From: Dustin Pusch [redacted]
Date: Thursday, May 21, 2020 at 2:44 PM
To: Jim McLaughlin [redacted]
Cc: Kalea Seitz Clark [redacted], "Leen, Jeff" [redacted], Thomas Clare [redacted]
Subject: Re: Correction Request

Dear Jim,

Please see the attached letter from Tom Clare responding to your May 7 email. We look forward to your response.

Hope you and your family are staying healthy and safe.

Sincerely,

Dustin A. Pusch | Associate
CLARE LOCKE LLP
10 Prince Street | Alexandria, Virginia 22314
[redacted] | www.clarelocke.com

From: Thomas Clare [redacted]
Date: Wednesday, May 13, 2020 at 1:00 PM
To: Jim McLaughlin [redacted]
Cc: Kalea Seitz Clark [redacted], "Leen, Jeff" [redacted]
Subject: Re: Correction Request

Thanks Jim. I'll definitely be back to you with additional information responsive to the issues and sources you've identified. I'll be back in touch soon. Best, Tom

Thomas A. Clare, P.C. | Partner
CLARE LOCKE LLP

10 Prince Street | Alexandria, Virginia 22314
[redacted]
[redacted] www.clarelocke.com

From: Jim McLaughlin [redacted]
Date: Thursday, May 7, 2020 at 6:38 PM
To: Tom Clare [redacted]
Cc: Kalea Seitz Clark [redacted], "Leen, Jeff" [redacted]
Subject: Re: Correction Request

Tom,

In response to your email, the Post's investigations editor Jeff Leen (copied) and reporter Sari Horwitz closely reviewed the statement that "millions" of people became addicted to OxyContin. They believe the statement is amply supported by the available evidence, some of which is summarized below. Nevertheless, if you have specific supporting documents or data you want to bring to their attention, they're also willing to review those.

Among the data points that Jeff noted in his review:

- A 2009 medical journal article available at the NIH website reported: "By 2002, OxyContin accounted for 68% of oxycodone sales. **Lifetime nonmedical use of OxyContin increased from 1.9 million to 3.1 million people between 2002 and 2004, and in 2004 there were 615,000 new nonmedical users of OxyContin.** By 2004, OxyContin had become the most prevalent prescription opioid abused in the United States." (emphasis added, article available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2622774/) The "nonmedical" use of OxyContin by 3.1 million even as of 2004 -- 16 years ago -- strongly suggests that the total number who have been addicted to the drug at one time or another over the course of nearly 25 years is in the millions.

- By all accounts, including Purdue Pharma's, sales of OxyContin skyrocketed in the late 1990s and early 2000s. The article above, for instance, notes that "Purdue's promotion of OxyContin for the treatment of non-cancer-related pain contributed to a nearly tenfold increase in OxyContin prescriptions for this type of pain, from about 670,000 in 1997 to about 6.2 million in 2002"). Those figures do not include illicit and/or diverted use of OxyContin.
- The National Institute of Drug Abuse estimates that at least 8 to 12 percent of patients who are prescribed opioids experience problems with addiction. Given that estimate, and the number of OxyContin prescriptions (6.2 million for non-cancer pain in 2002 *alone*) -- and noting, again, that the actual number of users was higher than would be reflected in prescription stats -- we believe there's substantiation for the conclusion that "millions" became addicted when referring to the entire history of the drug.
- The 2015 National Survey on Drug Use and Health (attached) found that, in the preceding 12 months, an estimated 1.7 million people had "misused" OxyContin. (Note that this figure was for OxyContin specifically, not other forms of oxycodone.) *See* p. 39, Table B.4. Even accepting that not all misuse amounts to addiction, the figure of 1.7 million people misusing the drug *for just that one year* seems to us to be strong evidence that the total who became addicted over the nearly 25-year life of the drug was in the millions.
- We acknowledge that OxyContin amounted to only about 4 percent of the total US opioid market in the 2006-12 period for which ARCOS data are available. But the Post's reporting, as well as numerous secondary sources like the article quoted above, suggest that the figure was much higher in earlier years, with the 2006-12 period reflecting, in part, changes in Purdue Pharma's practices after paying a $600 million fine in 2007. In any event, a relatively small market share in later years does not disprove the "millions" reference considering the huge number of people who have used opioid pills over the past quarter century.
- All of the statistics cited above refer only to the impact of OxyContin on the United States; the universe of addicts expands greatly when worldwide opioid abuse is considered. In 2016 alone, for example, the World Health Organization estimated that 27 million people worldwide were diagnosed with opioid use disorder (addiction). See https://www.who.int/substance_abuse/information-sheet/en/. Given Purdue's role in the promotion and marketing of OxyContin for chronic pain beginning in 1996, there is a strong argument, supported by the DOJ settlement agreement and fine in 2007, that Purdue has played a large role in the prevalence of opioids worldwide.

For all of these reasons, at this point, we don't believe a correction of "millions" is required. As I said, though, we'll review with an open mind any contrary evidence you want to submit. I'm also available to discuss it with you.

Best,

Jim

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James A. McLaughlin

Deputy General Counsel & Director of Government Affairs

The Washington Post

One Franklin Square, N.W. • Washington, D.C. 20071

[redacted]

[redacted]

From: McLaughlin, James [redacted]
Sent: Tuesday, May 5, 2020 11:35 AM
To: Tom Clare [redacted]
Cc: Clark, Kalea [redacted]
Subject: Re: Correction Request

Tom,

We'll bring this to the attention of the appropriate newsroom folks. I'm not sure who wrote the piece either, but we can figure that out. We'll also probably need to loop in an editor or editors who were involved more substantively in the opioid coverage. Stay tuned.

I'm glad to hear you and Libby are hanging in there. I think we're all a little frayed at the edges by now, but good to hear you're staying healthy and sane!

Best,

Jim

****

James A. McLaughlin

Deputy General Counsel & Director of Government Affairs

The Washington Post

One Franklin Square, N.W. • Washington, D.C. 20071

[redacted]

[redacted]

From: Tom Clare [redacted]
Sent: Tuesday, May 5, 2020 10:51 AM
To: McLaughlin, James [redacted]; Clark, Kalea
[redacted]
Subject: Correction Request

CAUTION: EXTERNAL SENDER

Hi Jim and Kalea:

I hope you and your families are all safe and healthy – and that remote working / distance learning / sheltering-in-place is allowing for some measure of sanity. Libby and I are managing it all pretty well, although we certainly have our moments.

I'm writing with (what I hope to be) a non-controversial correction request. We saw this post announcing the Pultizer Prize winners/finalist and wanted to ask that you please correct (or simply remove) the erroneous statement that OxyContin "addicted millions." OxyContin has never been more than 4% of the prescription opioid market and there is no factual basis for the false assertion that the medicine "addicted millions." It also contradicts the Post's own reporting on these issues, specifically with regard to the ARCOS data). Please let me know if you need any further information or data around this; I'd be happy to pull it together if needed.

Normally, the communications team would have sent this directly to the byline reporter or editor for discussion, but no contact was given for this write-up, so I was hoping that one of you could route it to the appropriate person for review.

Many thanks,

Tom

Thomas A. Clare, P.C. | Partner
CLARE LOCKE LLP
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Substance Abuse and Mental Health Services Administration
SAMHSA
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)
National Survey on Drug Use and Health
NSDUH DATA REVIEW
September 2016

Prescription Drug Use and Misuse in the United States: Results from the 2015 National Survey on Drug Use and Health

Authors

SAMHSA: Arthur Hughes, Matthew R. Williams, Rachel N. Lipari, and Jonaki Bose; RTI International: Elizabeth A. P. Copello and Larry A. Kroutil

Abstract

Background. Misuse of prescription psychotherapeutic drugs is second only to marijuana as the nation's most prevalent illicit drug use issue. In 2015, the National Survey on Drug Use and Health (NSDUH) questionnaire was redesigned regarding the data collection regarding four categories of prescription psychotherapeutic drugs: pain relievers, tranquilizers, stimulants, and sedatives. For the first time, NSDUH respondents were asked to report about *any* past year use of prescription drugs, which includes the use of one's own prescription medication as directed by a doctor, as well as misuse. In addition, misuse was redefined in 2015 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.

Methods. This report presents 2015 NSDUH findings for people aged 12 or older regarding the past year use or misuse of prescription psychotherapeutic drugs and related topics. Estimates for selected outcomes are presented by age, gender, race, Hispanic origin, and county type. Statistically significant differences are noted within selected subgroups.

Results. In 2015, an estimated 119.0 million Americans aged 12 or older used prescription psychotherapeutic drugs in the past year, representing 44.5 percent of the population. About 97.5 million people used pain relievers (36.4 percent), 39.3 million used tranquilizers (14.7 percent), 17.2 million used stimulants (6.4 percent), and 18.6 million used sedatives (6.9 percent). In 2015, 18.9 million people aged 12 or older (7.1 percent) misused prescription psychotherapeutic drugs in the past year. This number included 12.5 million people who misused pain relievers in the past year (4.7 percent), 6.1 million who misused tranquilizers (2.3 percent), 5.3 million who misused stimulants (2.0 percent), and 1.5 million who misused sedatives (0.6 percent). However, most people (84.1 percent) who used prescription drugs in the past year did not misuse them.

Past year users of other substances were more likely than people aged 12 or older to have misused prescription drugs. For example, 72.1 percent of past year heroin users and 5.9 percent of past year alcohol users misused pain relievers in the past year. Adults aged 18 or older who did not have mental illness in the past year were less likely than adults with mental illness to have misused prescription drugs in the past year.

In 2015, 2.1 million people aged 12 or older were recent initiates for pain reliever misuse (i.e., misused for the first time in the past year), 1.4 million were recent initiates for tranquilizer misuse, 1.3 million were recent initiates for stimulant misuse, and 425,000 were recent initiates for sedative misuse. On average, recent initiates aged 12 to 49 initiated the misuse of prescription drugs in their early to late 20s.

About 1.0 percent of people aged 12 or older (2.7 million) had a prescription drug use disorder in the past year, including 2.0 million people with a pain reliever use disorder, 688,000 with a tranquilizer use disorder, 426,000 with a stimulant use disorder, and 154,000 with a sedative use disorder. In 2015, as part of their most recent substance use treatment, 822,000 people received treatment for the misuse of pain relievers, 293,000 people received treatment for tranquilizer misuse, 139,000 received treatment for stimulant misuse, and 116,000 received treatment for sedative misuse.

Among people aged 12 or older who misused prescription pain relievers in the past year, the most commonly reported reason for their last misuse was to relieve physical pain (62.6 percent). Among past year misusers of tranquilizers, the most commonly reported reasons were to relax or relieve tension (44.9 percent) or to help with sleep (20.4 percent). Commonly reported reasons for misuse among stimulant misusers were to help be alert or stay awake, help concentrate, or help study (26.8, 26.5, and 22.5 percent, respectively). Among past year sedative misusers, the most common reason was to help with sleep (71.7 percent). Even if people misused prescription drugs for conditions for which these drugs are typically prescribed (e.g., for pain relief or to help with sleep), use without one's own prescription or use more often or at a higher dosage than prescribed nevertheless constitutes misuse.

Among people aged 12 or older who misused pain relievers in the past year, the most common source for the last pain reliever that was misused was from a friend or relative (53.7 percent), and about one third misused a prescription from one doctor. About 1 in 20 people who misused pain relievers bought the last pain reliever they misused from a drug dealer or stranger.

Conclusions. Compared with prior NSDUH data collection efforts, collecting more detailed information on the use and misuse of a comprehensive set of prescription drugs was determined to be more useful for policy and research purposes. The 2015 estimates provide a more nuanced understanding of prescription drug misuse in the United States.

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Introduction

Misuse of prescription psychotherapeutic drugs is second only to marijuana as the nation's most prevalent illicit drug use issue.[1] Highlighting this critical issue with the most current and accurate information on the nature and extent of prescription drug misuse will help policymakers understand and refine substance use prevention and treatment strategies.

The National Survey on Drug Use and Health (NSDUH) collects data on four main categories of prescription psychotherapeutic drugs: pain relievers, tranquilizers, stimulants, and sedatives. Although comparability of substance use measures across time is one of the strengths of NSDUH, prescription drug measures must be updated periodically as new drugs are introduced, new formulations of existing drugs are approved by the U.S. Food and Drug Administration (FDA), drugs are discontinued, controls for prescribing practices are revised, and drugs are switched from prescription to over-the-counter status. In 2015, the NSDUH questionnaire underwent a partial redesign that included changes to the prescription drug questions. Several key enhancements to the NSDUH prescription drug questions are described below and are discussed further in the section titled "New Directions in Measuring Prescription Drug Use and Misuse in the 2015 NSDUH" and in **Appendix A**.

- New questions were added for *any* use of specific prescription drugs.
- The reference period for questions about the misuse of specific prescription drugs changed from the lifetime to the past year period (i.e., the 12 months prior to the interview date).
- New questions were added for the reasons why people misused.
- A new section of the interview was created for methamphetamine use, such that methamphetamine is no longer included in estimates for prescription stimulants.
- A new prescription drug questionnaire format was implemented.

Because of the changes to the prescription drug questions (see **Appendix A** for more details), the 2015 prescription drug data constitute a new baseline for tracking trends in the use *and* misuse of prescription drugs over time. This report contains the first release of findings from the 2015 NSDUH for the use and misuse of prescription drugs in the past year among the civilian, noninstitutionalized population of the United States aged 12 or older. Comprehensive 2015 NSDUH detailed tables that show additional prescription drug estimates are available separately at https://www.samhsa.gov/data/.[2]

Change in Terminology from "Nonmedical Use" to "Misuse"

Prior to 2015, NSDUH used the term "nonmedical use" of prescription drugs, which was defined as use of prescription drugs that were not prescribed for an individual or were taken only for the experience or feeling that the drugs caused. However, there were challenges and issues associated with the measurement of this concept.[3] One concern, for example, was that the phrase "for the experience or feeling it caused" may erroneously capture reports of legitimate use based on the intended effects of the drug, such as pain relief.[4] A further concern was whether the term "nonmedical use" appropriately describes use of prescription drugs that individuals took to treat a condition for which the medications are typically prescribed (e.g., nonprescription use of opioid pain relievers to relieve physical pain) but were prescribed for someone else.[5] In addition, the definition did not specifically include the criterion of overuse of prescribed medication, which is particularly important for prescription pain relievers.

To address these shortcomings, the 2015 prescription drug questions were revised to ask survey respondents about the use of prescription drugs "in any way that a doctor did not direct you to use them," including (1) use without a prescription of the respondent's own; (2) use in greater amounts, more often, or longer than the respondent was told to take them; or (3) use in any other way a doctor did not direct the respondent to use them. Along with changes to the definition of misuse, NSDUH reports and tables no longer use the term "nonmedical use" and instead use the term "misuse." Additional details on changes to the prescription drug questions and the implications for analysis are provided in **Appendix A**.

Survey Background

NSDUH is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years old or older.[6] The survey is sponsored by the Substance Abuse and Mental Health Services Administration (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 2015 NSDUH annual target sample size of 67,500 interviews was distributed across three age groups, with 25 percent allocated to adolescents aged 12 to 17, 25 percent allocated to young adults aged 18 to 25, and 50 percent allocated to adults aged 26 or older.[7]

NSDUH is a face-to-face household interview survey that is conducted in two phases: the screening phase and the interview phase. The interviewer conducts a screening of the eligible 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.[8] NSDUH collects data using audio computer-assisted self interviewing (ACASI) in which respondents read or listen to the questions on headphones and then enter their answers directly into a NSDUH laptop computer. ACASI is designed for accurate reporting of information by providing respondents with a highly private and confidential mode for responding to questions about illicit drug use, mental health, and other sensitive behaviors. NSDUH also uses computer-assisted personal interviewing (CAPI) in which interviewers read less sensitive questions to respondents and enter the respondents' answers into a NSDUH laptop computer.

In 2015, screening was completed at 132,210 addresses, and 68,073 completed interviews were obtained, including 16,955 interviews from adolescents aged 12 to 17 and 51,118 interviews from adults aged 18 or older. Weighted response rates for household screening and for interviewing were 79.7 and 69.3 percent, respectively, for an overall response rate of 55.2 percent for people aged 12 or older. The weighted interview response rates were 77.7 percent for adolescents and 68.4 percent for adults.[9] Further details about the 2015 NSDUH design and methods can be found on the web at https://www.samhsa.gov/data/.[10]

Notable 2015 NSDUH Questionnaire Changes

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. As noted previously, the prescription drug questions were redesigned to shift the focus from lifetime misuse to past year misuse. Additionally, questions were added about any past year prescription drug use rather than just misuse. New methamphetamine questions were added, replacing the methamphetamine questions that were previously asked within the context of prescription stimulants. Substantial changes were also made to questions about smokeless tobacco, binge alcohol use, inhalants, and hallucinogens. These changes led to potential breaks in the comparability of 2015 estimates with estimates from prior years. Consequently,

these changes potentially affected overall summary measures, such as illicit drug use, and other measures, such as initiation, substance use disorder, and substance use treatment. Additionally, certain demographic items were changed as part of the partial redesign. Education questions were updated, and new questions were added on disability, English-language proficiency, sexual orientation of adults, and military families.

Due to these changes, only 2015 data are presented for certain estimates until comparability with prior years can be established. Trends will continue to be presented for items that are assumed to have remained comparable with earlier years. Details on the 2015 NSDUH questionnaire changes, reasons for the changes, and implications of the changes for NSDUH data users are summarized in a brief report on these questionnaire changes, in a report on the design changes for the 2014 and 2015 NSDUHs, and in the methodological summary and definitions report for 2015.[11,12,13]

Data Presentation and Interpretation

Prescription drug use and misuse estimates are presented for people aged 12 or older, adolescents aged 12 to 17, and adults aged 18 or older. Estimates are based on 2015 NSDUH data, and results are presented separately by age group, gender, racial/ethnic groups,[14] region of the country,[15] and the type of county in which individuals reside.[16] This report focuses on presenting the 2015 estimates and comparing estimates among people in different demographic and geographic subgroups.

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 reliability. Estimates that do not meet these criteria for reliability have been suppressed and are not shown.[17] 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," "more likely," or "less likely." Statements use terms such as "similar" or "the same" when a difference is not statistically significant. Graphics and tables contain estimates that support the statements in this report, and supplemental tables of estimates (including standard errors) are provided in **Appendix B**.

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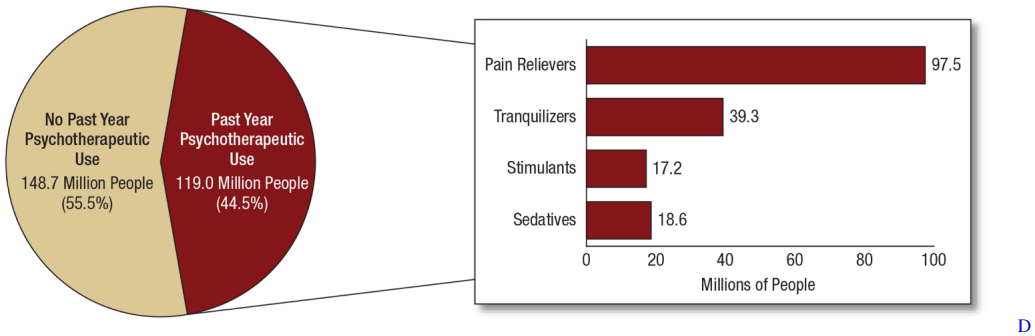
Use of Prescription Drugs

The four categories of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives) cover numerous medications that currently are or have been available by prescription. NSDUH reports and tables combine these four prescription drug categories into a group referred to as "psychotherapeutics." *Prescription pain relievers* include opioids such as hydrocodone (e.g., Vicodin®), oxycodone (e.g., OxyContin® and Percocet®), and morphine. Opioid pain relievers act in the central nervous system to reduce the perception of pain. Questions about specific pain relievers in NSDUH focus only on opioid pain relievers. However, respondents may specify that they misused other nonopioid pain relievers that require a prescription. *Prescription tranquilizers* are often prescribed for anxiety relief or to relieve muscle spasms. These include benzodiazepine drugs such as alprazolam (e.g., Xanax®), muscle relaxants such as Soma®, and other prescription tranquilizers. *Prescription stimulants* are often prescribed for the treatment of attention-deficit hyperactivity disorder (ADHD) or obesity. For example, amphetamines (e.g., Adderall®) and methylphenidate (e.g., Ritalin®) are prescribed for ADHD. Although originally developed as a prescription stimulant, methamphetamine is no longer asked about in NSDUH as a prescription stimulant because it tends to be illegally manufactured and distributed. *Prescription sedatives* are often prescribed for the relief of sleep disorders such as insomnia. Zolpidem (e.g., Ambien®) is an example of a prescription sedative. For the first time, NSDUH respondents in 2015 were asked to report *any* past year use of these drugs, including the use of one's own prescription medication as directed by a doctor as well as misuse.

Any Past Year Use of Prescription Psychotherapeutics

Use of prescription psychotherapeutic drugs in the past year was fairly common in the United States. In 2015, an estimated 119.0 million Americans aged 12 or older were past year users of prescription psychotherapeutic drugs, representing 44.5 percent of the population (**Figure 1**).

