15)	2.7 (0.16)	2.9 (0.15)
Juvenile Justice															
Juvenile Detention Center, Prison, or Jail <sup>2</sup>								0.4* (0.06)	0.3 (0.05)	0.4* (0.06)	0.3 (0.05)	0.2 (0.04)	0.3 (0.05)	0.2 (0.04)	0.2 (0.05)
Child Welfare															
Foster Care or Therapeutic Foster Care	0.6* (0.06)	0.7* (0.08)	0.6 (0.07)	0.6 (0.07)	0.5 (0.07)	0.5 (0.05)	0.5 (0.06)	0.4 (0.05)	0.4 (0.06)	0.6 (0.07)	0.4 (0.05)	0.4 (0.05)	0.4 (0.06)	0.3 (0.05)	0.4 (0.07)
SPECIALTY MENTAL HEALTH SERVICES AND EDUCATION, GENERAL MEDICINE, OR CHILD WELFARE								5.0* (0.20)	5 2* (0 20)	5.4* (0.20)	5.7 (0.20)	61 (021)	5.0 (0.22)	57 (0.21)	62 (0.22)
SERVICES <sup>1</sup>	nc	5.0 (0.20)	5.3 (0.20)	5.4 (0.20)	5.7 (0.20)	0.1 (0.21)	5.9 (0.23)	5.7 (0.21)	6.2 (0.23)						

-- = not available; nc = not comparable due to methodological changes.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown receipt of mental health service information were excluded.

NOTE: Respondents could indicate multiple service sources; thus, these response categories are not mutually exclusive.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Respondents who did not report their school enrollment status, who reported not being enrolled in school in the past 12 months, or who reported being home-schooled were not asked about receipt of mental health services from this source; however, respondents who reported not being enrolled in school in the past 12 months were classified as not having received mental health services from this source.

<sup>2</sup> These services were often provided by psychiatrists, psychologists, social workers, or counselors who work for the court system.