Figure 1. Numbers of Past Year Prescription Psychotherapeutic Users among People Aged 12 or Older: 2015



D

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 past year users of different psychotherapeutics are not mutually exclusive because people could have used more than one type of psychotherapeutic in the past year.

Of the four categories of prescription psychotherapeutic drugs presented in this report (i.e., pain relievers, tranquilizers, stimulants, and sedatives), prescription pain relievers were the most commonly used (**Figure 1**). Approximately 97.5 million people aged 12 or older were past year users of prescription pain relievers in 2015, representing more than one third (36.4 percent) of the population aged 12 or older. In addition, approximately 39.3 million people were past year users of prescription tranquilizers in 2015, representing 14.7 percent of people aged 12 or older. Approximately 17.2 million people were past year users of prescription stimulants in 2015, representing 6.4 percent of the

population aged 12 or older. Approximately 18.6 million people were past year users of prescription sedatives in 2015, representing 6.9 percent of the population aged 12 or older.

By Age Group

Of the 119.0 million past year users of prescription psychotherapeutic drugs in 2015, 7.0 million were youths aged 12 to 17 (28.1 percent of youths), 15.5 million were young adults aged 18 to 25 (44.3 percent of young adults), and 96.6 million were adults aged 26 or older (46.4 percent of adults in this age group) (**Table B.2** in **Appendix B**). Among the 97.5 million past year users of prescription pain relievers, 5.7 million were youths (22.7 percent), 12.1 million were young adults (34.8 percent), and 79.7 million were adults aged 26 or older (38.3 percent). Adults aged 26 or older were more likely than youths or young adults to have used prescription pain relievers in the past year.

Of the 39.3 million past year users of tranquilizers, 1.1 million were youths aged 12 to 17 (4.3 percent of youths), 4.2 million were young adults aged 18 to 25 (12.1 percent of young adults), and 34.0 million were adults aged 26 or older (16.4 percent of adults in this age group) (**Table B.2**). Adults aged 26 or older were more likely than youths or young adults to have used prescription pain tranquilizers in the past year.

Of the 17.2 million past year users of prescription stimulants, 1.8 million were youths aged 12 to 17 (7.3 percent of youths), 4.9 million were young adults aged 18 to 25 (14.1 percent of young adults), and 10.5 million were adults aged 26 or older (5.0 percent of adults in this age group) (**Table B.2**). Unlike the patterns for pain relievers and tranquilizers, young adults were more likely than youths or adults aged 26 or older to have used stimulants in the past year.

Of the 18.6 million past year users of prescription sedatives, 0.6 million were youths aged 12 to 17 (2.4 percent of youths), 1.3 million were young adults aged 18 to 25 (3.8 percent of young adults), and 16.6 million were older adults aged 26 or older (8.0 percent of older adults) (**Table B.2**). Thus, the overall estimate of 6.9 percent of people aged 12 or older who used sedatives in the past year was driven by use among adults aged 26 or older.

By Gender

Among the population aged 12 or older in 2015, 47.8 percent of females and 40.9 percent of males used prescription psychotherapeutic drugs in the past year (**Table B.2** in **Appendix B**). Females were more likely than males to have used prescription pain relievers (38.8 vs. 33.9 percent), tranquilizers (17.9 vs. 11.3 percent), and sedatives (8.2 vs. 5.6 percent). However, similar percentages of females and males used prescription stimulants in the past year (6.3 and 6.5 percent, respectively).

By Hispanic Origin and Race

In 2015, 46.1 percent of non-Hispanics aged 12 or older and 36.3 percent of Hispanics in this same age group used prescription psychotherapeutic drugs in the past year (**Table B.2** in **Appendix B**). People aged 12 or older who were not Hispanic were more likely than Hispanics to be past year users for each category of prescription psychotherapeutic drugs (37.6 vs. 30.2 percent for pain relievers, 15.5 vs. 10.3 percent for tranquilizers, 6.7 vs. 4.9 percent for stimulants, and 7.5 vs. 4.2 percent for sedatives).

The past year use of psychotherapeutic drugs in 2015 ranged from 26.7 percent among non Hispanic Asians to 52.9 percent among non-Hispanic individuals who reported two or more races (**Table B.2**). The percentages of people aged 12 or older who used prescription pain relievers in the past year ranged from 22.0 percent of non-Hispanic Asians to 44.8 percent of non-Hispanic people who reported two or more races. The percentages of people aged 12 or older who used prescription tranquilizers in the past year ranged from 4.6 percent of non Hispanic Asians to 17.8 percent of non-Hispanic whites. For prescription stimulants, the percentages of people aged 12 or older who reported use in the past year ranged from 2.9 percent of non-Hispanic Asians to 10.2 percent of non-Hispanic people who reported two or more races. Percentages of people aged 12 or older who used prescription sedatives in the past year ranged from 3.3 percent of non-Hispanic Native Hawaiians or Other Pacific Islanders to 8.3 percent of non-Hispanic whites.

By County Type

Among individuals aged 12 or older in 2015, 42.9 percent of those residing in large metropolitan areas, 46.5 percent of those in small metropolitan areas, and 46.2 percent of those in nonmetropolitan areas used prescription psychotherapeutic drugs in the past year (**Table B.3** in **Appendix B**).[15] An estimated 34.7 percent of the population aged 12 or older in large metropolitan areas, 38.6 percent of those in small metropolitan areas, and 38.5 percent of those in nonmetropolitan areas used prescription pain relievers in the past year. Among individuals aged 12 or older residing in large metropolitan areas, 13.9 percent used prescription tranquilizers in the past year, as did 15.7 percent each for individuals in small metropolitan areas and nonmetropolitan areas. Percentages of individuals aged 12 or older who used prescription stimulants in the past year were 6.4 percent for residents of large metropolitan areas, 6.8 percent of residents of small metropolitan areas, and 5.8 percent of residents of nonmetropolitan areas. Percentages of individuals aged 12 or older who used prescription sedatives in the past year were 6.6 percent for those residing in large metropolitan areas, 7.4 percent for those in small metropolitan areas, and 7.3 percent for those in nonmetropolitan areas.

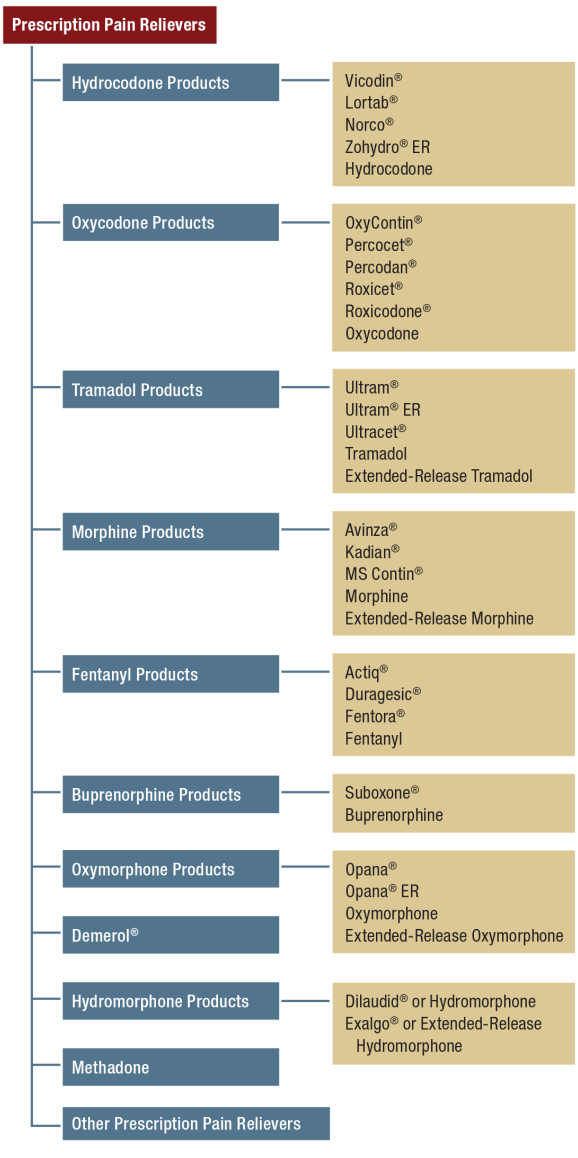
Past Year Use of Subtypes of Prescription Drugs

NSDUH asked respondents in 2015 to identify the specific prescription pain relievers, tranquilizers, stimulants, and sedatives that they used in the past year. Names of similar prescription drugs (e.g., Vicodin®, Lortab®, Norco®, Zohydro® ER, and generic hydrocodone) and electronic images of these drugs were presented to respondents to aid them in recalling which prescription drugs they used. For each prescription psychotherapeutic drug category, these specific prescription drugs were further categorized into subtypes within the overall category. However, estimates typically were not made for the specific prescription drugs that respondents reported using because the data were based on respondent self-reports.[18] Consequently, respondents may have reported that they used a brand name drug whose name they recognized (e.g., Vicodin®) when they may have actually taken the generic equivalent or some other drug containing the same ingredient (e.g., hydrocodone). For classification purposes, however, these reports would be equivalent. For example, respondents who reported the use of the pain relievers Vicodin® or hydrocodone were classified as users of hydrocodone products.

Pain Relievers

The specific pain relievers that individuals used in the past year were categorized into 11 subtypes, such as hydrocodone products (**Figure 2**).[19] In 2015, the most commonly used prescription pain relievers were hydrocodone products, which include Vicodin®, Lortab®, Norco®, Zohydro® ER, and generic hydrocodone (**Table B.4** in **Appendix B**). Approximately 58.3 million people aged 12 or older used hydrocodone products in the past year, representing 21.8 percent of the population. An estimated 27.9 million people aged 12 or older, or 10.4 percent of the population, used oxycodone products in the past year. Oxycodone products include OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, and generic oxycodone. Of the 27.9 million people aged 12 or older who used oxycodone products, 9.1 million used OxyContin®. This number of people who used OxyContin® in the past year represents 3.4 percent of the population aged 12 or older. Estimates for the past year use of buprenorphine products and methadone among people aged 12 or older were 0.9 and 0.6 percent, respectively. These two products are used in medication-assisted treatment to help people reduce or quit their use of heroin or other opiates.

Figure 2. Subtypes of Prescription Pain Relievers in the 2015 NSDUH Questionnaire

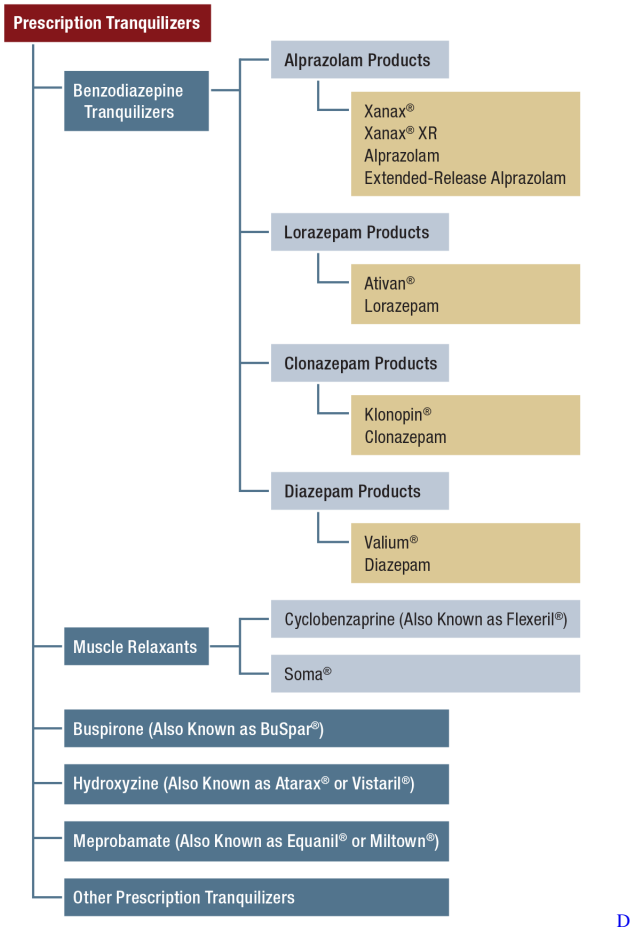


Note: Prescription pain reliever categories shown in the red and blue boxes represent estimates for subtypes that are shown in **Table B.4** in **Appendix B**. Estimates for the specific pain relievers Zohydro® ER and OxyContin® also are shown in **Table B.4**.
Note: Codeine products (e.g., Tylenol® with codeine 3 or 4 and codeine pills) are included in estimates for the Past Year use and misuse of any prescription pain reliever. However, separate estimates were not created for codeine products because of concerns that respondents in 2015 might overreport the use and misuse of codeine products if they confused Tylenol® with codeine 3 or 4 with over-the-counter Tylenol®, which does not require a prescription; changes were made to the 2016 NSDUH questionnaire to emphasize that Tylenol® with codeine 3 or 4 is not the same as over-the-counter Tylenol®.
Note: The following drugs in this figure are generic drugs: Hydrocodone, Oxycodone, Tramadol, Extended-Release Tramadol, Morphine, Extended-Release Morphine, Fentanyl, Buprenorphine, Oxymorphone, Extended-Release Oxymorphone, Hydromorphone, Extended-Release Hydromorphone, and Methadone.

Tranquilizers

The specific tranquilizers that individuals used in the past year were categorized into six subtypes, and some of these six subtypes were further subcategorized (**Figure 3**). For example, one of the six subtypes of tranquilizers was *benzodiazepine tranquilizers*, which was further subcategorized into four types of benzodiazepine tranquilizers, such as *alprazolam products* (e.g., Xanax®, Xanax® ER).[20] The most commonly used prescription tranquilizers among people aged 12 or older in 2015 were benzodiazepine tranquilizers, and the use of benzodiazepine tranquilizers was driven by the use of alprazolam products (**Table B.5** in **Appendix B**). Of the 39.3 million people aged 12 or older who used tranquilizers in the past year, 29.7 million (11.1 percent of the population aged 12 or older) used benzodiazepine tranquilizers, including 17.6 million people who used tranquilizers that contain alprazolam. An estimated 6.6 percent of the population aged 12 or older used alprazolam products.

Figure 3. Subtypes of Prescription Tranquilizers in the 2015 NSDUH Questionnaire



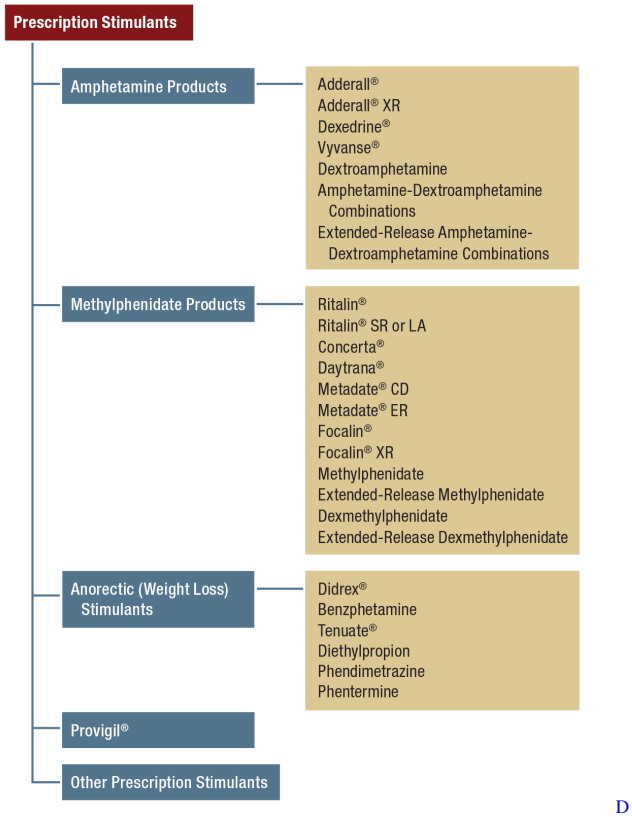
D

Note: Prescription tranquilizer categories shown in the red, blue, and gray boxes represent estimates for subtypes that are shown in **Table B.5** in **Appendix B**.
Note: The following drugs in this figure are generic drugs: Alprazolam, Extended-Release Alprazolam, Lorazepam, Clonazepam, Diazepam, Cyclobenzaprine, Buspirone, Hydroxyzine, and Meprobamate.

Stimulants

The specific stimulants that individuals used in the past year were categorized into the five subtypes that are shown in **Figure 4** and in **Table B.6** in **Appendix B**.[21] The most commonly used subtype of prescription stimulants among people aged 12 or older in 2015 was *amphetamine products*, such as Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, and generic amphetamines.[22] Of the 17.2 million past year users of stimulants aged 12 or older, 11.3 million (or 4.2 percent of the population aged 12 or older) used amphetamine products. In addition, 3.5 million people aged 12 or older used methylphenidate products in the past year.[21] This number represents 1.3 percent of the population aged 12 or older.

Figure 4. Subtypes of Prescription Stimulants in the 2015 NSDUH Questionnaire

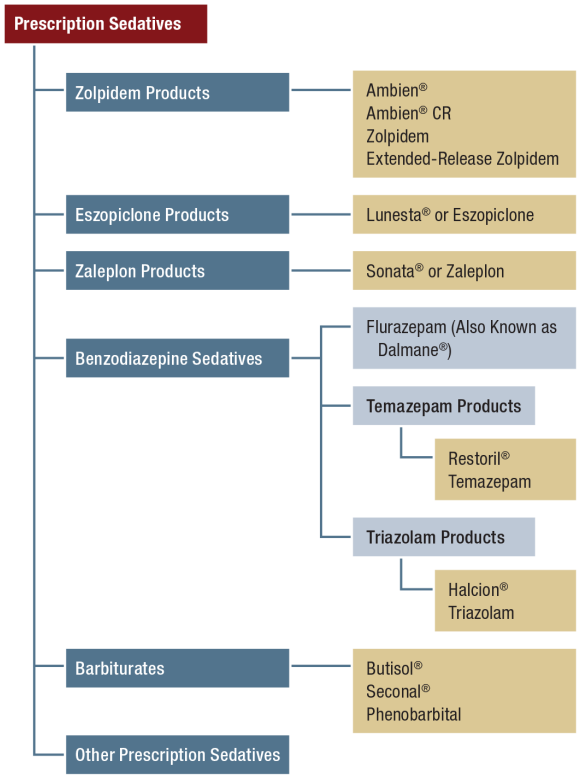


Note: Prescription stimulant categories shown in the red and blue boxes represent estimates for subtypes that are shown in **Table B.6** in **Appendix B**.
Note: Vyvanse® is included with Amphetamine Products because its active ingredient (lisdexamfetamine) is metabolized to dextroamphetamine.
Note: The following drugs in this figure are generic drugs: Dextroamphetamine, Amphetamine-Dextroamphetamine Combinations, Extended-Release Amphetamine-Dextroamphetamine Combinations, Methylphenidate, Extended-Release Methylphenidate, Dexmethylphenidate, Extended-Release Dexmethylphenidate, Benzphetamine, Diethylpropion, Phendimetrazine, and Phentermine.

Sedatives

The specific sedatives that individuals used in the past year were categorized into six subtypes, and one of these subtypes was further subcategorized (**Figure 5**).[23] Specifically, the *benzodiazepine sedatives subtype* was further subcategorized into three subcategories: *flurazepam*, *temazepam products*, and *triazolam products*. In 2015, the most commonly used prescription sedatives were zolpidem products, such as Ambien®, Ambien® CR, generic zolpidem, extended-release generic zolpidem, and similar products (**Table B.7** in **Appendix B**). An estimated 11.5 million people aged 12 or older used zolpidem products in the past year, representing 4.3 percent of the population. Thus, about 60 percent of the 18.6 million past year users of sedatives used zolpidem products in this period. About 2.5 million people (0.9 percent of the population aged 12 or older) used benzodiazepine sedatives. Only 0.2 percent of people aged 12 or older (452,000 people) used barbiturates in the past year.

Figure 5. Subtypes of Prescription Sedatives in the 2015 NSDUH Questionnaire



Note: Prescription sedative categories shown in the red, blue, and gray boxes represent estimates for subtypes that are shown in **Table B.7** in **Appendix B**.
Note: The following drugs in this figure are generic drugs: Zolpidem, Extended-Release Zolpidem, Eszopiclone, Zaleplon, Flurazepam, Temazepam, Triazolam, and Phenobarbital.

Top

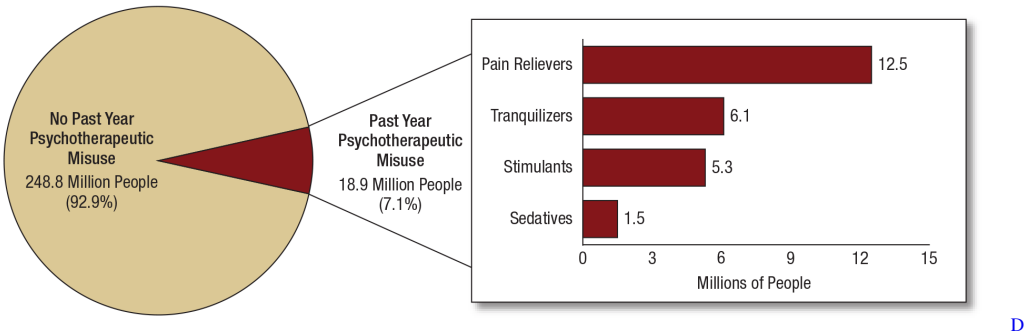
Misuse of Prescription Psychotherapeutics

The four categories of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives) in NSDUH cover many medications that currently are or have been available by prescription in the United States. Misuse of these drugs is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater 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 in the definition of misuse. As noted previously, NSDUH reports combine the four prescription drug categories into a category referred to as "psychotherapeutics." Beginning in 2015, the category of psychotherapeutics no longer includes methamphetamine, which is likely to be manufactured and distributed illegally.