Mental Health															
Services <sup>1</sup> /Age Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ANY MENTAL HEALTH SERVICE	13.0* (0.27)	13.2* (0.26)	12.8* (0.26)	13.0* (0.26)	12.9* (0.26)	13.3* (0.27)	13.5* (0.29)	13.4* (0.27)	13.8 (0.27)	13.6* (0.26)	14.5 (0.28)	14.6 (0.28)	14.8 (0.23)	14.2 (0.23)	14.4 (0.23)
18-25	10.5* (0.25)	11.1* (0.28)	10.8* (0.26)	11.2* (0.27)	10.8* (0.28)	10.4* (0.28)	11.0* (0.28)	11.2* (0.27)	11.0* (0.27)	11.4* (0.30)	12.0* (0.29)	12.2 (0.32)	11.9* (0.34)	11.7* (0.31)	12.9 (0.34)
26-49	14.5 (0.36)	14.5 (0.35)	14.4* (0.34)	13.9* (0.34)	14.0* (0.37)	14.3* (0.35)	14.1* (0.34)	14.6 (0.36)	14.9 (0.37)	14.9 (0.36)	15.2 (0.38)	15.5 (0.40)	15.3 (0.28)	15.3 (0.29)	15.4 (0.29)
50 or Older	12.0* (0.54)	12.3* (0.53)	11.7* (0.51)	12.5* (0.53)	12.4* (0.48)	13.2 (0.53)	13.7 (0.57)	12.9 (0.52)	13.6 (0.52)	13.2 (0.47)	14.8 (0.51)	14.6 (0.52)	15.4* (0.42)	13.9 (0.40)	14.0 (0.42)
INPATIENT	0.7* (0.06)	0.8 (0.07)	0.9 (0.07)	1.0 (0.08)	0.7* (0.06)	1.0 (0.08)	0.9 (0.10)	0.8 (0.07)	0.8 (0.07)	0.8 (0.06)	0.8 (0.06)	0.9 (0.07)	1.0 (0.06)	0.9 (0.06)	0.9 (0.06)
18-25	0.9* (0.08)	1.0* (0.09)	1.2 (0.10)	1.1* (0.09)	1.1* (0.08)	1.1* (0.09)	1.1* (0.10)	1.1* (0.10)	1.0* (0.09)	1.1* (0.09)	1.1* (0.10)	1.3 (0.11)	1.2* (0.11)	1.4 (0.12)	1.5 (0.11)
26-49	0.8 (0.09)	0.9 (0.10)	0.8 (0.09)	0.9 (0.10)	0.8 (0.09)	1.1 (0.11)	0.8 (0.09)	1.0 (0.11)	0.8 (0.09)	0.8 (0.09)	0.7* (0.08)	1.0 (0.10)	1.0 (0.08)	0.9 (0.07)	1.0 (0.08)
50 or Older	0.5 (0.10)	0.7 (0.14)	0.9 (0.14)	1.0 (0.17)	0.5 (0.10)	0.7 (0.15)	0.9 (0.22)	0.6 (0.11)	0.7 (0.13)	0.7 (0.11)	0.8 (0.12)	0.7 (0.11)	1.0 (0.12)	0.8 (0.11)	0.7 (0.10)
OUTPATIENT	7.4 (0.21)	7.1 (0.19)	7.1 (0.19)	6.8 (0.20)	6.7 (0.20)	7.0 (0.19)	6.8 (0.20)	6.4* (0.19)	6.6 (0.20)	6.7 (0.19)	6.6 (0.19)	6.6 (0.21)	6.7 (0.16)	7.1 (0.17)	6.9 (0.16)
18-25	6.7 (0.21)	6.6* (0.21)	6.2* (0.21)	6.4* (0.22)	5.9* (0.23)	5.6* (0.21)	5.9* (0.21)	6.1* (0.20)	5.7* (0.21)	6.2* (0.22)	6.5* (0.22)	6.3* (0.22)	6.4* (0.25)	6.6* (0.24)	7.3 (0.26)
26-49	8.9* (0.29)	8.7 (0.28)	8.6 (0.27)	7.8 (0.27)	7.6 (0.27)	8.0 (0.28)	7.9 (0.26)	7.5 (0.27)	7.8 (0.28)	7.8 (0.28)	7.6 (0.26)	7.4 (0.29)	7.5 (0.20)	7.9 (0.22)	8.1 (0.22)
50 or Older	5.7 (0.39)	5.3 (0.35)	5.6 (0.36)	5.9 (0.39)	6.0 (0.37)	6.3 (0.37)	6.0 (0.39)	5.3 (0.34)	5.7 (0.35)	5.7 (0.34)	5.7 (0.33)	6.0 (0.37)	6.1 (0.29)	6.4 (0.29)	5.8 (0.27)
PRESCRIPTION MEDICATION	10.5* (0.25)	10.9* (0.25)	10.5* (0.23)	10.7* (0.24)	10.9* (0.24)	11.2* (0.25)	11.4 (0.27)	11.3* (0.25)	11.7 (0.24)	11.5 (0.25)	12.4 (0.26)	12.5 (0.27)	12.6 (0.21)	11.8 (0.21)	12.0 (0.21)
18-25	7.5* (0.22)	8.3* (0.25)	8.1* (0.23)	8.3* (0.23)	8.0* (0.24)	8.0* (0.24)	8.1* (0.24)	8.5* (0.23)	8.4* (0.24)	8.8* (0.25)	9.0 (0.25)	9.4 (0.27)	8.8* (0.30)	8.6* (0.27)	9.7 (0.30)
26-49	11.4* (0.32)	11.9 (0.32)	11.7* (0.31)	11.4* (0.31)	11.7* (0.34)	11.8* (0.32)	11.7* (0.32)	12.3 (0.33)	12.5 (0.33)	12.3 (0.33)	13.0 (0.36)	13.1 (0.37)	12.8 (0.26)	12.6 (0.26)	12.6 (0.26)
50 or Older	10.5* (0.51)	10.9* (0.51)	10.1* (0.48)	10.8* (0.49)	11.0* (0.45)	11.7 (0.50)	12.2 (0.53)	11.3 (0.49)	12.0 (0.49)	11.8 (0.45)	12.9 (0.49)	12.9 (0.49)	13.5* (0.39)	12.0 (0.38)	12.3 (0.39)

#### Table A.26B Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older, by Age Group

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown mental health service information were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Respondents could indicate multiple service sources; thus, these response categories are not mutually exclusive.