Past Year Misuse of Prescription Psychotherapeutics

Among people aged 12 or older, an estimated 18.9 million misused prescription psychotherapeutic drugs in the past year, representing 7.1 percent of the population (**Figure 6**). Of the four categories of prescription psychotherapeutic drugs presented in this report (i.e., pain relievers, tranquilizers, stimulants, and sedatives), prescription pain relievers were the most commonly misused by people aged 12 or older. For example, approximately 12.5 million people misused prescription pain relievers in the past year, representing 4.7 percent of the population aged 12 or older. Approximately 6.1 million people misused prescription tranquilizers in the past year, representing 2.3 percent of the population aged 12 or older. An estimated 5.3 million people misused prescription stimulants in the past year, representing 2.0 percent of the population aged 12 or older. Approximately 1.5 million people misused prescription sedatives in the past year, representing 0.6 percent of the population aged 12 or older.

Figure 6. Numbers of Past Year Prescription Psychotherapeutic Misusers among People Aged 12 or Older: 2015



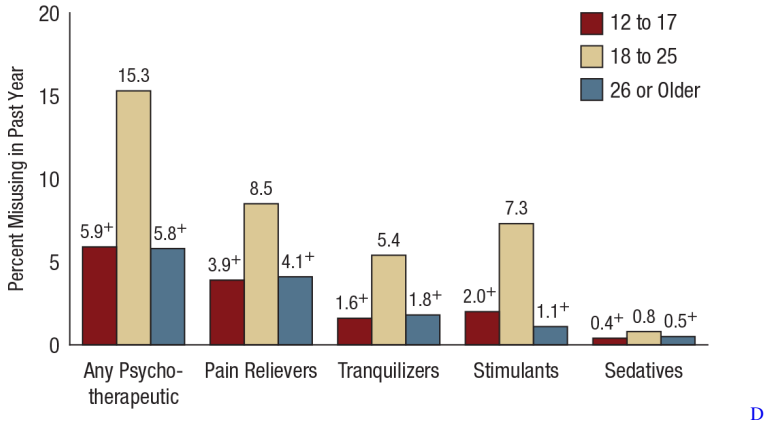
D

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 past year misusers of different psychotherapeutics are not mutually exclusive because people could have misused more than one type of psychotherapeutic in the past year.

By Age Group

Of the 18.9 million people aged 12 or older in 2015 who misused prescription psychotherapeutic drugs in the past year, 1.5 million were youths aged 12 to 17 (5.9 percent of youths), 5.3 million were young adults aged 18 to 25 (15.3 percent of young adults), and 12.1 million were adults aged 26 or older (5.8 percent of adults in this age group) (**Figure 7**). Although adults aged 26 or older were more likely than people in other age groups to have used prescription drugs in the past year, young adults were more likely than youths and adults aged 26 or older to have misused prescription psychotherapeutic drugs in this period.

Figure 7. Past Year Misuse of Prescription Psychotherapeutics among People Aged 12 or Older, by Drug Type and Age Group: Percentages, 2015



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+ Difference between this estimate and the 18 to 25 estimate is statistically significant at the .05 level.

Young adults aged 18 to 25 also were more likely than youths aged 12 to 17 and adults aged 26 or older to misuse prescription pain relievers, tranquilizers, stimulants, and sedatives in the past year (**Figure 7**). In addition, youths were more likely than adults aged 26 or older to have misused stimulants in the past year. However, similar percentages of youths and adults aged 26 or older misused prescription pain relievers, tranquilizers, and sedatives in the past year.

Among youths aged 12 to 17, 3.9 percent misused prescription pain relievers, 1.6 percent misused prescription tranquilizers, 2.0 percent misused prescription stimulants, and 0.4 percent misused prescription sedatives in the past year (**Figure 7**). These percentages correspond to 969,000 youths who misused prescription pain relievers, 394,000 who misused prescription tranquilizers, 491,000 who misused prescription stimulants, and 102,000 who misused prescription sedatives.

Percentages of young adults aged 18 to 25 who misused specific categories of prescription psychotherapeutic drugs were 8.5 percent who misused prescription pain relievers, 5.4 percent who misused prescription tranquilizers, 7.3 percent who misused prescription stimulants, and 0.8 percent who misused prescription sedatives in the past year (**Figure 7**). These percentages correspond to 3.0 million young adults who misused prescription pain relievers, 1.9 million who misused prescription tranquilizers, 2.5 million who misused prescription stimulants, and 0.3 million who misused prescription sedatives.

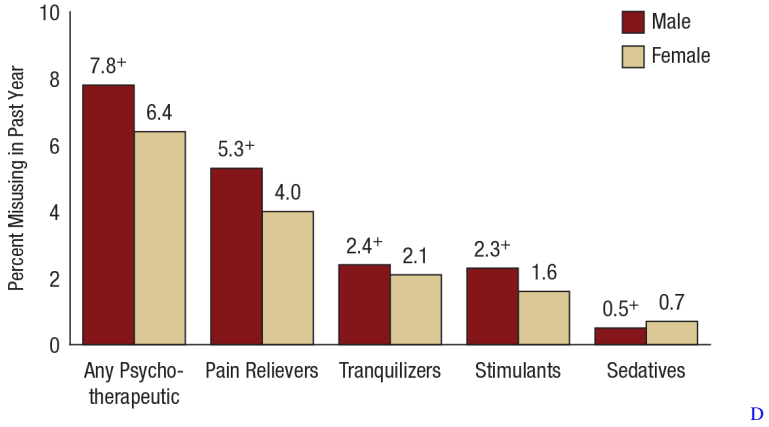
Among adults aged 26 or older, 4.1 percent misused prescription pain relievers, 1.8 percent misused prescription tranquilizers, 1.1 percent misused prescription stimulants, and 0.5 percent misused prescription sedatives (**Figure 7**). These percentages correspond to 8.5 million adults in this age group who misused prescription pain relievers, 3.8 million who misused prescription tranquilizers, 2.2 million who misused prescription stimulants, and 1.1 million who misused prescription sedatives.

By Gender

Although females were more likely than males to have used most types of prescription psychotherapeutic drugs, males were more likely than females to have misused

prescription psychotherapeutic drugs as a whole and most types of prescription psychotherapeutic drugs (**Figure 8**). In particular, males aged 12 or older were more likely than their female counterparts to have misused any prescription psychotherapeutic drug in the past year (7.8 vs. 6.4 percent). Males also were more likely than females to have misused prescription pain relievers (5.3 vs. 4.0 percent), prescription tranquilizers (2.4 vs. 2.1 percent), and prescription stimulants in the past year (2.3 vs. 1.6 percent). However, males were less likely than females to have misused prescription sedatives in the past year (0.5 vs. 0.7 percent).

Figure 8. Past Year Misuse of Prescription Psychotherapeutics among People Aged 12 or Older, by Drug Type and Gender: Percentages, 2015



D

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

By Hispanic Origin and Race

In 2015, percentages of non-Hispanics and Hispanics aged 12 or older were similar for the misuse in the past year of any prescription psychotherapeutic drug (7.1 and 7.0 percent, respectively), prescription pain relievers (4.6 and 5.0 percent, respectively), and prescription tranquilizers (2.3 and 2.0 percent, respectively) (**Table B.2** in **Appendix B**). However, non-Hispanics were more likely than Hispanics to have misused prescription stimulants in the past year (2.1 vs. 1.5 percent). An estimated 0.6 percent of non-Hispanics and 0.4 percent of Hispanics misused prescription sedatives in the past year.

The misuse of any prescription psychotherapeutic drug in the past year among individuals aged 12 or older in 2015 ranged from 3.1 percent of non-Hispanic Asians to 11.7 percent of non Hispanic individuals who reported two or more races (**Table B.2**). The misuse of prescription pain relievers in the past year ranged from 1.8 percent of non-Hispanic Asians to 8.4 percent of non-Hispanic individuals who reported two or more races. The misuse of prescription tranquilizers in the past year ranged from 0.7 percent of non Hispanic Asians to 3.6 percent of non-Hispanic individuals who reported two or more races. The misuse of prescription stimulants in the past year ranged from 0.7 percent of non-Hispanic African Americans to 4.1 percent of non Hispanic individuals who reported two or more races. Estimates for the misuse of prescription sedatives in the past year among racial groups were below 1.0 percent, except for an estimate of 1.4 percent among non-Hispanic individuals who reported two or more races.

By County Type

Among individuals aged 12 or older in 2015, 7.3 percent of those residing in large metropolitan areas, 6.9 percent of those in small metropolitan areas, and 6.4 percent of those in nonmetropolitan areas misused prescription psychotherapeutic drugs in the past year (**Table B.3** in **Appendix B**).[15] The past year misuse of categories of prescription drugs also showed little variation by county type. For example, 4.7 percent of individuals living in large metropolitan areas and 4.6 percent each of those in small metropolitan areas and nonmetropolitan areas misused prescription pain relievers in the past year.

Prescription Drug Misuse among Users of Prescription Drugs

Most people who used prescription psychotherapeutic drugs in the past year did not misuse them. For example, the 18.9 million Americans aged 12 or older who misused prescription psychotherapeutic drugs at least once in the past year represented only 15.9 percent of the 119.0 million people who reported any use of psychotherapeutic drugs in the past year (**Figure 9**). Stated another way, nearly 85 percent of people who used prescription psychotherapeutic drugs in the past year did *not* misuse them. Similarly, 12.8 percent of people aged 12 or older who used pain relievers in the past year reported misuse (the pie chart in **Figure 10** labeled as **10a**), as did 15.4 percent of people who used tranquilizers in the past year (the pie chart labeled as **10b**). However, 30.5 percent of people who used prescription stimulants in the past year misused stimulants in that period (the pie chart labeled as **10c**). An estimated 8.1 percent of people who used sedatives (the pie chart labeled as **10d**) misused them.

Figure 9. Misuse and No Misuse of Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older Who Used Prescription Psychotherapeutics: Percentages, 2015

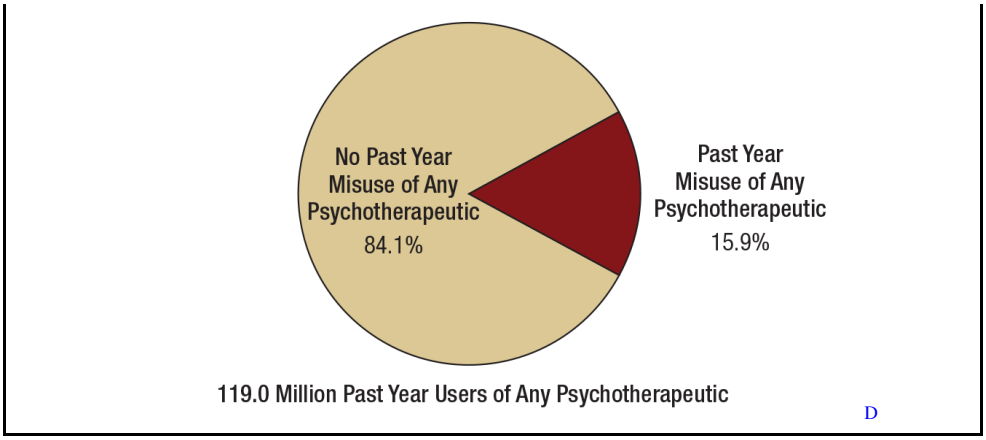
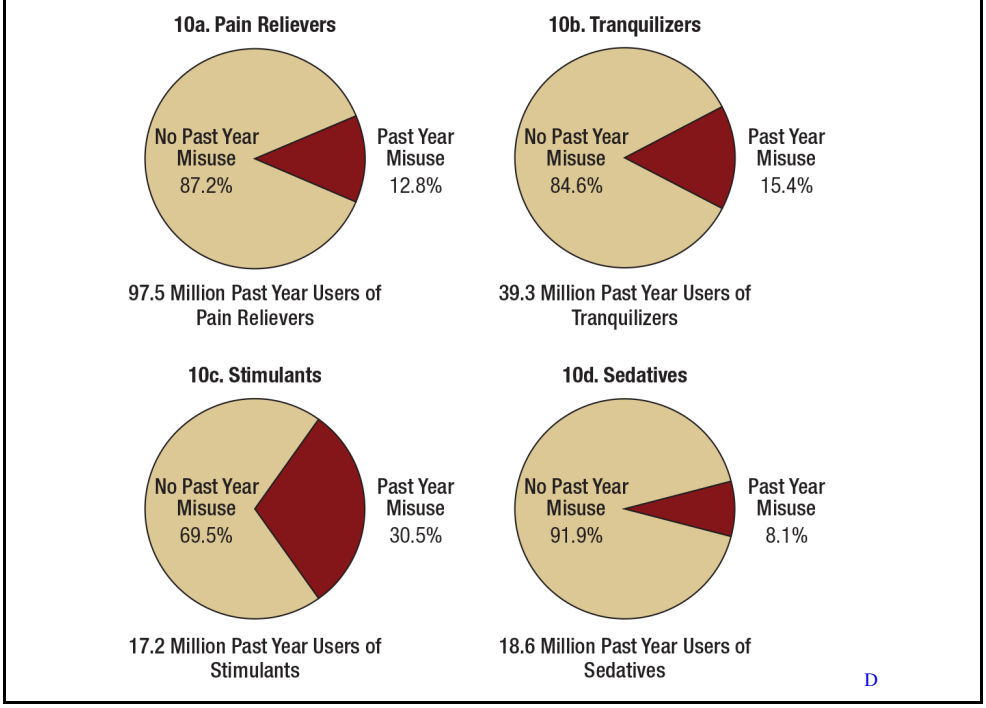


Figure 10. Misuse and No Misuse of Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older Who Used Prescription Psychotherapeutics, by Drug Type: Percentages, 2015



Prescription Drug Misuse among Users of Other Substances

NSDUH asks respondents aged 12 or older about their past year use of alcohol, tobacco, and several illicit drugs: marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, and methamphetamine. Except for data that are collected on the use of alcohol in combination with the misuse of prescription drugs in the past month (not included in this report), NSDUH does not assess whether respondents misused prescription drugs and used other substances at the same time.

This section provides estimates of past year prescription drug misuse among people who used other substances in that period, such as the percentage of past year alcohol users who misused prescription drugs in the past year. In 2015, the following numbers of people aged 12 or older used other substances at least once in the past year (regardless of whether they misused prescription drugs in the past year):

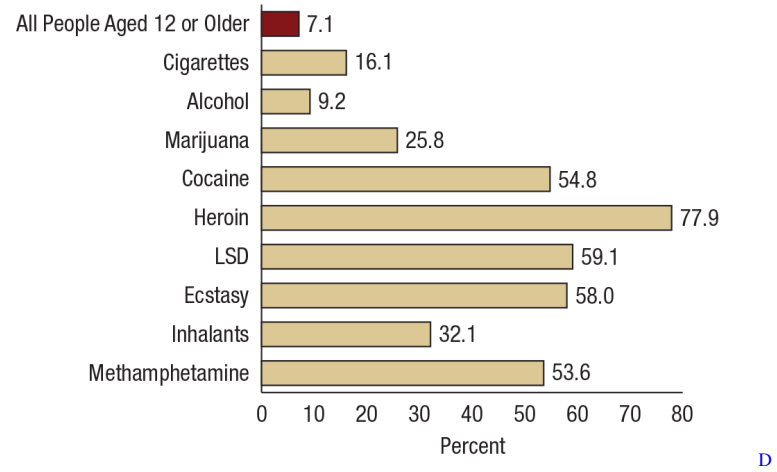
- 61.8 million smoked cigarettes,
- 175.8 million people drank alcohol,
- 36.0 million people used marijuana,
- 4.8 million people used cocaine,
- 828,000 people used heroin,
- 1.5 million people used lysergic acid diethylamide (LSD),
- 2.6 million people used Ecstasy,

- 1.8 million people used inhalants, and
- 1.7 million people used methamphetamine.[1]

Misuse of Any Prescription Psychotherapeutic Drug among Users of Other Substances

As shown in **Figure 11**, the misuse of prescription psychotherapeutic drugs in 2015 among people aged 12 or older who used other substances in the past year ranged from 9.2 percent of alcohol users to 77.9 percent of heroin users. Among the estimated 175.8 million people aged 12 or older who consumed alcohol in the past year, 16.1 million people also misused prescription psychotherapeutic drugs over the same time period of time, or nearly 1 in 10 (9.2 percent) of past year alcohol drinkers. The large majority of past year heroin users aged 12 or older also misused prescription psychotherapeutic drugs in the past year (77.9 percent of past year heroin users, or 646,000 out of 828,000 users of heroin). About a quarter (25.8 percent) of past year marijuana users also misused prescription drugs in the past year (9.3 million of the 36.0 million past year marijuana users).

Figure 11. Past Year Misuse of Any Prescription Psychotherapeutic among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015



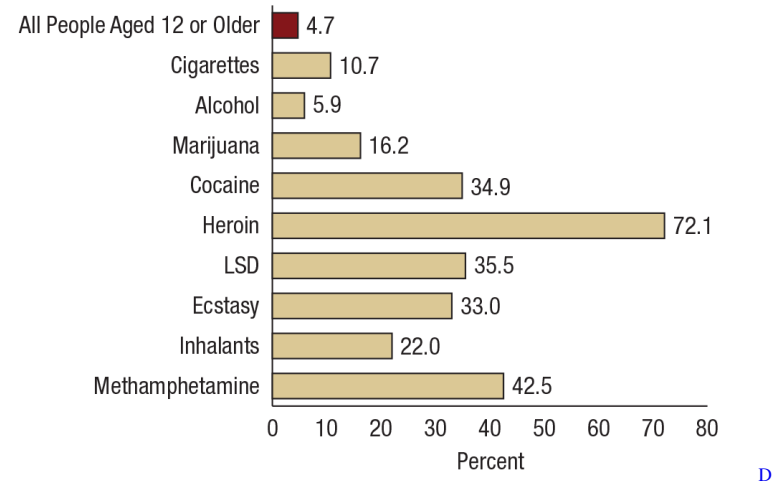
D

LSD = lysergic acid diethylamide.

Misuse of Prescription Pain Relievers among Users of Other Substances

Although 4.7 percent of the total population aged 12 or older misused prescription pain relievers in the past year, people who used substances other than prescription drugs were more likely to have misused pain relievers (**Figure 12**). For example, 5.9 percent of past year alcohol users (10.4 million of the 175.8 million past year alcohol users) also misused prescription pain relievers during the same time period. Among past year heroin users aged 12 or older, 72.1 percent (598,000 out of 828,000 past year heroin users) misused prescription pain relievers in the past year. Of the 36.0 million people aged 12 or older who used marijuana in the past year, 5.8 million (or 16.2 percent of past year marijuana users) also misused prescription pain relievers in the past year.

Figure 12. Past Year Misuse of Prescription Pain Relievers among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015



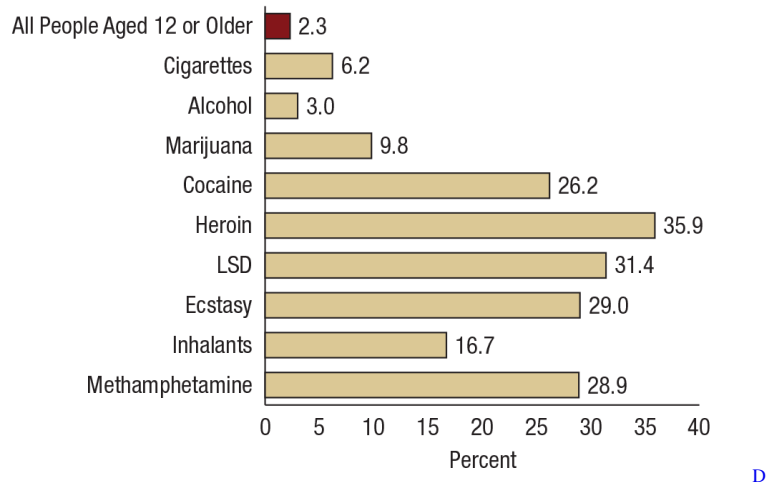
D

LSD = lysergic acid diethylamide.

Misuse of Prescription Tranquilizers among Users of Other Substances

Compared with the estimate of 2.3 percent of the population aged 12 or older who misused prescription tranquilizers in the past year, percentages were typically higher among people aged 12 or older in 2015 who used other substances (**Figure 13**). For example, 35.9 percent of past year heroin users also misused prescription tranquilizers during this same time period (297,000 out of 828,000 past year heroin users). In addition, more than 1 in 4 past year users of Ecstasy (29.0 percent), methamphetamine (28.9 percent), or cocaine (26.2 percent) misused tranquilizers in the past year. Of the 36.0 million people aged 12 or older who used marijuana in the past year, about 1 in 10 (9.8 percent, or 3.5 million people) misused prescription tranquilizers in the past year. An estimated 3.0 percent of past year alcohol users also misused prescription tranquilizers during the same time period (5.3 million out of 175.8 million past year alcohol users).