Level of Mental Illness/Mental Health									
Services <sup>1</sup> /Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
AMI									
Mental Health Services	40.9 (0.93)	40.2* (0.86)	42.4 (0.89)	40.8* (0.82)	41.0 (0.82)	44.7 (0.91)	44.7 (0.72)	43.1 (0.72)	43.1 (0.75)
18-25	30.3* (0.94)	32.0* (0.97)	32.6 (0.93)	32.9 (0.98)	34.5 (0.96)	34.7 (0.98)	33.6 (1.05)	32.0* (0.91)	35.1 (0.94)
26-49	41.4 (1.09)	40.8 (1.10)	43.3 (1.07)	41.1 (1.09)	42.0 (1.10)	43.5 (1.15)	44.2 (0.83)	43.3 (0.89)	43.1 (0.87)
50 or Older	45.2 (2.26)	42.8 (1.92)	45.1 (1.93)	43.6 (1.75)	42.4 (1.67)	50.5 (1.95)	49.9 (1.48)	48.3 (1.54)	46.8 (1.57)
Inpatient	3.7 (0.51)	3.2 (0.29)	2.7 (0.25)	3.3 (0.31)	3.0 (0.28)	3.3 (0.29)	3.8 (0.26)	3.4 (0.26)	3.3 (0.24)
18-25	3.5 (0.39)	4.1 (0.45)	3.3* (0.35)	3.9 (0.40)	3.8 (0.39)	4.2 (0.40)	3.7 (0.37)	4.3 (0.42)	4.6 (0.41)
26-49	2.9 (0.38)	3.7 (0.43)	2.8 (0.38)	2.9 (0.38)	2.3* (0.30)	3.3 (0.37)	3.7 (0.34)	3.1 (0.31)	3.4 (0.32)
50 or Older	5.2 (1.42)	2.1 (0.50)	2.1 (0.44)	3.5 (0.63)	3.6 (0.65)	2.9 (0.60)	3.9 (0.56)	3.5 (0.59)	2.7 (0.48)
Outpatient	24.1 (0.78)	22.5* (0.74)	23.4 (0.78)	24.0 (0.74)	22.4* (0.68)	24.4 (0.84)	24.3 (0.61)	25.4 (0.63)	24.5 (0.61)
18-25	18.9* (0.80)	20.3* (0.80)	19.9* (0.82)	20.9 (0.84)	21.9 (0.84)	21.0 (0.82)	21.3 (0.92)	20.6 (0.82)	22.8 (0.84)
26-49	26.0 (0.89)	23.6* (0.90)	24.9 (0.92)	25.1 (0.98)	23.6* (0.89)	24.3 (0.99)	25.8 (0.71)	26.1 (0.77)	26.0 (0.74)
50 or Older	23.5 (1.85)	21.9 (1.63)	22.8 (1.63)	23.8 (1.60)	21.0 (1.40)	26.1 (1.83)	23.9 (1.26)	27.0 (1.41)	23.4 (1.28)
Prescription Medication	35.5 (0.91)	34.8* (0.82)	36.9 (0.90)	35.6 (0.82)	35.3 (0.79)	38.9 (0.91)	38.7 (0.71)	36.7 (0.71)	37.1 (0.72)
18-25	23.3* (0.84)	25.3 (0.88)	25.5 (0.89)	25.3 (0.92)	26.8 (0.88)	27.2 (0.90)	25.5 (1.00)	24.3* (0.85)	27.2 (0.87)
26-49	35.9 (1.07)	35.3 (1.08)	37.7 (1.07)	35.6 (1.05)	37.1 (1.10)	37.7 (1.11)	38.0 (0.81)	36.4 (0.86)	36.7 (0.83)
50 or Older	40.8 (2.25)	38.1 (1.84)	40.7 (1.94)	39.8 (1.77)	36.7* (1.65)	45.5 (1.92)	45.3 (1.46)	43.2 (1.49)	42.2 (1.54)
SMI									
Mental Health Services	65.7 (1.76)	66.5 (1.68)	67.5 (1.67)	64.9 (1.70)	62.9 (1.65)	68.5 (1.78)	68.5 (1.33)	65.3 (1.33)	64.8 (1.34)
18-25	45.9 (2.28)	55.0 (2.20)	53.7 (2.32)	52.1 (2.27)	53.1 (2.14)	54.0 (2.30)	53.9 (2.13)	50.7 (2.14)	51.5 (2.05)
26-49	67.2 (2.08)	64.5 (2.06)	67.4 (2.05)	63.6 (2.20)	63.5 (2.27)	68.4 (2.29)	66.2 (1.72)	66.1 (1.68)	66.1 (1.57)
50 or Older	73.2 (4.33)	76.1 (3.74)	74.0 (3.74)	73.2 (3.60)	66.3 (3.62)	74.9 (3.51)	79.2 (2.59)	72.2 (3.09)	71.5 (3.16)
Inpatient	8.6 (1.29)	8.6 (0.98)	6.7 (0.77)	8.8 (1.11)	6.2 (0.77)	8.3 (0.93)	8.8 (0.85)	7.0 (0.71)	7.6 (0.73)
18-25	7.9 (1.18)	11.4 (1.81)	8.1 (1.06)	8.0 (1.19)	8.5 (1.18)	10.3 (1.27)	8.2 (1.05)	8.9 (1.17)	8.8 (1.06)
26-49	6.9 (1.19)	9.7 (1.44)	7.0 (1.04)	8.0 (1.17)	$4.8^{*}(0.82)$	8.4 (1.22)	8.0 (0.93)	7.3 (0.95)	8.1 (0.93)
50 or Older	12.4 (3.65)	4.9 (1.47)	5.5 (1.50)	10.8 (2.61)	7.3 (1.90)	7.3 (1.93)	10.2 (2.07)	5.5 (1.51)	6.0 (1.67)
Outpatient	46.2 (1.86)	44.6 (1.97)	42.5 (1.89)	44.1 (1.78)	39.0 (1.68)	46.9 (1.97)	44.2 (1.39)	43.6 (1.44)	42.6 (1.40)
18-25	33.0 (2.05)	38.6 (2.27)	36.2 (2.30)	37.2 (2.20)	35.8 (2.08)	37.3 (2.13)	39.2 (2.12)	36.0 (2.10)	36.8 (1.88)
26-49	48.2 (2.23)	43.8 (2.21)	42.9 (2.13)	42.8 (2.17)	40.3 (2.23)	47.1 (2.33)	43.8 (1.74)	44.8 (1.78)	44.8 (1.70)
50 or Older	49.0 (4.66)	49.0 (4.74)	44.6 (4.48)	49.7 (4.14)	38.2 (3.62)	50.7 (4.21)	47.3 (3.15)	46.0 (3.25)	42.6 (3.56)
Prescription Medication	59.7 (1.81)	61.1 (1.77)	61.0 (1.80)	58.2 (1.80)	57.8 (1.65)	62.1 (1.91)	61.4 (1.42)	57.3 (1.43)	58.0 (1.42)
18-25	35.9 (2.12)	43.4 (2.22)	44.0 (2.31)	41.0 (2.22)	45.5 (2.09)	46.2 (2.21)	42.4 (2.02)	40.0 (2.03)	41.1 (2.00)
26-49	60.1 (2.22)	59.5 (2.17)	61.2 (2.15)	57.2 (2.26)	58.7 (2.25)	60.7 (2.42)	60.1 (1.79)	58.2 (1.78)	59.1 (1.68)
50 or Older	71.5 (4.32)	72.6 (4.00)	68.4 (4.10)	68.1 (3.76)	61.9 (3.66)	71.3 (3.74)	72.9 (2.89)	65.6 (3.27)	67.4 (3.29)