Figure 13. Past Year Misuse of Prescription Tranquilizers among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015

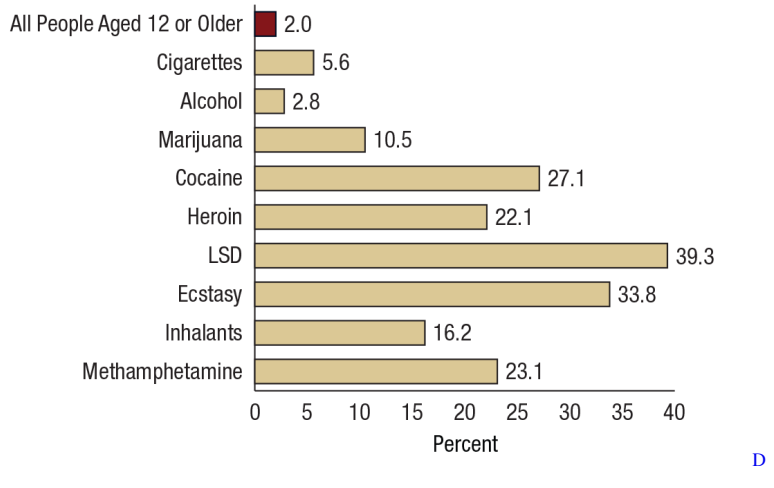


LSD = lysergic acid diethylamide.

Misuse of Prescription Stimulants among Users of Other Substances

People who used other substances in the past year were more likely than people aged 12 or older in the total population to have misused prescription stimulants in that period (**Figure 14**). For example, 33.8 percent of past year users of Ecstasy and 39.3 percent of past year users of LSD also misused prescription stimulants during the same time period. Among the estimated 175.8 million people aged 12 or older who consumed alcohol in the past year, 4.9 million misused prescription stimulants in the past year (2.8 percent of past year alcohol users). An estimated 22.1 percent of past year heroin users, 23.1 percent of past year methamphetamine users, and 27.1 percent of past year cocaine users misused prescription stimulants in that period.

Figure 14. Past Year Misuse of Prescription Stimulants among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015



LSD = lysergic acid diethylamide.

Misuse of Prescription Sedatives among Users of Other Substances

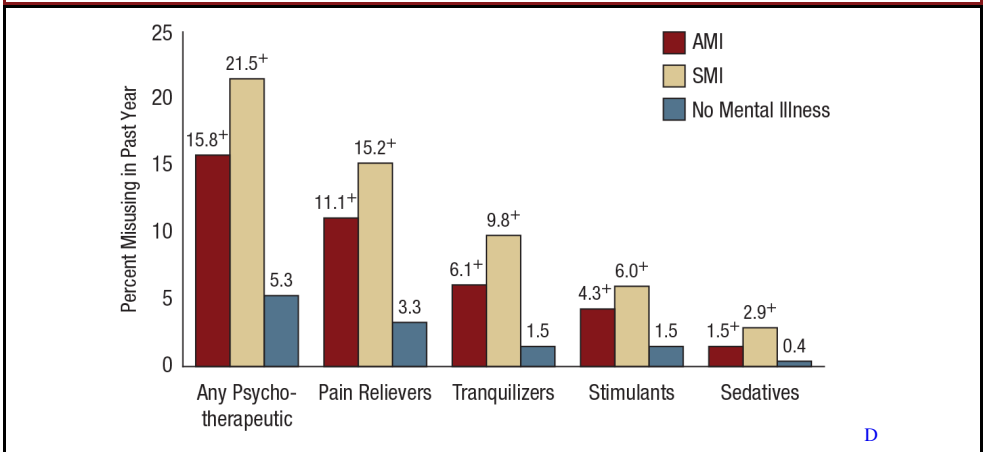
In 2015, the misuse of prescription sedatives in the past year among people aged 12 or older who used other substances in that period was not as pronounced as the misuse of pain relievers, tranquilizers, or stimulants. In 2015, 0.6 percent of the population aged 12 or older misused prescription sedatives in the past year (**Table B.1** in **Appendix B**). In comparison, the percentages of users of other substances who misused sedatives in the past year ranged from 0.7 percent of alcohol users to 9.2 percent of heroin users (**Table B.8**). Among the estimated 175.8 million people aged 12 or older who consumed alcohol in the past year, 1.3 million misused prescription sedatives in the past year (0.7 percent of past year alcohol users). The estimated 9.2 percent of past year heroin users who misused prescription sedatives represent 76,000 out of 828,000 past year heroin users. Of the 36.0 million people aged 12 or older who used marijuana in the past year, 617,000 also misused prescription sedatives in the past year, or 1.7 percent of past year marijuana users.

Prescription Drug Misuse among Adults with Any or Serious Mental Illness

NSDUH collects information that is used to estimate the number adults aged 18 or older who had any mental illness (AMI) or serious mental illness (SMI) in the past year. Adults are defined as having AMI if they had any mental, behavioral, or emotional disorder in the past year that met the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV), criteria (excluding developmental disorders and substance use disorders).[24] 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.[25] In 2015, an estimated 43.4 million Americans aged 18 or older had AMI in the past year, including an estimated 9.8 million adults who had SMI.[1]

Among the 43.4 million adults aged 18 or older in 2015 with AMI in the past year, 6.9 million misused prescription psychotherapeutic drugs during the same period of time. This number who misused prescription psychotherapeutic drugs in the past year corresponds to 15.8 percent of adults with AMI (**Figure 15**). Among the 9.8 million adults who had SMI in the past year, 2.1 million, or 21.5 percent, misused prescription psychotherapeutic drugs during the same period of time. In comparison, among adults who did not have a mental illness in the past year, 5.3 percent misused prescription psychotherapeutic drugs in the past year.

Figure 15. Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Mental Illness Status: Percentages, 2015



AMI = any mental illness; SMI = serious mental illness.
+ Difference between this estimate and the estimate for adults with no past year mental illness is statistically significant at the .05 level.

Among adults in 2015 who had AMI in the past year, about 1 in 9 (11.1 percent) misused prescription pain relievers, about 1 in 16 (6.1 percent) misused prescription tranquilizers, 4.3 percent misused prescription stimulants, and 1.5 percent misused prescription sedatives in the past year. These percentages correspond to 4.8 million adults with AMI who misused prescription pain relievers, 2.7 million who misused prescription tranquilizers, 1.8 million who misused prescription stimulants, and 634,000 who misused prescription sedatives in the past year.

Among the 9.8 million adults in 2015 who had SMI in the past year, 15.2 percent (1.5 million adults) also misused prescription pain relievers during the same period of time. About 1 in 10 adults with SMI (9.8 percent, or 961,000 adults) misused prescription tranquilizers in the past year. An estimated 6.0 percent of adults with SMI (590,000 adults) misused prescription stimulants in the past year, and 2.9 percent (279,000 adults) misused prescription sedatives.

Adults in 2015 who did not have a mental illness in the past year were less likely than adults with AMI or SMI to have misused prescription drugs in each of the four psychotherapeutic categories in the past year. Among adults in 2015 who did not have a mental illness in the past year, 3.3 percent misused prescription pain relievers, 1.5 percent misused prescription tranquilizers, 1.5 percent misused prescription stimulants, and 0.4 percent misused prescription sedatives in the past year.

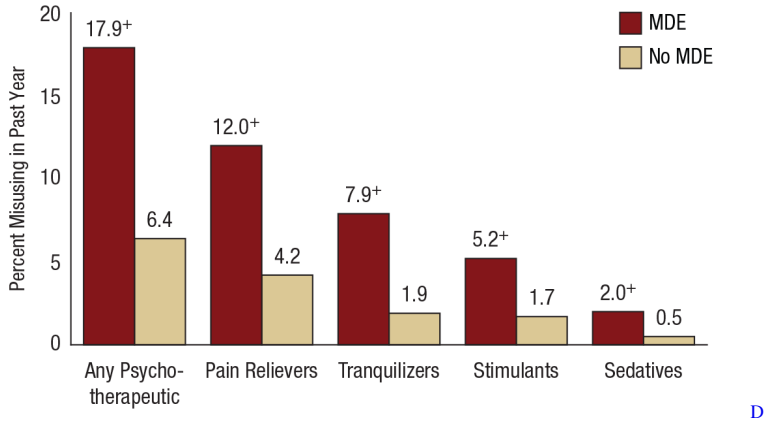
Prescription Drug Misuse among Individuals Who Had a Major Depressive Episode

NSDUH also provides estimates of having a past year major depressive episode (MDE) among adults and adolescents. MDE is defined for both adults and adolescents using the diagnostic criteria from DSM-IV, although there are separate criteria for adults and youths.[24] Adults were defined as having 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.[26] Similar to adults, 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. However, some wordings to the questions for adolescents were designed to make them more developmentally appropriate for youths.[27] This section provides estimates of prescription drug misuse among adults and adolescents who had an MDE in the past year. Data are presented separately for adults and adolescents because of the different wording of questions for adults and adolescents.

Misuse among Adults Aged 18 or Older with a Past Year MDE

In 2015, an estimated 16.1 million American adults aged 18 or older had at least one MDE in the past year.[1] Among the 16.1 million adults who had MDE in the past year, 2.9 million misused a prescription psychotherapeutic drug during the same period of time. This number of adults who misused prescription psychotherapeutic drugs represents 17.9 percent of adults who had an MDE in the past year (**Figure 16**). Adults who did not have an MDE in the past year were less likely than adults who had a past year MDE to misuse prescription psychotherapeutic drugs in the past year (6.4 vs. 17.9 percent).

Figure 16. Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Major Depressive Episode (MDE) Status: Percentages, 2015



+ Difference between this estimate and the estimate for adults with no past year MDE is statistically significant at the .05 level.
Note: Adult respondents with unknown past year MDE data were excluded.

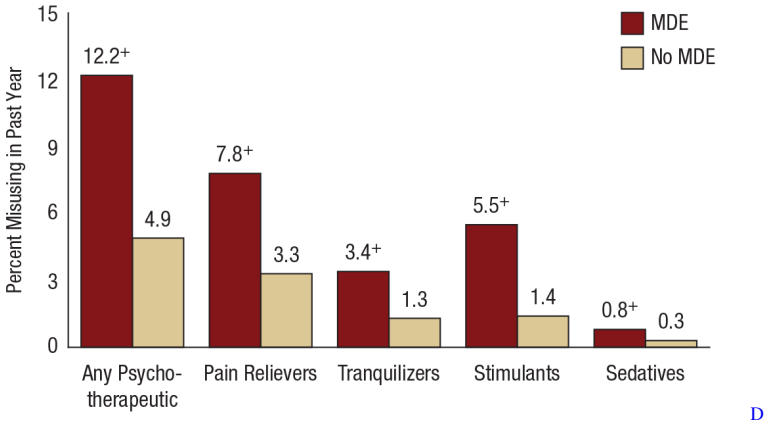
Among the 16.1 million adults in 2015 who had an MDE in the past year, 1.9 million misused prescription pain relievers, 1.3 million misused prescription tranquilizers, 834,000 misused prescription stimulants, and 321,000 misused prescription sedatives in the past year. Corresponding percentages among adults with a past year MDE were 12.0 percent for the misuse of prescription pain relievers, 7.9 percent for the misuse of prescription tranquilizers, 5.2 percent for the misuse of prescription stimulants, and 2.0 percent for the misuse of prescription sedatives.

Adults in 2015 who did not have an MDE in the past year were less likely than adults who had an MDE to misuse prescription drugs in each of the psychotherapeutic categories in the past year. Specifically, among adults who did not have an MDE in the past year, 4.2 percent misused prescription pain relievers, 1.9 percent misused prescription tranquilizers, 1.7 percent misused prescription stimulants, and 0.5 percent misused prescription sedatives in the past year.

Misuse among Adolescents Aged 12 to 17 with a Past Year MDE

In 2015, an estimated 3.0 million adolescents aged 12 to 17 had at least one MDE in the past year.[1] Among the 3.0 million adolescents who had an MDE in the past year, 370,000 misused a prescription psychotherapeutic drug during the same period of time. This number represents 12.2 percent of adolescents who had an MDE in the past year (**Figure 17**). Among adolescents who did not have an MDE in the past year, 4.9 percent misused prescription psychotherapeutic drugs in the past year, which was lower than the percentage among youths who had a past year MDE (12.2 percent).

Figure 17. Past Year Misuse of Prescription Psychotherapeutics among Youths Aged 12 to 17, by Drug Type and Past Year Major Depressive Episode (MDE) Status: Percentages, 2015



+ Difference between this estimate and the estimate for youths with no past year MDE is statistically significant at the .05 level.
Note: Youth respondents with unknown past year MDE data were excluded.

Among the 3.0 million adolescents who had an MDE in the past year, 236,000 misused prescription pain relievers, 103,000 misused prescription tranquilizers, 166,000 misused

prescription stimulants, and 26,000 misused prescription sedatives during the same period of time. These numbers correspond to 7.8 percent of adolescents with a past year MDE who misused prescription pain relievers, 3.4 percent who misused prescription tranquilizers, 5.5 percent who misused prescription stimulants, and 0.8 percent who misused prescription sedatives during the past year.

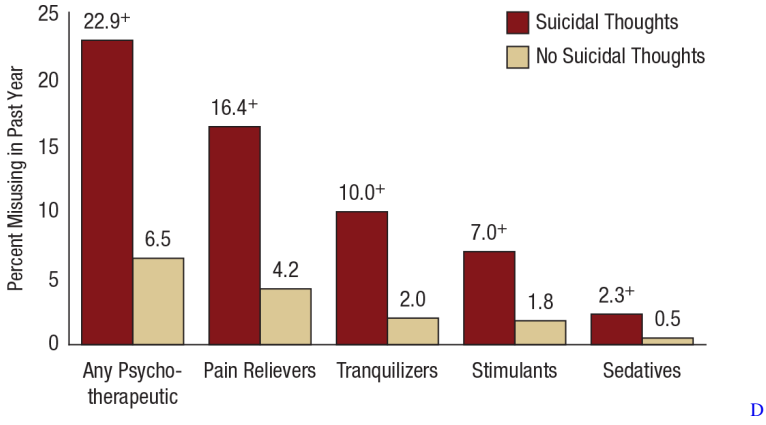
Adolescents in 2015 who did not have an MDE in the past year were less likely than their counterparts who had an MDE to misuse prescription drugs in each of the psychotherapeutic categories in the past year. Among adolescents who did not have an MDE in the past year, 3.3 percent misused prescription pain relievers, 1.3 percent misused prescription tranquilizers, 1.4 percent misused prescription stimulants, and 0.3 percent misused prescription sedatives in the past year.

Prescription Drug Misuse among Adults with Serious Thoughts of Suicide

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. This section provides estimates of the misuse of prescription drugs among adults who had serious thoughts of suicide in the past year. However, NSDUH does not assess whether respondents misused prescription drugs while they were having serious thoughts of suicide.

In 2015, 9.8 million adults aged 18 or older thought seriously about trying to kill themselves at any time during the past 12 months.[28] Among the 9.8 million adults who had serious thoughts of suicide in the past year, 2.2 million misused prescription psychotherapeutic drugs during the same period of time. This represents 22.9 percent of adults who had serious thoughts of suicide, or more than 1 in 5 (**Figure 18**). Among adults who did not have serious thoughts of suicide in the past year, 6.5 percent misused prescription psychotherapeutic drugs in the past year.

Figure 18. Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Suicidal Thoughts: Percentages, 2015



+ Difference between this estimate and the estimate for adults with no Past Year suicidal thoughts is statistically significant at the .05 level.
Note: Adult respondents with unknown suicide information were excluded.

Among the 9.8 million adults who had serious thoughts of suicide in the past year, 1.6 million misused prescription pain relievers, 978,000 misused prescription tranquilizers, 683,000 misused prescription stimulants, and 221,000 misused prescription sedatives. Among adults who had serious thoughts of suicide in the past year, these numbers represent 16.4 percent of adults who misused prescription pain relievers, 10.0 percent who misused prescription tranquilizers, 7.0 percent who misused prescription stimulants, and 2.3 percent who misused prescription sedatives during the past year.

Adults who did not have serious thoughts of suicide in the past year were less likely than those who had serious thoughts of suicide to have misused prescription drugs in each of the psychotherapeutic categories in the past year. Among adults who did not have serious thoughts of suicide in the past year, 4.2 percent misused prescription pain relievers, 2.0 percent misused prescription tranquilizers, 1.8 percent misused prescription stimulants, and 0.5 percent misused prescription sedatives in the past year.

Past Year Misuse of Subtypes of Prescription Drugs

As noted previously, NSDUH respondents in 2015 were asked to identify the specific prescription pain relievers, tranquilizers, stimulants, and sedatives that they used in the past year. For each prescription psychotherapeutic drug category, these specific prescription drugs were further categorized into subtypes within the overall category. The remainder of this section presents estimates for the misuse of specific subtypes of prescription drugs in the past year.

Pain Relievers

The specific pain relievers that individuals misused in the past year were categorized into 11 subtypes, such as hydrocodone products (**Figure 2**).[19] In 2015, the most commonly misused subtype of prescription pain relievers were hydrocodone products, which include Vicodin®, Lortab®, Norco®, Zohydro® ER, and generic hydrocodone (**Table B.4** in **Appendix B**). An estimated 7.2 million people aged 12 or older misused these products in the past year, representing 2.7 percent of the population. An estimated 4.3 million people misused oxycodone products in the past year; this number represents 1.6 percent of people aged 12 or older. Oxycodone products include OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, and generic oxycodone. Misuse of OxyContin® in the past year occurred among 0.7 percent of the population aged 12 or older (1.7 million people) and among about 40 percent of the misusers of oxycodone products. An estimated 0.3 percent of people aged 12 or older misused buprenorphine products in the past year, and 0.2 percent misused methadone.

Tranquilizers

The specific tranquilizers that individuals misused in the past year were categorized into six subtypes, and some of these six subtypes were further subcategorized (**Figure 3**).[20]

For example, one of the six subtypes of tranquilizers was benzodiazepine tranquilizers, which was further subcategorized into four subtypes of benzodiazepine tranquilizers, such as alprazolam products (e.g., Xanax®, Xanax® ER). In 2015, benzodiazepine tranquilizers were the most commonly misused subtype of prescription tranquilizers that people aged 12 or older misused in the past year (**Table B.5** in **Appendix B**). The misuse of benzodiazepine tranquilizers was driven by the misuse of alprazolam products, such as Xanax®, Xanax® XR, generic alprazolam, and generic extended-release alprazolam. Of the 6.1 million people aged 12 or older who misused tranquilizers in the past year, 5.4 million misused benzodiazepine tranquilizers, including 4.1 million people who misused alprazolam products. Individuals who misused alprazolam products represented 1.5 percent of the population. Although 6.6 million people reported any use in the past year of other prescription tranquilizers, only 202,000 reported misuse of other tranquilizers.

Stimulants

The specific stimulants that individuals misused in the past year were categorized into five subtypes (**Figure 4**).[21] In 2015, the most commonly misused subtype of prescription stimulants in the past year among people aged 12 or older was amphetamine products, which include Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, generic dextroamphetamine, generic amphetamine-dextroamphetamine combinations, and generic extended-release amphetamine-dextroamphetamine combinations (**Table B.6** in **Appendix B**).[22] Among the 5.3 million people aged 12 or older who misused prescription stimulants in the past year, 4.8 million misused amphetamine products. The number of people who misused amphetamine products in the past year represented 1.8 percent of the population. In contrast to the 2.7 million people aged 12 or older who reported any use of other prescription stimulants in the past year, only 96,000 reported misuse of other stimulants.

Sedatives

The specific sedatives that individuals misused in the past year were categorized into six subtypes, and one of these six subtypes was further subcategorized (**Figure 5**).[23] Specifically, the benzodiazepine sedatives subtype was further subcategorized into three subcategories: flurazepam, temazepam products, and triazolam products. In 2015, the most commonly misused subtype of prescription sedatives was zolpidem products consisting of Ambien®, Ambien® CR, generic zolpidem, and extended-release generic zolpidem (**Table B.7** in **Appendix B**). Of the 1.5 million people aged 12 or older who misused prescription sedatives in the past year, 1.1 million misused zolpidem products. The number of people who misused zolpidem products in the past year represented 0.4 percent of the population. An estimated 205,000 people aged 12 or older, or 0.1 percent of the population, misused benzodiazepine sedatives in the past year. Although about 5.4 million people aged 12 or older reported that they used other prescription sedatives in the past year, only 191,000 reported misuse of other sedatives.

Main Reasons for Misusing Prescription Drugs

Respondents in the 2015 NSDUH who reported misuse of any of the four categories of prescription psychotherapeutic drugs in the past year were asked to recall the last prescription drug in that category that they misused in the past year. For the first time in NSDUH, respondents were asked to report their reasons for misusing the prescription drug that last time. Respondents who reported more than one reason for misusing the last prescription drug were asked to report the main reason for misuse. If respondents reported only one reason for misusing their last prescription drug in a given psychotherapeutic category, then that reason was their main reason for misuse.