Table A.27B Type of Mental Health Services Received in the Past Year among Adults Aged 18 or Older, by Past Year Level of Mental Illness and Age Group

AMI = any mental illness; SMI = serious mental illness.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown mental health service information were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

<sup>1</sup> Respondents could indicate multiple service sources; thus, these response categories are not mutually exclusive.

# Table A.28B Co-Occurring Substance Use Disorder (SUD) and Major Depressive Episode (MDE) and Co-Occurring SUD and MDE with Severe Impairment in the Past Year among Youths Aged 12 to 17

SUD and MDE	12 to 17
MDE and SUD	1.4 (0.11)
MDE with Severe Impairment <sup>1</sup> and SUD	1.1 (0.10)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year MDE data were excluded.

<sup>1</sup> Impairment is based on the Sheehan Disability Scale (SDS) role domains, which measure the impact of a disorder on a youth's life. Impairment is defined as the highest severity level of role impairment across four domains: (1) chores at home, (2) school or work, (3) close relationships with family, and (4) social life. Ratings  $\geq$  7 on a 0 to 10 scale were considered Severe Impairment. Respondents with unknown impairment data were excluded.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.29B Substance Use Disorder (SUD) and Past Year Major Depressive Episode (MDE) among Youths Aged 12 to 17, by SUD and MDE Status

Outcome	SUD	No SUD	MDE	No MDE
SUD	100.0 (0.00)	da	10.8 (0.83)	3.2 (0.19)
MDE	33.0 (2.12)	11.9 (0.32)	100.0 (0.00)	da

da = does not apply.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown past year MDE data were excluded.

Substance	Total <sup>1</sup>	MDE	No MDE
PAST YEAR USE			
Illicit Drugs	15.8 (0.35)	31.7 (1.25)	13.4 (0.36)
Marijuana	12.0 (0.31)	24.3 (1.14)	10.1 (0.31)
Cocaine	0.5 (0.07)	1.1 (0.27)	0.4 (0.07)
Crack	0.0 (0.02)	0.1 (0.09)	0.0 (0.01)
Heroin	0.1 (0.02)	0.1 (0.05)	0.0 (0.02)
Hallucinogens	1.8 (0.13)	4.1 (0.52)	1.5 (0.13)
LSD	0.8 (0.08)	1.3 (0.30)	0.7 (0.08)
PCP	0.1 (0.02)	0.2 (0.08)	0.1 (0.02)
Ecstasy	0.7 (0.08)	1.9 (0.37)	0.5 (0.08)
Inhalants	2.2 (0.14)	5.1 (0.59)	1.8 (0.13)
Methamphetamine	0.1 (0.03)	0.2 (0.08)	0.1 (0.03)
Misuse of Psychotherapeutics	5.3 (0.21)	13.3 (0.91)	4.0 (0.21)
Pain Relievers	3.5 (0.17)	9.2 (0.80)	2.6 (0.17)
Tranquilizers	1.7 (0.13)	4.8 (0.59)	1.2 (0.11)
Stimulants	1.7 (0.14)	4.6 (0.59)	1.3 (0.12)
Sedatives	0.4 (0.06)	1.4 (0.27)	0.2 (0.05)
Opioids (Heroin Use or Pain Reliever Misuse)	3.6 (0.17)	9.2 (0.80)	2.7 (0.17)
PAST MONTH USE			
Daily Cigarette Use	0.5 (0.06)	0.9 (0.20)	0.4 (0.07)
Heavy Alcohol Use	0.8 (0.09)	1.7 (0.35)	0.6 (0.08)

<b>Table A.30B</b> Substance Use in the Past Year and Past Month amon	g Youths Aged 12 to 17, by Past Year Major Depressive Episode (MDE)

LSD = lysergic acid diethylamide; PCP = phencyclidine.

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.

<sup>1</sup> Estimates in the Total column represent all youths aged 12 to 17, including those with unknown past year MDE information.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

Table A.31B Received Substance Use Treatment at a Specialty Facility and/or Mental Health Services in Past Year among Youths Aged 12 to 17, by Past Yea	r Substance Use
Disorder (SUD) and Major Depressive Episode (MDE) Status	

Past Year SUD Status/MDE Status	Received Substance Use Treatment at a Specialty Facility OR Mental Health Services	Received Substance Use Treatment at a Specialty Facility but Not Mental Health Services	Received Mental Health Services but Not Substance Use Treatment at a Specialty Facility	Received Substance Use Treatment at a Specialty Facility AND Mental Health Services
SUD and MDE	71.9 (3.83)	1.5 (0.99)	65.8 (4.00)	4.6 (1.52)
SUD and No MDE	37.1 (2.68)	3.5 (1.19)	30.5 (2.66)	3.1 (0.84)
MDE and No SUD	52.6 (1.35)	0.0 (0.01)	52.6 (1.35)	0.0 (0.02)
No SUD and No MDE	18.8 (0.40)	0.0 (0.01)	18.7 (0.39)	0.0 (0.02)

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: Respondents with unknown information on mental health service were excluded.

SUD Status and Level of Mental Illness	18 or Older	18 to 25	26 to 49	50 or Older
SUD and AMI	3.4 (0.10)	6.1 (0.24)	4.5 (0.18)	1.5 (0.14)
SUD and SMI	1.1 (0.06)	2.1 (0.14)	1.4 (0.10)	0.4 (0.07)
SUD and AMI Excluding SMI	2.3 (0.08)	4.1 (0.20)	3.1 (0.14)	1.1 (0.12)

#### Table A.32B Co-Occurring Past Year Substance Use Disorder and Level of Mental Illness Status in the Past Year among Adults Aged 18 or Older, by Age Group

AMI = any mental illness; SMI = serious mental illness; SUD = substance use disorder.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.33B Level of Mental Illness in the Past Year among Adults Aged 18 or Older, by Past Year Substance Use Disorder Status and Age Group

Level of Mental Illness/SUD Status	18 or Older	18 to 25	26 to 49	50 or Older
AMI				
SUD	43.3 (1.03)	40.6 (1.27)	47.9 (1.41)	37.0 (2.80)
No SUD	16.1 (0.24)	18.8 (0.44)	18.3 (0.32)	13.6 (0.40)
SMI				
SUD	13.8 (0.69)	13.6 (0.87)	15.3 (0.95)	11.0 (1.77)
No SUD	3.4 (0.12)	4.5 (0.22)	4.3 (0.17)	2.4 (0.19)
AMI EXCLUDING SMI				
SUD	29.5 (0.91)	27.0 (1.14)	32.7 (1.24)	26.0 (2.52)
No SUD	12.7 (0.22)	14.3 (0.38)	14.0 (0.29)	11.2 (0.37)

AMI = any mental illness; SMI = serious mental illness; SUD = substance use disorder.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.34B Substance Use Disorder in the Past Year among Adults Aged 18 or Older, by Past Year Level of Mental Illness and Age Group

Level of Mental Illness	18 or Older	18 to 25	26 to 49	50 or Older
AMI	18.5 (0.53)	27.8 (0.94)	21.3 (0.77)	10.3 (0.92)
SMI	25.4 (1.21)	34.9 (1.89)	26.9 (1.58)	16.3 (2.48)
AMI Excluding SMI	16.4 (0.58)	25.2 (1.08)	19.5 (0.82)	8.9 (0.99)
No Mental Illness	5.4 (0.15)	11.6 (0.38)	6.2 (0.22)	3.0 (0.21)

AMI = any mental illness; SMI = serious mental illness.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

# Table A.35B Received Substance Use Treatment at a Specialty Facility and/or Any Mental Health Services in Past Year among Adults Aged 18 or Older with Past Year Substance Use Disorder, by Past Year Level of Mental Illness and Age Group

Level of Mental Illness/Age Group	Received Substance Use Treatment at a Specialty Facility or Mental Health Services	Received Substance Use Treatment at a Specialty Facility but Not Mental Health Services	Received Mental Health Services but Not Substance Use Treatment at a Specialty Facility	Received Substance Use Treatment at a Specialty Facility and Mental Health Services
ANY MENTAL ILLNESS	48.1 (1.48)	2.9 (0.45)	38.2 (1.41)	6.9 (0.75)
18-25	42.0 (2.05)	3.1 (0.61)	35.1 (2.04)	3.8 (0.68)
26-49	47.9 (1.75)	2.8 (0.54)	37.0 (1.64)	8.0 (0.99)
50 or Older	56.3 (4.87)	3.0 (1.58)	45.1 (4.73)	8.1 (2.53)
SERIOUS MENTAL ILLNESS	65.6 (2.27)	2.3 (0.66)	51.2 (2.51)	12.0 (1.77)
18-25	55.7 (3.54)	2.3 (1.05)	49.6 (3.74)	3.8 (1.05)
26-49	69.0 (2.85)	2.2 (0.75)	54.1 (2.99)	12.7 (1.97)
50 or Older	** (**)	** (**)	** (**)	** (**)

\*\* Low precision; no estimate reported.

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown mental health services information were excluded

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016.