As shown in **Table B.11** in **Appendix B**, the main reasons for misuse varied by the psychotherapeutic categories. Reasons for the misuse of the last prescription pain reliever that were presented to respondents were (1) to relieve physical pain, (2) to relax or relieve tension, (3) to experiment or to see what the drug is like, (4) to feel good or get high, (5) to help with the respondent's sleep, (6) to help the respondent with his or her feelings or emotions, (7) to increase or decrease the effect(s) of some other drug, (8) because the respondent is "hooked" or has to have the drug, or (9) for some other reason. Except for "to relieve physical pain," the same reasons were presented for tranquilizers and sedatives; the first reason that was presented for these two psychotherapeutic categories was "to relax or relieve tension." Reasons that were presented for stimulants were (1) to help lose weight, (2) to help concentrate, (3) to help be alert or stay awake, (4) to help study, (5) to experiment or to see what the drug is like, (6) to feel good or get high, (7) to increase or decrease the effect(s) of some other drug, (8) because the respondent is "hooked" or has to have the drug, or (9) for some other reason. In addition, respondents could report "some other reason" for their misuse of a particular psychotherapeutic drug and then specify a reason that applied to another psychotherapeutic category. For example, respondents could specify that they also misused their last tranquilizer to relieve physical pain (i.e., a choice for pain relievers) and then specify that this other reason was the main reason for their last misuse.

Main Reasons for Misusing Pain Relievers

Among people aged 12 or older in 2015 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 (62.6 percent), which is the reason pain relievers are prescribed (**Table B.11**). 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 (12.1 percent) and to relax or relieve tension (10.8 percent). Less common reasons among past year misusers of pain relievers included to help with sleep (4.4 percent), to help with feelings or emotion (3.3 percent), to experiment or see what the drug was like (2.5 percent), because they were "hooked" or needed to have the drug (2.3 percent), and to increase or decrease the effects of other drugs (0.9 percent). In addition, 1.2 percent of past year misusers of pain relievers reported that some other reason was their main reason.

Main Reasons for Misusing Tranquilizers

Among people aged 12 or older in 2015 who misused prescription tranquilizers in the past year, the most common reasons for misuse the last time were to relax or relieve tension (44.9 percent), followed by to help with sleep (20.4 percent); these are common reasons for prescribing tranquilizers (**Table B.11**). However, these individuals misused tranquilizers to achieve the effect for which tranquilizers are prescribed. Even if the reason for misuse was a reason for which tranquilizers are prescribed, use without a prescription, more often than prescribed, or at higher dosages than prescribed still constituted misuse.

In addition, 12.3 percent of people aged 12 or older who misused prescription tranquilizers in the past year reported that the main reason for their last misuse was to feel good or get high, and 10.7 percent reported that their main reason was to help with feelings and emotions. Less common reasons for misuse included experimenting to see what the drug was like (6.4 percent), increasing or decreasing the effect of some other drug (1.5 percent), and because of being "hooked" or needing to have the drug (0.3 percent). An estimated 3.4 percent of people who misused tranquilizers in the past year reported that some other reason was the main reason for their last misuse.

Main Reasons for Misusing Stimulants

In 2015, the most commonly reported main reasons for the misuse of stimulants among people aged 12 or older who misused stimulants in the past year were to help be alert or stay awake (26.8 percent) and to help concentrate (26.5 percent), followed by to help study (22.5 percent) (**Table B.11**). Less commonly reported reasons for the last misuse of prescription stimulants among past year misusers were to experiment to see what the drug was like (5.7 percent), to help lose weight (4.2 percent), to increase or decrease the effect of some other drug (1.5 percent), and because of being "hooked" or needing to have the drug (0.1 percent). An estimated 2.2 percent of past year misusers of prescription stimulants reported some other reason as the main reason for their last misuse.

Main Reasons for Misusing Sedatives

Among people aged 12 or older in 2015 who misused prescription sedatives in the past year, the most common reason for the last misuse was to help with sleep (71.7 percent), which is the reason sedatives are prescribed (**Table B.11**). Even if people took sedatives to help them sleep, this use constituted misuse if people took them without a prescription, more often than prescribed, or at higher dosages than prescribed.

Other reasons for the last misuse among people who misused sedatives in the past year were to relax or relieve tension (12.0 percent) and to feel good or get high (5.9 percent). Less commonly reported reasons included to help with feelings or emotions (3.7 percent), to experiment to see what the drug was like (3.7 percent), and to increase or decrease the effects of some other drug (1.2 percent). In addition, 1.8 percent of past year misusers of sedatives reported that some other reason was their main reason for their last misuse.

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Initiation of Prescription Drug Misuse

If NSDUH respondents in 2015 reported that they misused a specific prescription psychotherapeutic drug (e.g., OxyContin®) in the past 12 months, they were asked to report their age when they first misused it (i.e., initiation).[29] NSDUH respondents were defined as being past year initiates for the misuse of prescription drugs in an overall psychotherapeutic category (e.g., pain relievers) if they reported initiating misuse in the past 12 months for all of the specific prescription drugs in that category that they misused in that same period, and they had not misused any other drug in that category before the past 12 months. **Section A.4.3** in **Appendix A** provides more details about how the past year initiation of misuse of prescription drugs was measured and defined.

The 2015 NSDUH measures whether an individual first misused all prescription drugs in a given psychotherapeutic category within the past 12 months (i.e., recent initiation), and, for recent initiates, the age when they first misused any prescription drug in that category. By definition, people who initiated the misuse of any psychotherapeutic drug within a category in the past 12 months will have had their first misuse at their current age or the year before their current age. More information about the methods for measuring and estimating the initiation of prescription drug misuse in NSDUH can be found in **Section A.4.3** and on the web in the methodological summary and definitions report for the 2015 NSDUH.[30]

However, the focus on the misuse of specific prescription drugs in the past 12 months could cause some respondents to underreport the use or misuse of prescription psychotherapeutic drugs that occurred more than 12 months before the interview date (see **Section A.4.3**). For this reason, estimates are not included for the past year initiation of misuse for any prescription psychotherapeutic drug.

Unlike previous sections, this section focuses on the number of people who were recent initiates for the misuse of drugs in specific categories of prescription psychotherapeutic drugs rather than on percentages. Information on the number of recent initiates can be useful to policymakers and program planners for anticipating future needs for health services both in the short term and in the longer term. However, care should be taken in interpreting apparent differences in the estimated numbers of initiates across population subgroups because some of these differences could reflect differences in the size of the respective subgroups.

This section also presents the average age at first misuse for prescription drugs among recent initiates of prescription drugs in a given psychotherapeutic category. Although the numbers of initiates are shown for initiates aged 12 or older as well as by age group, the average ages at first misuse in this report are limited to past year initiates aged 12 to 49 to avoid extreme values from older initiates influencing the averages.[31] For example, a small number of people who started misusing a substance at ages of 50 years or later could heavily influence the average age at first misuse among all initiates and cause instability in the estimated average.

Figure 19 shows the numbers of past year initiates in 2015 for the misuse of prescription pain relievers, tranquilizers, stimulants, and sedatives among people aged 12 or older. In 2015, there were 2.1 million new misusers of pain relievers, 1.4 million new misusers of tranquilizers, 1.3 million new misusers of stimulants, and 425,000 new misusers of sedatives.

Figure 19. Numbers of People Aged 12 or Older (in Thousands) Who Initiated Prescription Drug Misuse in the Past Year, by Age Group: 2015

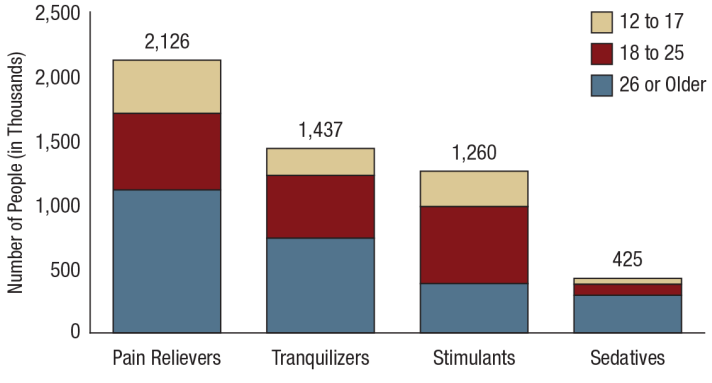


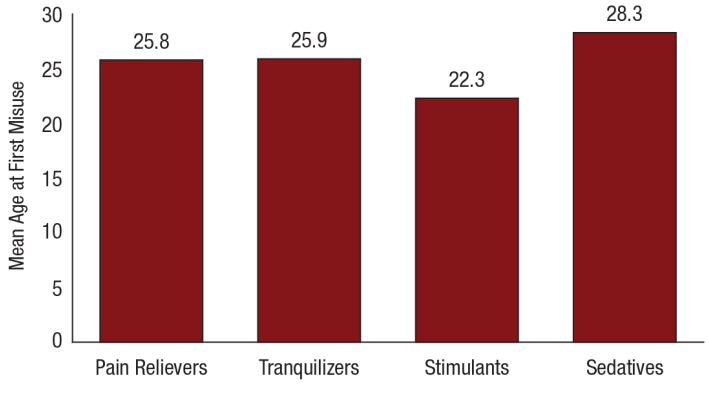
Figure 19 Table. Numbers of People Aged 12 or Older (in Thousands) Who Initiated Prescription Drug Misuse in the Past Year, by Age Group: 2015

Age Group	Pain Relievers	Tranquilizers	Stimulants	Sedatives
12 or Older	2,126	1,437	1,260	425
12 to 17	415	210	276	46

18 to 25	596	489	600	86
26 or Older	1,114	738	384	293

On average, past year initiates aged 12 to 49 in 2015 initiated the misuse of prescription drugs in their early to late 20s (**Figure 20**). The average ages at first misuse in 2015 among recent initiates aged 12 to 49 were 25.8 years for prescription pain relievers, 25.9 years for prescription tranquilizers, 22.3 years for prescription stimulants, and 28.3 years for prescription sedatives.

Figure 20. Mean Age at First Misuse of Prescription Psychotherapeutics among People Aged 12 to 49 Who Initiated Misuse in the Past Year, by Drug Type: 2015



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Initiation of Pain Reliever Misuse

Historically, the number of past year initiates for the misuse of pain relievers has been second only to marijuana among illicit drugs.[32] In 2015, the 2.1 million recent initiates for the misuse of pain relievers average to about 5,800 initiates per day. This number of recent initiates includes 0.9 million males aged 12 or older (0.7 percent of males) and 1.2 million females (0.9 percent of females) who initiated the misuse of prescription pain relievers in the past year (**Figure 19** and **Table B.14** in **Appendix B**).

By Age Group

In 2015, approximately 415,000 adolescents aged 12 to 17 (1.7 percent of adolescents) misused pain relievers for the first time in the past year (**Figure 19** and **Table B.14** in **Appendix B**). This averages to approximately 1,100 adolescents each day who initiated the misuse of pain relievers. There were 596,000 young adults aged 18 to 25 (1.7 percent of young adults) and 1.1 million adults aged 26 or older (0.5 percent of adults in this age group) in 2015 who initiated the misuse of pain relievers in the past year. These numbers average to about 1,600 young adults and about 3,100 adults aged 26 or older each day who initiated the misuse of pain relievers.

Initiation of Tranquilizer Misuse

The estimated 1.4 million people aged 12 or older in 2015 who misused tranquilizers for the first time within the past year average to about 3,900 initiates per day. About 0.8 million females aged 12 or older (0.6 percent of females) and 0.6 million males (0.5 percent of males) misused tranquilizers for the first time in the past year (**Figure 19** and **Table B.14** in **Appendix B**).

By Age Group

In 2015, approximately 210,000 adolescents aged 12 to 17 (0.8 percent of adolescents), 489,000 young adults aged 18 to 25 (1.4 percent of young adults), and 738,000 adults aged 26 or older (0.4 percent of adults in this age group) misused tranquilizers for the first time in the past year (**Figure 19** and **Table B.14**). Each day, therefore, about 600 adolescents, 1,300 young adults, and 2,000 adults aged 26 or older initiated the misuse of tranquilizers.

Initiation of Stimulant Misuse

In 2015, the estimated 1.3 million people aged 12 or older who misused stimulants for the first time average to about 3,500 initiates per day. These numbers of initiates include 629,000 females aged 12 or older (0.5 percent of females) and 631,000 males (0.5 percent of males) (**Figure 19** and **Table B.14**).

By Age Group

Approximately 276,000 adolescents aged 12 to 17 (1.1 percent of adolescents), 600,000 young adults aged 18 to 25 (1.7 percent of young adults), and 384,000 adults aged 26 or older (0.2 percent of adults aged 26 or older) in 2015 misused stimulants for the first time in the past year (**Figure 19** and **Table B.14**). Thus, about 800 adolescents per day, 1,600 young adults per day, and 1,100 adults aged 26 or older per day initiated the misuse of stimulants.

Initiation of Sedative Misuse

In 2015, the approximately 425,000 people aged 12 or older who misused sedatives for the first time within the past year average to about 1,200 initiates per day for misuse of sedatives. About 270,000 females aged 12 or older (0.2 percent of females) and 155,000 males (0.1 percent of males) misused sedatives for the first time in the past year (**Figure 19** and **Table B.14**).

By Age Group

In 2015, approximately 46,000 adolescents aged 12 to 17 (0.2 percent of adolescents), 86,000 young adults aged 18 to 25 (0.2 percent of young adults), and 293,000 adults aged

26 or older (0.1 percent of adults aged 26 or older) misused sedatives for the first time in the past year (**Figure 19** and **Table B.14**). Thus, about 100 adolescents, 200 young adults, and 800 adults aged 26 or older initiated the misuse of sedatives each day in 2015.

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Prescription Drug Use Disorders

NSDUH includes a series of questions to estimate the percentage of the population aged 12 or older who had substance use disorders (SUDs) in the past 12 months. Respondents were asked questions about prescription drug use disorders if they reported misuse of prescription drugs in the past 12 months. These SUD questions classify people as having an SUD in the past 12 months and are based on criteria specified in DSM-IV.[24] The criteria include symptoms such as withdrawal, tolerance, use in dangerous situations, trouble with the law, and interference with major obligations at work, school, or home.

Because of the creation of a new section in the interview for methamphetamine (see the "Introduction"), SUDs for prescription stimulants in 2015 do not include methamphetamine. (In 2014 and earlier years, SUD estimates for prescription stimulants included data from respondents who used methamphetamine in the past year.) Instead, new questions were added to the survey in 2015 that ask about SUD symptoms that respondents specifically attributed to their use of methamphetamine in the past year, separate from SUD symptoms that were associated with the misuse of prescription stimulants.

Prescription Psychotherapeutic Use Disorder

An estimated 2.7 million people aged 12 or older in 2015 had a prescription drug use disorder in the past year (**Figure 21**). This number of people who had a prescription drug use disorder represents 1.0 percent of the population. An estimated 216,000 adolescents aged 12 to 17 in 2015 (0.9 percent of adolescents) had a prescription drug use disorder in the past year (**Figure 22** and **Table B.16**). Among young adults aged 18 to 25, about 687,000 had a prescription drug use disorder in the past year (2.0 percent of young adults). Approximately 1.8 million adults aged 26 or older in 2015 had a prescription drug use disorder in the past year, representing 0.9 percent of adults aged 26 or older.

Figure 21. Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older: Numbers (in Thousands) and Percentages, 2015

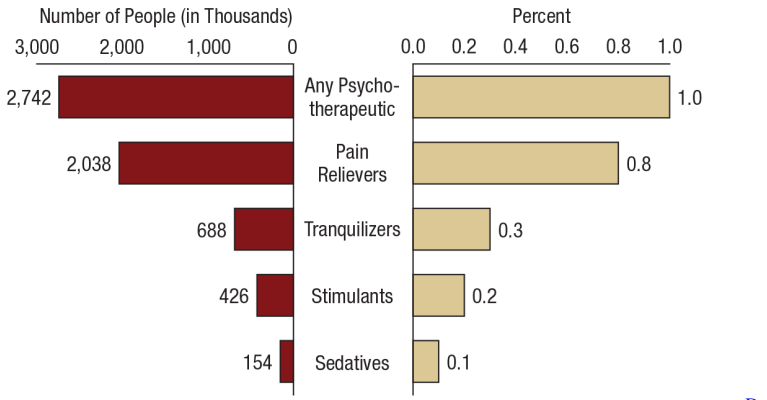
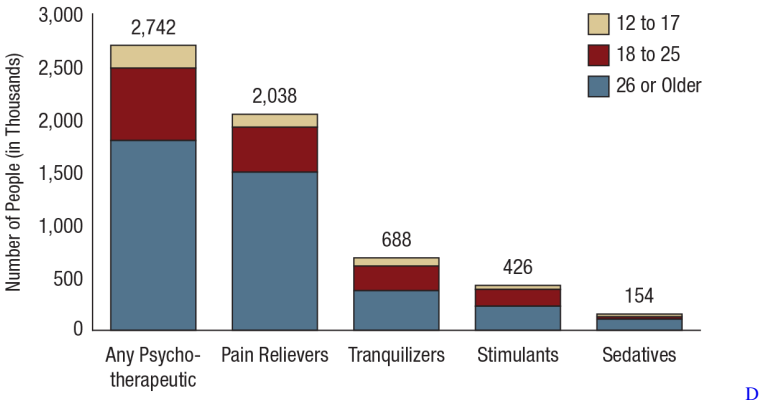


Figure 22. Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older, by Age Group: Numbers (in Thousands), 2015



Note: In the figure, visibility of the numbers of youths aged 12 to 17 and young adults aged 18 to 25 who had a sedative use disorder is affected by the small numbers of youths and young adults with that particular disorder.

Figure 22 Table. Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older, by Age Group: Numbers (in Thousands), 2015

Age Group	Any Psycho-therapeutic	Pain Relievers	Tranquilizers	Stimulants	Sedatives
12 or Older	2,742	2,038	688	426	154
12 to 17	216	122	77	38	26
18 to 25	687	427	234	159	22
26 or Older	1,800	1,500	376	229	106

Pain Reliever Use Disorder

In 2015, an estimated 2.0 million people aged 12 or older had a pain reliever use disorder (**Figure 21**). This number represents 0.8 percent of the population and nearly three fourths of the 2.7 million people who had any prescription drug use disorder. An estimated 122,000 adolescents aged 12 to 17 in 2015 (0.5 percent of adolescents) had a pain reliever use disorder in the past year (**Figure 22** and **Table B.16**). Approximately 427,000 young adults aged 18 to 25 and 1.5 million adults aged 26 or older in 2015 had a pain reliever use disorder in the past year. These numbers represent 1.2 percent of young adults and 0.7 percent of adults aged 26 or older.

Tranquilizer Use Disorder

An estimated 688,000 people aged 12 or older in 2015 had a tranquilizer use disorder (**Figure 21**), or 0.3 percent of the population. An estimated 77,000 adolescents aged 12 to 17 in 2015 (0.3 percent of adolescents) had a tranquilizer use disorder in the past year (**Figure 22** and **Table B.16**). Approximately 234,000 young adults aged 18 to 25 (0.7 percent of young adults) and 376,000 adults aged 26 or older in 2015 (0.2 percent of adults aged 26 or older) had a tranquilizer use disorder in the past year.

Stimulant Use Disorder

In 2015, an estimated 426,000 people aged 12 or older had a stimulant use disorder in the past year (**Figure 21**), which represents 0.2 percent of the population. About 38,000 adolescents aged 12 to 17 in 2015 (0.2 percent of adolescents) had a stimulant use disorder in the past year (**Figure 22** and **Table B.16**). Approximately 159,000 young adults aged 18 to 25 and 229,000 adults aged 26 or older in 2015 had a stimulant use disorder in the past year. These numbers represent 0.5 percent of young adults and 0.1 percent of adults aged 26 or older.

Sedative Use Disorder

An estimated 154,000 people aged 12 or older in 2015 had a sedative use disorder (**Figure 21**), which represents 0.1 percent of the population. An estimated 26,000 adolescents aged 12 to 17 (0.1 percent of adolescents) had a sedative use disorder in the past year (**Figure 22** and **Table B.16**). Approximately 22,000 young adults aged 18 to 25 and 106,000 adults aged 26 or older in 2015 had a sedative use disorder in the past year. These numbers represent 0.1 percent of young adults and 0.1 percent of the adults aged 26 or older.