#### Table A.36B Had Serious Thoughts of Suicide in the Past Year among Adults Aged 18 or Older, by Age Group

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	3.7 (0.13)	3.7 (0.13)	3.8 (0.14)	3.7* (0.13)	3.9 (0.13)	3.9 (0.14)	3.9 (0.12)	4.0 (0.12)	4.0 (0.11)
18-25	6.8* (0.23)	6.1* (0.20)	6.7* (0.22)	6.8* (0.25)	7.2* (0.23)	7.4* (0.24)	7.5* (0.25)	8.3 (0.26)	8.8 (0.28)
26-49	4.0 (0.19)	4.3 (0.20)	4.1 (0.20)	3.7* (0.17)	4.2 (0.21)	4.0 (0.21)	4.0 (0.17)	4.1 (0.17)	4.2 (0.16)
50 or Older	2.3 (0.23)	2.3 (0.23)	2.6 (0.22)	2.6 (0.23)	2.4 (0.21)	2.7 (0.26)	2.7 (0.18)	2.6 (0.19)	2.4 (0.17)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown suicide information were excluded.

\* Difference between estimate and 2016 estimate is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2008-2016.

#### Table A.37B Made Any Suicide Plans in the Past Year among Adults Aged 18 or Older, by Age Group

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	1.0 (0.07)	1.0 (0.07)	1.1 (0.07)	1.0 (0.07)	1.1 (0.07)	1.1 (0.07)	1.1 (0.06)	1.1 (0.06)	1.1 (0.05)
18-25	2.0* (0.12)	2.0* (0.12)	1.9* (0.12)	1.9* (0.13)	2.4* (0.14)	2.5 (0.14)	2.3* (0.14)	2.7 (0.16)	2.9 (0.16)
26-49	1.1 (0.10)	1.0* (0.10)	1.0* (0.09)	1.1 (0.10)	1.3 (0.12)	1.3 (0.12)	1.1 (0.09)	1.1* (0.08)	1.3 (0.09)
50 or Older	0.7 (0.12)	0.6 (0.12)	0.9* (0.14)	0.7 (0.11)	0.6 (0.10)	0.6 (0.09)	0.7* (0.09)	0.7 (0.09)	0.5 (0.07)

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown suicide information were excluded.

\* Difference between estimate and 2016 estimate is statistically significant at the .05 level.

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016
18 or Older	0.5 (0.05)	0.5 (0.04)	0.5 (0.05)	0.5 (0.05)	0.6 (0.04)	0.6 (0.05)	0.5 (0.03)	0.6 (0.04)	0.5 (0.04)
18-25	1.2* (0.10)	1.1* (0.09)	1.2* (0.09)	1.2* (0.10)	1.5 (0.12)	1.3* (0.10)	1.2* (0.10)	1.6 (0.13)	1.8 (0.13)
26-49	0.4 (0.07)	0.5 (0.06)	0.4 (0.06)	0.5 (0.07)	0.5 (0.08)	0.6 (0.09)	0.5 (0.06)	0.5 (0.06)	0.5 (0.05)
50 or Older	0.3 (0.08)	0.2 (0.06)	0.3 (0.08)	0.3 (0.08)	0.3 (0.06)	0.3 (0.07)	0.2 (0.04)	0.3 (0.07)	0.2 (0.06)

#### Table A.38B Attempted Suicide in the Past Year among Adults Aged 18 or Older, by Age Group

NOTE: Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown suicide information were excluded.

\* The difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2008-2016.

### Table A.39B Suicidal Thoughts, Plans, and Attempts in the Past Year among Adults Aged 18 or Older

Suicide Behavior	Aged 18 or Older, Numbers <sup>1</sup>	Percentage among Adults Aged 18 or Older <sup>2</sup>
Had Serious Thoughts of Suicide	9,829 (267)	4.0 (0.11)
Made Suicide Plans	2,756 (127)	1.1 (0.05)
Attempted Suicide	1,319 (96)	0.5 (0.04)
Made Suicide Plans	1,046 (82)	0.4 (0.03)
Did Not Make Suicide Plans	273 (51)	0.1 (0.02)

<sup>1</sup> Estimates shown are numbers in thousands with standard errors included in parentheses.

 $^{2}\,$  Estimates shown are percentages with standard errors included in parentheses.

NOTE: Respondents with unknown suicide information were excluded.

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