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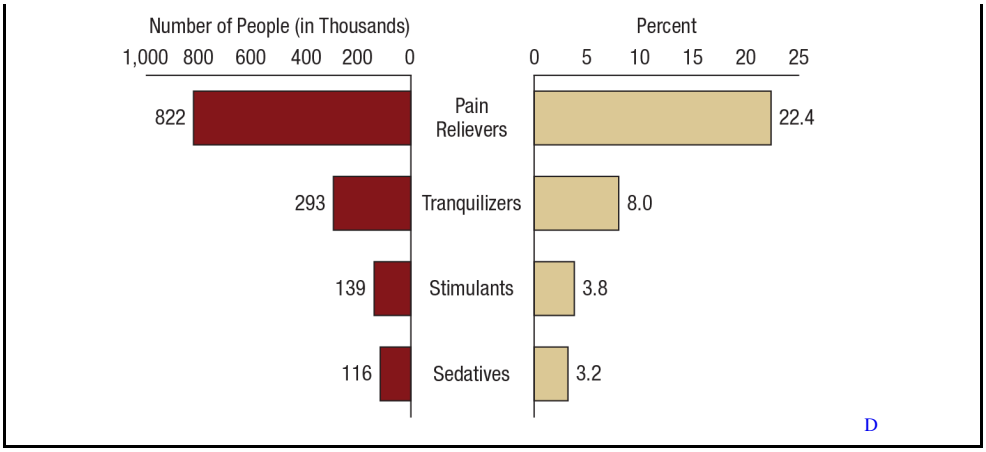
Treatment for the Misuse of Prescription Psychotherapeutics

NSDUH respondents who used alcohol or illicit drugs in their lifetime are asked whether they ever received substance use treatment (i.e., treatment for their use of alcohol or illicit drugs), and those who received substance use treatment in their lifetime are asked whether they received treatment in the 12 months prior to the survey interview (i.e., the past year). Substance use treatment refers to treatment received for illicit drug or alcohol use or for medical problems associated with the use of illicit drugs or alcohol. This includes treatment received in the past year at any location, such as a hospital (inpatient), rehabilitation facility (outpatient or inpatient), mental health center, emergency room, private doctor's office, prison or jail, or a self-help group, such as Alcoholics Anonymous or Narcotics Anonymous.

Respondents who reported receiving substance use treatment in the past year had the opportunity to indicate the specific substances for which they received treatment during their most recent (e.g., last or current) substance use treatment. Data on the substances for which people received their most recent treatment are not mutually exclusive because respondents could indicate that they received treatment for their use of more than one substance.

In 2015, 3.7 million people aged 12 or older received substance use treatment in the past year. Of these, 822,000 received treatment for the misuse of pain relievers during their most recent treatment in the past year (**Figure 23**). The 822,000 people who received treatment for the misuse of pain relievers during their most recent treatment in the past year represent 22.4 percent of people aged 12 or older who received treatment for alcohol or illicit drug use in the past year. An estimated 293,000 people aged 12 or older received treatment for tranquilizer misuse during their most recent treatment in the past year (8.0 percent of people who received treatment in the past year), 139,000 received treatment for stimulant misuse during their most recent treatment (3.8 percent of people who received treatment in the past year), and 116,000 received treatment for sedative misuse during their most recent treatment (3.2 percent of people who received treatment in the past year).

Figure 23. Prescription Psychotherapeutics for Which Most Recent Treatment Was Received among People Aged 12 or Older Who Received Substance Use Treatment in the Past Year: Numbers (in Thousands) and Percentages, 2015



Treatment for Prescription Pain Reliever Misuse, by Age Group

The 822,000 people aged 12 or older in 2015 who received treatment for prescription pain reliever misuse during their most recent substance use treatment in the past year (**Figure 23**) included about 25,000 adolescents aged 12 to 17, 165,000 young adults aged 18 to 25, and 632,000 adults aged 26 or older (**Table B.17** in **Appendix B**).

Treatment for Prescription Tranquilizer Misuse, by Age Group

In 2015, of the 293,000 people aged 12 or older who received treatment for prescription tranquilizer misuse during their most recent substance use treatment in the past year (**Figure 23**), about 19,000 were adolescents aged 12 to 17, 89,000 were young adults aged 18 to 25, and 185,000 were adults aged 26 or older (**Table B.17**).

Treatment for Prescription Stimulant Misuse, by Age Group

In 2015, the 139,000 people aged 12 or older who received treatment for prescription stimulant misuse during their most recent substance use treatment in the past year (**Figure 23**) included 16,000 adolescents aged 12 to 17, 46,000 young adults aged 18 to 25, and 76,000 adults aged 26 or older (**Table B.17**).

Treatment for Prescription Sedative Misuse, by Age Group

In 2015, the 116,000 people aged 12 or older who received treatment for prescription sedative misuse during their most recent substance use treatment in the past year (**Figure 23**) included 7,000 adolescents aged 12 to 17, 28,000 young adults aged 18 to 25, and 81,000 adults aged 26 or older (**Table B.17**).

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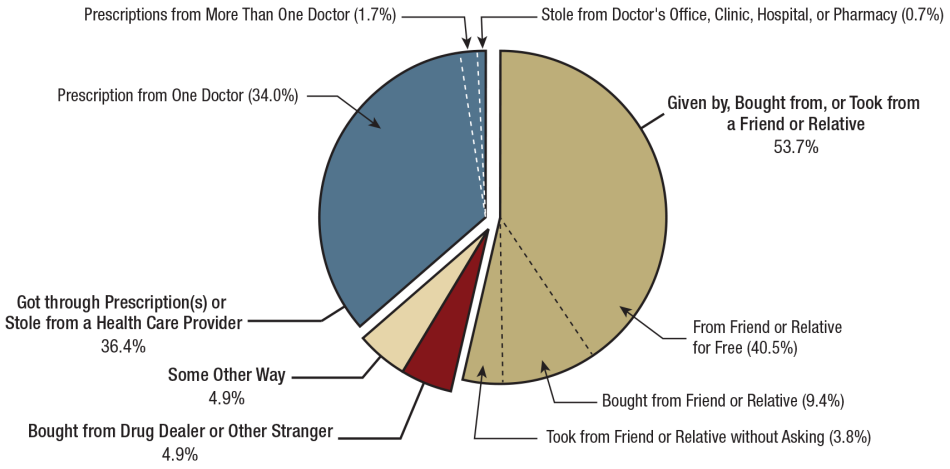
Source of Prescription Pain Relievers

This section presents information for how all people aged 12 or older who misused prescription pain relievers in the past year obtained these pain relievers the last time they misused them. This section also discusses how past year misusers of pain relievers obtained pain relievers the last time they misused them according to approximately increasing levels of problem misuse.

Source of Prescription Pain Relievers among All Past Year Misusers

Among all people aged 12 or older in 2015 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 24**). More than half (53.7 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, 40.5 percent of people who misused pain relievers in the past year obtained pain relievers the last time by getting them from a friend or relative for free, 9.4 percent bought their last pain reliever from a friend or relative, and 3.8 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 (36.4 percent) indicated that they obtained pain relievers the last time through a prescription or health care provider, typically getting the pain relievers through a prescription from one doctor (34.0 percent). About 1 in 20 people who misused pain relievers in the past year (4.9 percent) reported that they bought the last pain reliever they misused from a drug dealer or stranger.

Figure 24. 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, 2015



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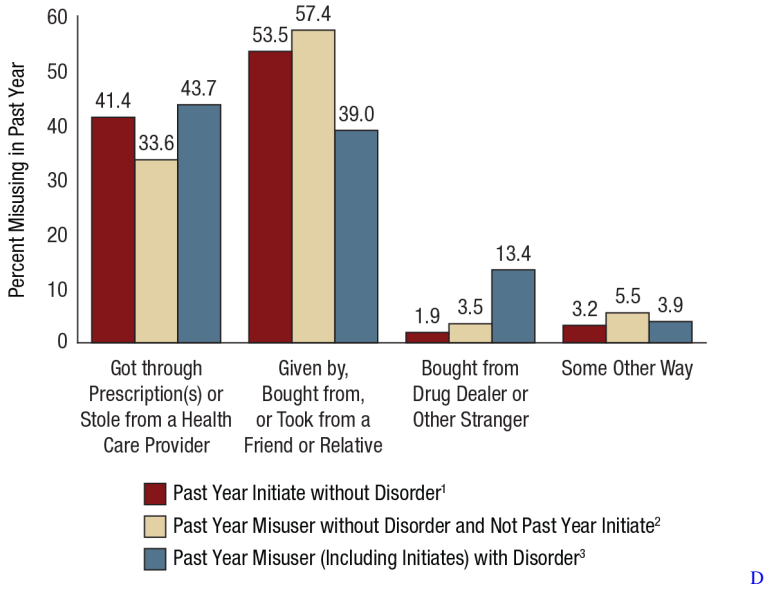
Note: The percentages do not add to 100 percent due to rounding.
Note: Respondents with unknown data for the Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded.

Source of Prescription Pain Relievers, by Type of Misuser

Another way of understanding the misuse of prescription pain relievers is to examine whether the sources for the most recently misused prescription pain relievers vary by the type of misuser of pain relievers. These user types were defined in terms of approximately increasing levels of misuse. Specifically, past year misusers of pain relievers were categorized into the following mutually exclusive groups: (a) past year initiates without a pain reliever use disorder, (b) past year misusers who initiated misuse more than 12 months ago and did not have a pain reliever use disorder, and (c) past year misusers with a pain reliever use disorder, which included past year initiates whose misuse progressed in the past 12 months from initiation to having a pain reliever use disorder. As noted previously, individuals who misused pain relievers in the past year were defined as having a pain reliever use disorder in the past year based on criteria specified in DSM-IV.[24] Past year initiates were defined as people who first misused prescription pain relievers within the past 12 months.

For all three types of past year misusers, the two most commonly reported sources of the prescription pain relievers that were misused the last time were (a) obtaining the drugs from a friend or relative and (b) receiving the drugs through prescription(s) or health care providers (**Figure 25**). Obtaining pain relievers from a friend or relative was the most common source for both past year initiates (53.5 percent) and less recent initiates who misused pain relievers in the past year and did not have a pain reliever use disorder (57.4 percent). This source was followed by obtaining pain relievers through prescription(s) or health care providers, which was reported by 41.4 percent of past year initiates and 33.6 percent of less recent initiates who did not have a pain reliever use disorder. In comparison, the most common source for past year misusers with a pain reliever use disorder was through prescription(s) or health care providers (43.7 percent), followed by friends or relatives (39.0 percent).

Figure 25. Source Where Pain Relievers Were Obtained for Most Recent Misuse for People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year, by Past Year Initiation Status and Pain Reliever Disorder Status: Percentages, 2015



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

valid way were excluded.
[1] Past Year Initiate without Disorder is defined as individuals who initiated pain reliever misuse in the past year but who did not have a past year pain reliever use disorder.
[2] Past Year Misuser without Disorder and Not Past Year Initiate is defined as individuals who misused pain relievers in the past year, were not past year initiates for pain reliever misuse, and did not have a past year pain reliever use disorder.
[3] Past Year Misuser (Including Initiates) with Disorder is defined as individuals who misused pain relievers in the past year (including initiates and noninitates) and had a past year pain reliever use disorder.

Past year misusers with a pain reliever use disorder also were more likely than misusers in the other two groups to have obtained their last prescription pain relievers from a drug dealer or other stranger (13.4 percent) (**Figure 25**). In comparison, 1.9 percent of past year initiates without a disorder and 3.5 percent of less recent initiates who misused in the past year and did not have a pain reliever use disorder bought their last prescription pain relievers from a drug dealer or other stranger. More than 1 in 8 past year misusers with a pain reliever use disorder (13.8 percent) bought their last pain relievers from a friend or relative (**Table B.13** in **Appendix B**), followed by past year misusers who initiated misuse more than 12 months ago but did not have a pain reliever use disorder (9.3 percent), then by recent initiates (5.4 percent). Past year misusers with a pain reliever use disorder also were less likely to obtain their last pain relievers from a friend or relative for free (22.1 percent) compared with past year initiates without a pain reliever use disorder (45.5 percent) and less recent initiates who were past year misusers but did not have a pain reliever use disorder (43.9 percent).

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New Directions in Measuring Prescription Drug Use and Misuse in the 2015 NSDUH

A number of changes were made to the 2015 NSDUH questionnaire and data collection procedures to collect new information and to address current substance use and mental health policy and research needs. As noted in the section at the beginning of the report titled "Notable Questionnaire Changes for the 2015 NSDUH," these changes included the redesign of the prescription drug questions. Collecting more detailed information on use, misuse, and recent initiation of a comprehensive set of specific prescription drugs was determined to be more useful for policy and research purposes, in part because of public health concerns about increases in addiction, overdoses, and deaths involving prescription drugs. This section provides a brief summary of enhancements to the NSDUH prescription drug questions and some analyses that are now possible with these new prescription drug data. Notable limitations are also summarized. Additional information on these changes and related issues can be found in **Appendix A**.

Key Enhancements

Several enhancements or improvements were made to the prescription drug questions in the 2015 NSDUH, as described below.

Changes to the Definition of Misuse

The definition of misuse was changed to focus on specific behaviors that constitute misuse and to incorporate more ways in which people misuse prescription drugs, including overuse of medication despite having a prescription. The definition of misuse before 2015 included a *behavior* (i.e., use without a prescription of one's own) and a *motivation* (i.e., use only for the experience or feeling that a drug caused). Also, use "for the experience or feeling" that a drug caused could be misinterpreted by respondents to apply to use of prescribed medications for their intended effects (e.g., use of prescription tranquilizers to reduce feelings of anxiety).[4]

Inclusion of Relevant Prescription Drugs for Estimating Past Year Use and Misuse

Because of the focus of the 2015 NSDUH questions on the past year reference period for the use and misuse of specific prescription drugs (i.e., instead of the lifetime period prior to 2015), attention was given to identifying the specific prescription drugs that were likely to be most relevant for estimating past year use and misuse. Decisions to add specific prescription drugs to the questionnaire were based on a number of factors, including identification of recently approved prescription drugs that were not included in the NSDUH questionnaire for the last major redesign in 1999, changes in prescribing practices (e.g., increased prescribing of some prescription drugs), evidence of serious adverse consequences associated with the misuse of certain prescription drugs, and evidence of certain prescription drugs being commonly diverted to people without a prescription or for purposes other than those for which the drugs are prescribed. In turn, prescription drugs that are no longer available in the United States were removed from the 2015 questionnaire, despite some of these having been commonly misused drugs in the past (e.g., sedatives containing methaqualone, such as Quaalude®). In particular, more than half of the stimulants and sedatives in the 2014 questionnaire had been discontinued or were no longer legally available in the United States and were therefore not included in the 2015 questionnaire. Keeping a set of measures in the survey that have undergone little or no change over time permits the measurement of trends. However, presenting respondents with a less relevant set of prescription drugs erodes the validity of the trend data for prescription drug misuse, even if the NSDUH questions remain unchanged.

Inclusion of a New Measure for Any Use of Prescription Drugs

Data on *any* use of specific prescription drugs are available for the first time in the 2015 NSDUH. Because the NSDUH questionnaire includes subsequent questions on misuse, it is now possible to estimate the percentages of past year users of different categories of psychotherapeutic drugs who reported misuse. Although not a focus of this report, it also is possible with these data to estimate the number of people who used their own medication only as directed by a doctor by subtracting the number of people who reported misuse from the number who reported any use. Note that people who reported any use of a specific medication and also reported misuse of the same medication are counted as misusers because they misused a medication at least once in the past year. However, it is not possible to differentiate respondents whose only use in the past year involved misuse from those who used a given medication as directed and who also misused the same medication at some other time in the past year.

Availability of More Detailed Data on Subtypes of Prescription Drugs

The prescription drug redesign allows for prescription drug use and misuse to be grouped by chemically related prescription drugs (e.g., benzodiazepine tranquilizers such as Xanax®, Ativan®, and Valium®) or for use and misuse to be categorized according to the common active ingredients (e.g., pain relievers containing hydrocodone). Data on specific prescription drugs also can allow drugs to be categorized according to whether the active ingredient is intended to be released fairly rapidly into a person's system (i.e., "immediate release") or if the active ingredient is intended to be released more slowly over a longer period (i.e., "extended release"). Because extended-release prescription drugs typically contain a higher dosage of the active ingredient than their immediate-release counterparts, tampering with extended-release medications (e.g., by crushing or dissolving them) to override the extended-release mechanism can release the active ingredient into a person's system more rapidly than intended, which can cause a life-threatening or fatal overdose. However, taking a large number of pills for an immediate-release drug could have the same potentially dangerous effect. Thus, understanding patterns of misuse of immediate-release and extended-release prescription drugs can inform decisionmaking about prescribing practices (e.g., which drug to prescribe and how much to prescribe), patient education, and the development of formulations that better deter misuse.

Identification of Specific Ways of Misuse

NSDUH now asks respondents to report whether they misused prescription drugs in the following ways:

- use without a prescription of the respondent's own,
- use in greater amounts than a drug was prescribed,
- use more often than a drug was prescribed,
- use for longer than told to take a drug (e.g., continuing to take a drug despite no longer having the problem for which the drug was prescribed), and
- use in some other way that was not directed by a doctor.

Although data from these questions were not presented in this report, these questions can be used to assess whether drugs in certain prescription psychotherapeutic categories are more likely to be misused in specific ways compared with other categories of prescription drugs or if ways of misuse vary by respondent characteristics (e.g., age, gender, mental health). In addition, it would be useful to understand the ways in which people misused prescription drugs in combination with their motivations for misuse (see below).[33]

Identification of Motivations for Misuse

NSDUH now asks respondents who misused prescription drugs in a given category in the past year to report why they misused prescription drugs for their last episode of misuse. The specific reasons for misuse are listed below, along with the prescription drug categories to which these reasons applied:

- to relieve physical pain (pain relievers only);
- to relax or relieve tension (pain relievers, tranquilizers, or sedatives);
- to help with sleep (pain relievers, tranquilizers, or sedatives);
- to help with feelings or emotions (pain relievers, tranquilizers, or sedatives);
- to experiment or to see what the drug was like (all four psychotherapeutic categories);
- to feel good or get high (all four psychotherapeutic categories);
- to increase or decrease the effect(s) of some other drug (all four psychotherapeutic categories);
- because the respondent was "hooked" or needed to have it (all four psychotherapeutic categories);
- to help lose weight (stimulants only);
- to help concentrate (stimulants only);
- to be alert or stay awake (stimulants only);
- to help study (stimulants only); or
- for some other reason (all four psychotherapeutic categories).

Analyzing data on motivations for misuse according to the ways in which prescription drugs are being misused and how people obtained prescription drugs will be useful for identifying a richer set of social determinants and other risk factors that ultimately could be used by policymakers, researchers, and health care providers in the development of more focused prevention efforts and treatment interventions.

Key Limitations

Although the previously described enhancements to the NSDUH prescription drug questions will provide a richer set of data for researchers and policymakers, there also are some important limitations to note that are associated with the changes to these questions.

Comparability of Estimates for Prescription Drug Misuse and Related Measures in 2015 and Prior Years

Because of the changes that were described previously, the estimates from the 2015 NSDUH for all prescription drug measures are not comparable with corresponding estimates that existed in prior survey years, including estimates of misuse, past year initiation of prescription drug misuse, and prescription drug use disorders.

Estimation of Lifetime Use and Misuse of Prescription Drugs

The changes in the way that lifetime prescription drug misuse was measured appear to have affected the reporting of lifetime misuse of prescription drugs. In particular, the redesigned questions provided fewer questions and cues to aid respondents in recalling whether they misused any prescription psychotherapeutic drug in a given category more than 12 months prior to the interview date. With the increase in questions asking about specific prescription drugs that were used in the past year, there were fewer questions asking about lifetime use of specific prescription drugs. The redesigned questions also did not provide examples of prescription drugs that were no longer available by prescription in the United States but may have been historically important (e.g., sedatives containing methaqualone, such as those with the brand names Quaalude® or Sopor®). As a consequence, respondents who did not misuse prescription drugs in the past year but who did so in their lifetime may have underreported lifetime misuse in 2015 compared with the situation in prior years. Therefore, both lifetime prescription drug use and misuse measures are not reported for 2015.

Initiation of Misuse of Prescription Drugs

Prior to 2015, NSDUH respondents who reported that they misused one or more specific prescription psychotherapeutic drugs in a given category in their lifetime were asked to report how old they were when they first misused any prescription drug in that category. This question sequence (i.e., first asking all respondents if they ever used or misused a drug or specific drugs in a given category and, if applicable, then asking how old respondents were when they first used or misused a drug in that category[34]) was consistent across all substance use sections of the questionnaire. This questioning sequence remained the same in 2015 for all substances except for prescription drugs.

For prescription drugs, questions about the first time that respondents misused prescription drugs were limited to the specific prescription drugs that respondents misused in the past 12 months. Specifically, if NSDUH respondents reported that they misused a particular prescription psychotherapeutic drug in the past 12 months, they were asked to report their age when they first misused it.

Because initiation data in the 2015 NSDUH were not collected for respondents who reported lifetime but not past year misuse, an additional issue for the redesigned prescription drug questions is that limited data are available for establishing the temporal sequence of initiation for misuse of prescription drugs relative to the initiation of use for other substances. For example, if a respondent initiated use of heroin in the past year and reported misuse of prescription pain relievers more than 12 months prior to being interviewed, information was not available in 2015 on the period of time between the initiation of the misuse of pain relievers and the first use of heroin.

As noted in the preceding section, there is evidence of underreporting of lifetime (but not past year) misuse of prescription drugs compared with prior years. This potential underreporting of lifetime misuse also has two effects on estimates in 2015 for initiation of prescription drug misuse. First, underreporting of lifetime misuse would increase the estimated size of the population who are defined as being "at risk" for initiation; respondents who initiated use or misuse of a substance more than 12 months ago can no longer be "at risk" for initiation *in the past 12 months*.[35] The result of overestimating the number of individuals who are at risk for initiation would be to underestimate the proportion of recent initiates among the population that is at risk for initiation.

Second, the potential for respondents to underreport lifetime misuse has affected the estimation of past year initiation of misuse for any prescription psychotherapeutic drug (i.e., pain relievers, sedatives, stimulants, or tranquilizers) and past year initiation for any illicit drug. If a respondent was defined as being a past year initiate for misuse of one category of prescription drugs (e.g., tranquilizers) but this respondent failed to report lifetime (but not past year) misuse of prescription psychotherapeutic drugs in other categories, then this respondent would be misclassified as a past year initiate for the misuse of any psychotherapeutic drug. Likewise, respondents who underreported lifetime (but not past year) misuse of prescription drugs could be misclassified as initiating the use or misuse of any illicit drug in the past year. Therefore, estimates for 2015 are still reported for past year initiation for the individual prescription drug categories (i.e., pain relievers, tranquilizers, stimulants, and sedatives) and for specific other illicit drug use categories (e.g., marijuana). However, estimates in 2015 are no longer reported for the initiation of misuse of any prescription psychotherapeutic drug or any illicit drug in the past year. Further studies are needed to evaluate how this underreporting has affected the estimates for these aggregate initiation measures.

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Endnotes

[1] Center for Behavioral Health Statistics and Quality. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health* (HHS Publication No. SMA 16-4984, NSDUH Series H-51). Retrieved from https://www.samhsa.gov/data/

[2] 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 2015 NSDUH available at https://www.samhsa.gov/data/.

[3] Colliver, J. D., Kroutil, L. A., Dai, L., & Gfroerer, J. C. (2006). *Misuse of prescription drugs: Data from the 2002, 2003, and 2004 National Surveys on Drug Use and Health* (HHS Publication No. SMA 06-4192, Analytic Series A-28). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

[4] Huang, B., Dawson, D. A., Stinson, F. S., Hasin, D. S., Ruan, W. J., Saha, T. D., Smith, S. M. Goldstein, R. B., & Grant, B. F. (2006). Prevalence, correlates, and comorbidity of nonmedical prescription drug use and drug use disorders in the United States: Results of the National Epidemiology Survey on Alcohol and Drug Related Conditions. *Journal of Clinical Psychiatry, 67*, 1062-1073. doi:10.4088/jcp.v67n0708

[5] Zacny, J. P., & Lichtor, S. A. (2008). Nonmedical use of prescription opioids: Motive and ubiquity issues. *Journal of Pain, 9*, 473-486. doi:10.1016/j.jpain.2007.12.008

[6] In this report, terms such as "Americans," "people in this country," "general population," or similar terms are used broadly to refer to the civilian, noninstitutionalized population 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 U.S. Census 2010 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

[7] Details about the sample design, weighting, and interviewing results for the 2015 NSDUH are provided in Sections A.1, A.3.4, and B.3.1 of CBHSQ (2016). In particular, Tables A.1 and A.2 in CBHSQ (2016) 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. (2016). *2015 National Survey on Drug Use and Health: Methodological summary and definitions*. Retrieved from https://www.samhsa.gov/data/

[8] 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.

[9] Overall response rates are not calculated for adolescents or adults because the screening response rate is not specific to age groups.

[10] See the CBHSQ (2016) reference in endnote 7.

[11] 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/

[12] 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/

[13] See Section C in CBHSQ (2016). See endnote 7 for the reference.

[14] Racial/ethnic group categorizations are based on guidelines for collecting and reporting race and ethnicity data (Office of Management and Budget [OMB], 1997). Because respondents were allowed to choose more than one racial group, a "two or more races" category is presented that includes persons who reported more than one category among the seven basic groups listed in the survey question (white, black or African American, American Indian or Alaska Native, Native Hawaiian, Other Pacific Islander, Asian, Other). It should be noted that, except for the "Hispanic or Latino" group, the racial/ethnic groups discussed in this report include only non-Hispanics. The category "Hispanic or Latino" includes Hispanics of any race. Also, more detailed categories describing specific subgroups were obtained from survey respondents if they reported either Asian race or Hispanic ethnicity. Data on Native Hawaiians and Other Pacific Islanders are combined in this report. See the following reference: Office of Management and Budget. (1997). Revisions to the standards for the classification of federal data on race and ethnicity. *Federal Register, 62*(210), 58781-58790.

[15] Estimates by region are presented in **Table B.3** in **Appendix B**. The regions of the country in which NSDUH respondents reside include four U.S. geographic regions defined by the U.S. Census Bureau. These regions consist of the following groups of states, including the District of Columbia:

Northeast Region - Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Midwest Region - Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

South Region - Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West Region - Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[16] Geographic comparisons are made based on county type, which reflects different levels of urbanicity and metropolitan area inclusion of counties, based on metropolitan area definitions issued by the OMB in June 2003 (OMB, 2003). For this purpose, counties are grouped based on the 2013 rural-urban continuum codes. These codes are updated approximately every 10 years and are available at http://ers.usda.gov/topics/rural-economy-population/rural-classifications.aspx by clicking on that page's link to the "Rural/Urban Continuum Codes." The rural-urban continuum codes were originally developed by the U.S. Department of Agriculture (Butler & Beale, 1994). Each county is either inside or outside a metropolitan statistical area (MSA), as defined by the OMB. Large metropolitan areas have a population of 1 million or more, small metropolitan areas have a population of fewer than 1 million, and nonmetropolitan areas are areas outside metropolitan areas. See the following references:

Butler, M. A., & Beale, C. L. (1994, September). *Rural-urban continuum codes for metro and non-metro counties*, 1993 (Staff Report No. AGES 9425). Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Office of Management and Budget. (2003, June 6). *Revised definitions of metropolitan statistical areas, new definitions of micropolitan statistical areas and combined statistical areas, and guidance on uses of the statistical definitions of these areas* (OMB Bulletin No. 03-04). Washington, DC: The White House.

[17] For a discussion of the criteria for suppressing (i.e., not publishing) unreliable estimates, see Section B.2.2 in CBHSQ (2016). See endnote 7 for the reference.

[18] Some exceptions were made for brand name prescription drugs that did not have a generic equivalent that also was available by prescription in the United States, such as OxyContin®.

[19] Questions in the 2015 NSDUH covered the following subcategories of pain relievers: *hydrocodone products* (Vicodin®, Lortab®, Norco®, Zohydro® ER, or generic hydrocodone); *oxycodone products* (OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, or generic oxycodone); *tramadol products* (Ultram®, Ultram® ER, Ultracet®, generic tramadol, or generic extended-release tramadol); *codeine products* (Tylenol® with codeine 3 or 4 or generic codeine pills); *morphine products* (Avinza®, Kadian®, MS Contin®, generic morphine, or generic extended-release morphine); *fentanyl products* (Actiq®, Duragesic®, Fentora®, or generic fentanyl); *buprenorphine products* (Suboxone® or generic buprenorphine); *oxymorphone products* (Opana®, Opana® ER, generic oxymorphone, or generic extended-release oxymorphone); Demerol®; *hydromorphone products* (Dilaudid® or generic hydromorphone, or Exalgo® or generic extended-release hydromorphone); methadone; or any other prescription pain reliever. Other prescription pain relievers could include products that are similar to the specific pain relievers that were listed previously. However, separate estimates were not created for codeine products for 2015 because of concerns that respondents in 2015 might overreport the use and misuse of codeine products if they confused Tylenol® with codeine 3 or 4 (which is a prescription drug) with over-the-counter Tylenol®, which does not require a prescription; changes were made to the 2016 NSDUH questionnaire to emphasize that Tylenol® with codeine 3 or 4 is not the same as over-the-counter Tylenol®.

[20] Questions in the 2015 NSDUH covered the following subcategories of tranquilizers: *benzodiazepine tranquilizers* (including *alprazolam products* [Xanax®, Xanax® XR, generic alprazolam, or generic extended-release alprazolam], *lorazepam products* [Ativan® or generic lorazepam], *clonazepam products* [Klonopin® or generic clonazepam], or *diazepam products* [Valium® or generic diazepam]); *muscle relaxants* (cyclobenzaprine [also known as Flexeril®] or Soma®); *buspirone* (also known as BuSpar®); *hydroxyzine* (also known as Atarax® or Vistaril®); *meprobamate* (also known as Equanil® or Miltown®); or any other prescription tranquilizer. Other prescription tranquilizers could include products that are similar to the specific tranquilizers that were listed previously.

[21] Questions in the 2015 NSDUH covered the following subcategories of stimulants: *amphetamines for attention-deficit/hyperactivity disorder* (Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, generic dextroamphetamine, generic amphetamine-dextroamphetamine combinations, or generic extended-release amphetamine-dextroamphetamine combinations); *methylphenidate products* (Ritalin®, Ritalin® SR, Ritalin® LA, Concerta®, Daytrana®, Metadate® CD, Metadate® ER, Focalin®, Focalin® XR, generic methylphenidate, generic extended-release methylphenidate, generic dexmethylphenidate, or generic extended-release dexmethylphenidate); *anorectic (weight-loss) stimulants* (Didrex®, benzphetamine, Tenuate®, diethylpropion, phendimetrazine, or phentermine); Provigil®; or any other prescription stimulant. Other prescription stimulants could include products that are similar to the specific stimulants that were listed previously. Since 2015, methamphetamine has not been included as a prescription stimulant.

[22] Vyvanse® is included with amphetamine products because its active ingredient (lisdexamfetamine) is metabolized to dextroamphetamine.

[23] Questions in the 2015 NSDUH covered the following subcategories of sedatives: *zolpidem products* (Ambien®, Ambien® CR, generic zolpidem, or extended-release generic zolpidem); *eszopiclone products* (Lunesta® or generic eszopiclone); *zaleplon products* (Sonata® or generic zaleplon); *benzodiazepine sedatives* (flurazepam [also known as Dalmane®], *temazepam products* [Restoril®, or generic temazepam], or triazolam [Halcion® or generic triazolam]); *barbiturates* (Butisol®, Seconal®, or phenobarbital); or any other prescription sedative. Other prescription sedatives could include products that are similar to the specific sedatives that were listed previously.

[24] American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC: Author.

[25] 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 in 2008 to 2012 was applied to data from the 2008 to 2013 NSDUHs to produce estimates of AMI for the entire NSDUH adult sample in these years. For details about the SCID-I/NP, 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.

[26] The specific questions used to measure MDE and a discussion of measurement issues are included in Section B.4.5 of CBHSQ (2016). See endnote 7 for the reference. 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.

[27] 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 in the 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.

[28] Piscopo, K., Lipari, R. N., Cooney, J., & Glasheen, C. (2016, September). *Suicidal thoughts and behavior among adults: Results from the 2015 National Survey on Drug Use and Health*. NSDUH Data Review. Retrieved from https://www.samhsa.gov/data/

[29] NSDUH does not ask respondents to report on their first use of prescription psychotherapeutic drugs. Rather, NSDUH asks only about the initiation of misuse. NSDUH respondents who reported that they misused a particular prescription drug in the past 12 months are asked to report their age when they first misused it. Respondents who reported first misuse of a prescription drug within a year of their current age (which is within 24 months of the date of the interview) also are asked to report the year and month when they first misused it.

[30] See the CBHSQ (2016) reference in endnote 7.

[31] In terms of data quality, NSDUH respondents who started misusing a substance recently would be expected to have less difficulty remembering how old they were when they first misused it compared with respondents whose first misuse occurred several years prior to the interview.

[32] Center for Behavioral Statistics and Quality. (2015). *Risk and protective factors and initiation of substance use: Results from the 2014 National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/

[33] Boyd, C. J., & McCabe, S. E. (2008). Coming to terms with the nonmedical use of prescription medications. *Substance Abuse Treatment, Prevention, and Policy, 3*(22). doi:10.1186/1747-597X-3-22

[34] For substances such as cigarettes, alcohol, and marijuana, respondents were asked whether they ever used that substance, and if they answered affirmatively, they were asked to report their age when they first used it. For substances such as hallucinogens, respondents were asked whether they ever used specific substances in that category. If respondents answered affirmatively for one or more of the specific substances, they were asked to report their age when they first used any drug in that category (e.g., the age when a respondent first used any hallucinogen).

[35] Given that respondents who initiated the misuse of prescription drugs more than 12 months prior to being interviewed cannot be "at risk" for initiating misuse in the past 12 months, respondents were classified as being at risk for initiation of misuse if they never misused any prescription drug in that category in their lifetime or they had initiated the misuse of *all* prescription drugs in that category in the past 12 months.

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Appendix A: Methodological Summary for the 2015 NSDUH Prescription Drug Questions

A.1 Definitions for Any Psychotherapeutic Drug and the Four Psychotherapeutic Categories

The 2015 National Survey on Drug Use and Health (NSDUH) included questions about four categories of prescription psychotherapeutic drugs: pain relievers, tranquilizers, stimulants, and sedatives. For each prescription psychotherapeutic drug category, respondents first were asked whether they used a series of specific prescription drugs in the past 12 months. To aid respondents in recalling whether they used a specific prescription drug in the past 12 months, electronic images of pills or other forms of the drugs (where applicable) were shown to respondents on the computer screen; a document that shows the prescription drug images for the 2015 NSDUH is available at https://www.samhsa.gov/data/.[1] Respondents who did not report use in the past 12 months of any specific prescription psychotherapeutic drug within a category (e.g., prescription pain relievers) were asked whether they ever, even once, used any prescription psychotherapeutic drug within that category (e.g., any prescription pain reliever). Respondents who reported use of prescription psychotherapeutics in any of these four psychotherapeutic categories in the past 12 months or the lifetime period were defined as users of any prescription psychotherapeutic drug.

In order to identify past year misusers of prescription psychotherapeutic drugs, respondents who reported that they used specific prescription psychotherapeutic drugs in the past 12 months were shown a list of the drugs that they used in the past 12 months and were asked for each drug whether they used it in the past 12 months "in any way not directed by a doctor" (i.e., misuse). (See **Section A.3** for more information about how misuse was defined for the 2015 NSDUH.) If respondents reported misuse of one or more specific drugs within a psychotherapeutic category in the past 12 months, they were asked whether they used any drug in that category (e.g., prescription pain relievers) in the past 30 days in any way that a doctor did not direct the respondents to use it or them. This question was used to estimate past month or "current" misuse. Respondents who reported (a) any use of prescription psychotherapeutics in the past 12 months but did not report misuse in the past 12 months or (b) any use in their lifetime but not in the past 12 months were asked whether they ever, even once, misused any prescription psychotherapeutic drug within that category (e.g., any prescription pain reliever); respondents who reported misuse in their lifetime were identified as having misused prescription drugs in their lifetime but not in the past 12 months. Respondents who reported misuse of prescription psychotherapeutics in any of these four psychotherapeutic categories in the past 30 days, past 12 months, or in the lifetime period were defined as having misused any prescription psychotherapeutic drug.

Unlike prior years, the 2015 NSDUH reports and tables no longer refer to "prescription-type" psychotherapeutic drugs because questions about use of methamphetamine in 2015 are asked separately from questions about the use and misuse of prescription psychotherapeutic drugs. Prior to 2015, methamphetamine was included in the section of the interview for prescription stimulants. However, most methamphetamine that is used in the United States is produced in clandestine laboratories rather than by the pharmaceutical industry. Thus, beginning in 2015, methamphetamine questions were removed from the prescription stimulants section and were included in a new, separate section of the interview. Also, with the greater emphasis of the redesigned prescription drug questions on use and misuse in the past year instead of in the lifetime period (see **Section A.3**), the specific prescription drugs that were included in the 2015 NSDUH were currently or recently available by prescription in the United States relative to when the data were collected. For these reasons, it is not necessary for the 2015 NSDUH to refer to "prescription-type" psychotherapeutic drugs.

A.1.1 Controlled Substances Act and Relevance to Psychotherapeutics

The Controlled Substances Act (CSA) of 1970 gives authority to the Drug Enforcement Administration (DEA) within the U.S. Department of Justice to place controlled substances into "schedules."[2] Schedules are defined according to factors such as (a) a substance's potential for abuse, (b) the state of current scientific knowledge regarding a drug, (c) risks to the public health, or (d) the potential for physiological or psychological dependence.

- Substances in Schedule I, such as heroin (a nonprescription opioid), are deemed to have a high potential for abuse, have no currently accepted medical use in treatment in the United States, and have a lack of accepted safety for use under medical supervision.
- Substances in Schedule II have a high potential for abuse that can lead to severe psychological or physiological dependence. Unlike the drugs in Schedule I, however, the drugs in Schedule II have currently accepted medical uses in the United States under proper medical supervision. Several of the pain relievers and stimulants in NSDUH are in Schedule II.
- Substances in Schedule III also have currently accepted medical uses. These substances have a lower potential for abuse than the substances in Schedule II. Abuse of these substances can lead to moderate or low physical dependence or a high degree of psychological dependence. Some of the stimulants in NSDUH that are prescribed for weight loss are in Schedule III.

- Substances in Schedule IV also have currently accepted medical uses. These substances have a lower potential for abuse relative to the substances in Schedule III. Abuse of these substances can lead to limited physical or psychological dependence relative to the drugs in Schedule III. Several of the tranquilizers and sedatives in NSDUH are in Schedule IV.
- Substances in Schedule V have a lower potential for abuse relative to the substances in Schedule IV. The NSDUH questionnaire does not specifically ask about substances that are classified in Schedule V, such as cough medicines that contain low dosages of codeine.

Because of the greater risks associated with drugs in Schedule II, prescribing of these drugs is more tightly restricted and regulated than is prescribing of drugs in Schedules III or IV.[3] In principle, classification of prescription drugs into these schedules could affect the availability of prescription drugs for misuse.

A.1.2 Pain Relievers

Table A.1 shows the subtypes of pain relievers that are shown in **Table B.4** in **Appendix B** according to their CSA schedule numbers. Altogether, the 2015 questionnaire asked about the past year use or misuse of 37 specific pain relievers. In comparison, the 2014 questionnaire asked about the *lifetime* misuse of 27 specific pain relievers, including some that are no longer available by prescription in the United States (e.g., Darvocet®, Darvon®, generic propoxyphene, Talacen®, Talwin® NX).

As noted previously, most of the pain relievers in the 2015 NSDUH questionnaire are in the more stringently controlled Schedule II. Exceptions are products containing tramadol (Schedule IV) or buprenorphine (Schedule III). In 2014, pain relievers that contain hydrocodone plus acetaminophen (e.g., Vicodin®, Norco®) were moved from the less restrictive Schedule III to the more restrictive Schedule II; this change became effective on October 6, 2014.[4] Consequently, for respondents in the 2015 NSDUH who were interviewed prior to October 6, 2015, the 12-month reference period for past year use and past year misuse included a period when these hydrocodone products were in Schedule III. For respondents who were interviewed on or after October 6, 2015, the 12-month reference period included a period in which these hydrocodone products were in Schedule II.

The NSDUH questionnaire also includes questions about codeine products. For this report, codeine products are included in estimates of the use and misuse of prescription pain relievers as a whole. However, separate estimates were not created for the use and misuse of codeine products for 2015 because of concerns that respondents in 2015 might overreport the use and misuse of codeine products if they confused Tylenol® with codeine 3 or 4 (which is a Schedule III controlled substance that is available in the United States only by prescription[5]) with over-the-counter Tylenol®, which does not require a prescription; changes were made to the 2016 NSDUH questionnaire to emphasize that Tylenol® with codeine 3 or 4 is not the same as over-the-counter Tylenol®.

All pain reliever subtypes listed in **Table A.1** are prescription opioids. Prescription opioids are substances that act in the central nervous system to reduce the perception of pain. Although all of the pain reliever subtypes are opioids, the term "pain relievers" in NSDUH is not synonymous with "opioids" because respondents could specify that they misused other pain relievers besides the ones they were asked about in the questionnaire. These other pain relievers could include nonopioids such as nonsteroidal anti-inflammatory drugs that are not classified as controlled substances (e.g., prescription-strength ibuprofen). As shown in **Table B.4**, however, relatively few individuals who misused prescription pain relievers in the past year reported the misuse of pain relievers other than the opioids in the NSDUH questionnaire.

A.1.3 Tranquilizers

Table A.2 shows the subtypes of tranquilizers that are shown in **Table B.5** in **Appendix B** according to their CSA schedule numbers. Altogether, the 2015 questionnaire asked about the past year use or misuse of 15 specific tranquilizers. Although the 2014 questionnaire asked about the *lifetime* misuse of nominally more tranquilizers (i.e., 21 specific tranquilizers) than in 2015, nearly half of the questions for specific tranquilizers in 2014 pertained to brand names that are no longer available by prescription in the United States (e.g., Atarax®, BuSpar®, Equanil®, Miltown®, Serax®, Tranxene®, Vistaril®).

The drugs that were included in the tranquilizers section of the 2015 NSDUH interview included benzodiazepines that are prescribed as tranquilizers (e.g., Xanax®), muscle relaxants (e.g., Soma®), and miscellaneous tranquilizers (i.e., tranquilizers containing buspirone, hydroxyzine, or meprobamate). Several of the tranquilizers in the NSDUH questionnaire are in the less restrictive Schedule IV.

However, cyclobenzaprine (also known as Flexeril®), buspirone (also known as BuSpar®), and hydroxyzine (also known as Atarax® or Vistaril®) are not classified as controlled substances (i.e., other than requiring a prescription). These three substances had been included in the tranquilizers section of the interview in the 2014 NSDUH and had been kept for the 2015 questionnaire based on the results of field testing of the planned questionnaire and review by pharmacists of the proposed specific prescription drugs for the questionnaire. Buspirone and hydroxyzine have been dropped for 2016, but cyclobenzaprine has been retained for the 2016 NSDUH questionnaire. Although cyclobenzaprine is not scheduled as a controlled substance, it is classified as a muscle relaxant. As shown in **Table A.2**, another muscle relaxant in the questionnaire (Soma®) *is* a controlled substance. Despite cyclobenzaprine not being a controlled substance, the label for Flexeril® indicates that the drug may enhance the effects of alcohol and other central nervous system depressants.[6] The "Drug Abuse and Dependence" section of the label for Flexeril® indicates that similarities between this drug and tricyclic antidepressants require that certain withdrawal symptoms be considered when Flexeril® is administered.

Although both tranquilizers and sedatives cause drowsiness, an important distinction between these drug categories is that tranquilizers are prescribed for anxiety relief or to relieve muscle spasms, whereas sedatives are prescribed specifically for the relief of insomnia. In particular, benzodiazepine drugs that are prescribed as tranquilizers typically are metabolized more slowly than benzodiazepines that are prescribed as sedatives.[7,8] The rate of metabolism determines the duration and intensity of a drug's pharmacological effect on the body.

A.1.4 Stimulants

Table A.3 shows the subtypes of stimulants that are shown in **Table B.6** in **Appendix B** according to their CSA schedule numbers. Altogether, the 2015 questionnaire asked about the past year use or misuse of 26 specific stimulants. This number of stimulants in 2015 is slightly more than the 21 specific stimulants in the 2014 questionnaire for which respondents were asked about *lifetime* misuse, which included methamphetamine. Not counting methamphetamine, more than half of the stimulants in the 2014 questionnaire are no longer available by prescription in the United States (e.g., Benzedrine®, Cylert®, Ionamin®, Plegine®, Preludin®). Also, in 2006 to 2014, questions about the misuse of the stimulant Adderall® were included in a section of the NSDUH interview other than for prescription stimulants and therefore were not used in the reporting of trends in stimulant misuse.

Stimulants can be prescribed for multiple reasons, including treatment of attention-deficit/hyperactivity disorder (ADHD), weight reduction or control, or promoting wakefulness because of sleepiness associated with conditions such as narcolepsy or sleep apnea. Thus, unlike the other prescription drug categories, the intended purpose of prescribing stimulants is not always apparent from the name of the category. In contrast, the reason for prescribing pain relievers, tranquilizers, or sedatives is implied in the category name (i.e., pain relief, anxiety control, or sedation to relieve insomnia, respectively). For this reason, some of the subtypes of stimulants for 2015 that are listed in **Table A.3** refer to

the condition for which the drugs are prescribed. The amphetamines and stimulants containing methylphenidate that are primarily prescribed for the treatment of ADHD are in the more restrictive Schedule II. Stimulants in **Table A.3** that are prescribed for weight control are in Schedules III or IV.

As noted previously, methamphetamine was not included as a prescription stimulant in the 2015 NSDUH unless the prescription form of methamphetamine (Desoxyn®) had been specified as some other stimulant that respondents had misused in the past year. However, this did not occur for 2015.

A.1.5 Sedatives

Table A.4 shows the subtypes of sedatives that are shown in **Table B.7** in **Appendix B** according to their CSA schedule numbers. Altogether, the 2015 questionnaire asked about the past year use or misuse of 14 specific sedatives. Although the 2014 questionnaire asked about the *lifetime* misuse of nominally more sedatives (i.e., 18 specific sedatives) than in 2015, more than half of the sedatives in the 2014 questionnaire are no longer available by prescription in the United States (e.g., Quaalude®, Sopor®, methaqualone, chloral hydrate, Placidyl®). Also, in 2006 to 2014, questions about misuse of the sedative Ambien ® were included in a section of the NSDUH interview other than for prescription sedatives and therefore were not used in reporting of trends in sedative misuse.

Most of the sedatives that are in the 2015 NSDUH are in the less restrictive Schedule IV. However, some barbiturates are in Schedule II (Seconal®) or Schedule III (Butisol®). As noted in **Section A.1.3** for tranquilizers, the benzodiazepines that are prescribed as sedatives for the relief of insomnia (e.g., Halcion®) typically have a shorter duration of action compared with benzodiazepines that are prescribed for the treatment of anxiety (e.g., Xanax®).

The definition of sedatives can vary across surveys that cover segments of the NSDUH population. For example, the Monitoring the Future (MTF) survey of adolescents and young adults (see **Section A.5**) includes questions about "sedatives, including barbiturates," and cites only barbiturates as examples of sedatives (i.e., phenobarbital, Tuinal®, Nembutal®, and Seconal®).[9] Researchers on MTF have noted that barbiturates were the dominant form of sedatives when the MTF questions were first introduced. A design in which half of the sample received the original question about barbiturates and the other half received a question about "sedatives, which include barbiturates," yielded almost identical estimates for the two different question forms among 12th graders. The researchers concluded that users of sedatives that were not barbiturates were including these sedatives in their answers.[10] However, it is not clear whether different results would have been obtained if the questions had included examples of newer types of sedatives, such as Ambien®. As shown in **Table B.7**, sedatives containing zolpidem (including Ambien®) were the most commonly reported subtype of sedatives in the 2015 NSDUH.

A.2 Misuse of Prescription Psychotherapeutic Drugs versus Nonmedical Use

Prior to the 2015 NSDUH, the term "nonmedical use" was used in NSDUH reports to describe use of the prescription drugs that were not prescribed for individuals or that individuals took only for the experience or feeling that the drugs caused. As noted previously, questions in the 2015 NSDUH for prescription drugs were revised to ask about use "in any way that a doctor did not direct you to use them." Examples of such use included (a) using prescription drugs without a prescription of one's own; (b) using them in greater amounts, more often, or longer than people were told to take them; and (c) using them in any other way not directed by a doctor. With this change to the prescription drug questions came the opportunity for the Substance Abuse and Mental Health Services Administration (SAMHSA) to reevaluate the terminology that is used in NSDUH to describe these types of inappropriate uses of prescription drugs.

Potential alternatives to the term "nonmedical use" include "extramedical use," "misuse," and "abuse"; these terms have different meanings and therefore are not interchangeable.[11] Any one term is unlikely to describe and encompass all of the behaviors that may be associated with use of prescription drugs outside of proper medical supervision. Nevertheless, the term "misuse" appears for multiple reasons to be the most appropriate and parsimonious term to describe the types of behaviors that are covered by the new NSDUH prescription drug questions for 2015. Butler and colleagues defined substance misuse as "the use of any drug in a manner other than how it is indicated or prescribed."[12]

- "Misuse" appropriately covers *any* use of medications without a prescription. Zacny and Lichtor acknowledged that taking a prescription drug for the intended purpose for which it is prescribed but outside of proper medical supervision is problematic.[11] However, they criticized use of the term "nonmedical use" in NSDUH to refer to use without a prescription to treat a condition for which medications are typically prescribed (e.g., nonprescription use of opioid pain relievers to relieve physical pain).
- "Misuse" covers inappropriate use of medications for which people have a legitimate prescription, such as taking higher dosages of pain relievers than prescribed to achieve pain relief. The term "misuse" has been used in the literature in connection with patients who have been prescribed opioids for chronic noncancer pain.[11,13]
- "Misuse" covers inappropriate use of medications such as routes of administration that were not medically directed (e.g., inhalation through the nose [i.e., "snorting"] or injection of oral medications) or use in combination with alcohol. Respondents in cognitive testing of the redesigned NSDUH questions identified these as constituting use "in any other way" that was not directed.
- The term "abuse" also applies to diagnostic criteria for substance use disorders (SUDs).[14] Individuals who experiment with prescription drugs or take them recreationally (e.g., to feel good or get high) may not necessarily have an SUD.

A.3 Summary of Redesign Changes for Prescription Drugs in the 2015 NSDUH

To address the priorities and needs of policymakers and researchers, the changes listed below were implemented as part of the redesign of the prescription drug questions for the 2015 NSDUH. This section also discusses expected improvements to the data because of these changes.

- The focus of questions for specific prescription drugs was changed from the lifetime period to the past 12 months because policymakers are typically more interested in recent misuse of prescription drugs that are currently available in the United States than in lifetime misuse.[15] A further benefit of the 12-month reference period is that this period is closer to the interview date, allowing respondents to recall information more accurately. Respondents in 2015 who did not report any misuse of prescription drugs in the past 12 months were asked a general question about whether they had misused any prescription drug in that overall category (e.g., pain relievers) in their lifetime, but no details were collected on specific prescription drugs that were misused prior to the past year.
- The past year questions in the 2015 NSDUH for 37 specific prescription pain relievers, 15 specific prescription tranquilizers, 26 specific prescription stimulants, and 14 specific prescription sedatives covered prescription drugs that were currently or recently available by prescription in the United States. In turn, prescription drugs that are no longer available in the United States were removed from the 2015 questionnaire.
- The questions about specific prescription drugs allow data to be analyzed for prescription drugs with common active ingredients (e.g., pain relievers containing hydrocodone), for drugs that are chemically related (e.g., benzodiazepine tranquilizers such as Xanax®, Ativan®, and Valium®), and according to whether a drug's active ingredient is intended to be released fairly rapidly into a person's system (i.e., "immediate release") or if the active ingredient is intended to be released more slowly over a longer period (i.e., "extended release").

- Methamphetamine was moved in 2015 from the section of the interview for prescription stimulants to its own separate section; most methamphetamine that is used in the United States is manufactured illegally rather than being dispensed in prescription form (i.e., Desoxyn®). This change is designed to improve the accuracy of estimates both for methamphetamine and for the misuse of stimulants that are likely to be available by prescription.
- Printed pill cards prior to 2015 were replaced by electronic images that respondents in 2015 saw on the computer screen during the interview. This change facilitated the data collection process because respondents did not need to pause to ask interviewers to hand them a printed pill card for a set of prescription drug questions. To encourage more complete reporting, these images in 2015 also included examples of prescription drugs other than pills, such as a picture of morphine in liquid form for injection and pictures of patches for delivering some drugs through the skin.
- Questions were included for the first time on the use of specific prescription drugs in the past 12 months for *any* reason (i.e., not just misuse). Thus, it is now possible to gauge how many people misused certain prescription drugs at least once in the past year relative to the number of people who used these drugs for any reason in that same period. Separating out the concepts of any use and misuse also simplified the cognitive process for respondents in answering the questions about misuse. Prior to 2015, the questions about misuse of specific prescription drugs required respondents to think about two pieces of information in order to answer a single question: (1) whether they ever used a specific prescription drug for any reason; and, (2) if so, whether they ever used it in any of the ways that were described that constituted misuse (see below).
- After respondents reported whether they had used specific prescription drugs in each of the four psychotherapeutic categories (i.e., pain relievers, tranquilizers, stimulants, or sedatives) for any reason in the past 12 months, they were asked about misuse for each of the specific prescription drugs that they reported using for any reason in the past 12 months. This questioning approach was designed to reduce underreporting of the misuse of prescription drugs in the past 12 months by avoiding respondent "conditioning." That is, if respondents come to expect that they will be asked more questions if they report any use in the past 12 months and fewer questions if they do not report use, then they might not report use in order to get through the interview faster.
- The definition of misuse was changed in 2015. Before 2015, respondents were asked about the use of prescription drugs that were not prescribed for them (i.e., a behavior) or that respondents took only for the experience or feeling that the drugs caused (i.e., a motivation). The revised definition of misuse referred to the use of prescription drugs in any way a doctor did not direct respondents to use them and focused specifically on behaviors that constituted misuse. Examples of behaviors that were presented to respondents for misuse included (a) use without a prescription of the respondent's own; (b) use in greater amounts, more often, or longer than told to take a drug; or (c) use in any other way a doctor did not tell respondents to take a drug. Thus, the revised definition of misuse captured a type of misuse (i.e., overuse of prescribed medication) that was not explicitly included in the previous definition and that might be an important form of misuse for some segments of the population.
- Questions about the initiation of misuse of prescription drugs focused on the specific prescription drugs that respondents misused in the past 12 months. Prior to 2015, all respondents who reported misuse of prescription drugs in their lifetime had the opportunity to report initiation of misuse in the past 12 months or in any earlier time period. In 2015, however, only respondents who reported misuse of prescription drugs in the past 12 months were given the opportunity to report initiation of misuse in the past 12 months or any earlier time period.
- Questions about the frequency of misuse in the past 12 months were replaced with questions about the frequency of misuse in the past 30 days.
- Questions about the misuse of prescription drugs in the past 30 days in combination with alcohol (i.e., while respondents were drinking alcohol or within a couple of hours or drinking) were moved from a later section of the interview to be asked directly in the context of other questions about the misuse of prescription drugs in that category. These questions about the misuse of prescription drugs with alcohol also were revised to ask about misuse in combination with alcohol at any time in the past 30 days instead of misuse that occurred the last time that respondents drank alcohol in the past 30 days.
- Information was collected for the first time on the ways in which respondents misused prescription drugs (e.g., without a prescription of their own).
- Questions about the sources of prescription drugs that respondents misused were moved from a later section of the interview to be asked directly in the context of other questions about the misuse of prescription drugs in that category. In addition, the response options for getting prescriptions on the Internet and writing fake prescriptions were deleted in 2015 because low numbers of respondents reported those behaviors in previous years.
- Respondents who misused prescription drugs in a given category in the past year were asked to report why they misused prescription drugs for their last episode of misuse. For each prescription drug category, respondents chose from a list of reasons that was shown to them during the interview. For example, the choices for pain relievers were (a) to relieve physical pain, (b) to relax or relieve tension, (c) to experiment or to see what it's like, (d) to feel good or get high, (e) to help with my sleep, (f) to help me with my feelings or emotions, (g) to increase or decrease the effect(s) of some other drug, (h) because I am "hooked" or I have to have it, or (i) I used it for some other reason. Respondents who chose "I used it for some other reason" were asked to provide a brief description of that reason. Respondents who reported more than one reason for their last misuse were presented with the reasons they previously reported and were asked to report which of these was the most important reason.

Because of these changes, new baselines started in 2015 for all prescription drug measures, including measures for prescription psychotherapeutics overall and for categories of prescription psychotherapeutics (i.e., pain relievers, tranquilizers, stimulants, and sedatives). Specifically, new baselines were established for the following measures that existed before 2015:

- past year and past month misuse of any prescription drug in the overall prescription drug categories (e.g., pain relievers),
- initiation of misuse for overall prescription drug categories,
- sources of prescription drugs that were misused,
- SUDs among individuals who misused prescription drugs in the past year, and
- the need for and receipt of treatment for the misuse of psychotherapeutics.

Trend data are not available for these measures in 2015 NSDUH reports or tables.

New baselines also began in 2015 for questions that were added to the survey in 2015, including (a) any use in the past year for the overall prescription drug category, (b) any use and misuse in the past year of specific subtypes of prescription drugs in a given overall category (e.g., pain relievers that contain hydrocodone), and (c) motivations for misuse. Unlike the other prescription drug measures that were described previously, corresponding measures did not exist before 2015 for these questions.

In addition, field testing of the redesigned prescription drug questions suggested that the focus on the past 12 months could cause some respondents to underreport the use or misuse of prescription psychotherapeutic drugs that occurred in their lifetime but not in the past 12 months.[16,17] In particular, the redesigned questions provided fewer cues and specific questions to aid respondents in recalling whether they misused any prescription psychotherapeutic drug in a given category more than 12 months prior to the interview date. The redesigned questions also did not provide examples of prescription drugs that were no longer available by prescription in the United States but may have been

historically important (e.g., sedatives containing methaqualone, such as those with the brand names Quaalude® or Sopor®). Therefore, lifetime prescription drug misuse measures are not reported for the 2015 NSDUH.

A.4 Specific Measurement Issues

This section discusses the following issues related to the measurement of prescription drug use and misuse in the 2015 NSDUH:

- the estimation of use and misuse for subtypes of prescription drugs,
- handling of missing data when prescription drug variables did not undergo statistical imputation,
- measurement of past year initiation of misuse of prescription drugs, and
- creation of subgroups of past year misusers of prescription pain relievers based on when respondents initiated misuse and whether they had an SUD related to their misuse of pain relievers in the past year.

A separate methodological summary report for the 2015 NSDUH contains information about additional data processing and measurement issues for the use and misuse of prescription drugs, including the following:[18]

- editing of the prescription drug data;
- statistical imputation procedures to eliminate missing data, including the imputation of missing data for SUDs for prescription drugs for the first time in 2015; and
- classification of past year prescription drug misusers as having an SUD based on *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) criteria.[14]

Detailed documentation of the editing and imputation procedures for the 2015 prescription drug data also will be provided in a forthcoming report on general editing and imputation procedures for the 2015 NSDUH; this report will be included in the *2015 NSDUH Methodological Resource Book* and will be available at https://www.samhsa.gov/data/. The report of editing and imputation procedures for 2015 also will discuss procedures for handling answers that respondents typed for other prescription drugs that they misused, other reasons for misuse, and other sources of prescription drugs (also referred to as "OTHER, Specify" data), including procedures to assign numeric codes to the typed responses and procedures for using these "OTHER, Specify" data to edit the prescription drug data.

A.4.1 Use and Misuse of Subtypes of Prescription Drugs

Questions in the 2015 NSDUH for *prescription pain relievers* were used to define the following 10 specific subtypes of opioid pain relievers:

- hydrocodone products,
- oxycodone products,
- tramadol products,
- morphine products,
- fentanyl products,
- buprenorphine products,
- oxymorphone products,
- Demerol®,
- hydromorphone products, and
- methadone.

The specific pain relievers that pertain to these subtypes are listed in **Table A.1** and in **Table B.4** in **Appendix B**. Because generic equivalents of Zohydro® ER (an extended-release form of hydrocodone that does not contain hydrocodone in combination with other pain relievers) and OxyContin® (an extended-release form of oxycodone with a formulation that is designed to resist tampering by crushing or dissolving) were not available by prescription in the United States during the data collection period for the 2015 NSDUH, estimates also were produced for these specific brand name pain relievers. Separate estimates were not produced for prescription drugs that are available both as brand name drugs and as generic equivalents (e.g., Percocet® and oxycodone, respectively) because respondents could recognize a drug by its brand name. Consequently, some respondents could report the use or misuse of brand name drugs when, in fact, they took the generic equivalent. Conversely, respondents who recently switched prescriptions from a generic to a corresponding brand name drug could misreport that they used or misused the generic when their behavior actually applied to the brand name drug. For these types of prescription drugs, therefore, only combined estimates were produced that were based on the use or misuse of either brand name drugs or their generic equivalents.

Questions in the 2015 NSDUH for specific *prescription tranquilizers* were used to define the following broad subtypes of prescription tranquilizers (not counting other tranquilizers):

- benzodiazepines that are prescribed as tranquilizers,
- muscle relaxants,
- buspirone,
- hydroxyzine, and
- meprobamate.

Benzodiazepine tranquilizers were further categorized into the following four subtypes:

- alprazolam products,
- lorazepam products,
- clonazepam products, and
- diazepam products.

Muscle relaxants were further categorized into subtypes for (a) cyclobenzaprine, and (b) Soma®.

The specific tranquilizers that pertain to these subtypes are listed in **Table A.2** and in **Table B.5** in **Appendix B**. In particular, **Table A.2** and **Table B.5** list the specific benzodiazepine tranquilizers for alprazolam products, lorazepam products, clonazepam products, and diazepam products. These tables also list brand names (which have been discontinued in the United States) that respondents may recognize for cyclobenzaprine, buspirone, hydroxyzine, and meprobamate.

Questions in the 2015 NSDUH for specific *prescription stimulants* were used to define the following broad subtypes of prescription stimulants (not counting other stimulants):

- amphetamine products,
- methylphenidate products,
- anorectic (weight-loss) stimulants, and
- Provigil®.

The specific stimulants that pertain to these subtypes are listed in **Table A.3** and in **Table B.6** in **Appendix B**. In particular, the amphetamine and methylphenidate products in these tables are primarily prescribed for the treatment of ADHD.

Questions in the 2015 NSDUH for specific *prescription sedatives* were used to define the following broad subtypes of prescription sedatives (not counting other sedatives):

- zolpidem products,
- eszopiclone products,
- zaleplon products,
- benzodiazepines that are prescribed as sedatives, and
- barbiturates.

Benzodiazepine sedatives were further categorized into the following three subtypes:

- flurazepam,
- temazepam products, and
- triazolam products.

The specific sedatives that pertain to these subtypes are listed in **Table A.4** and in **Table B.7** in **Appendix B**. In particular, **Table A.4** and **Table B.7** list the specific benzodiazepine sedatives for temazepam products and triazolam products. These tables also list a brand name that respondents may recognize for the benzodiazepine sedative flurazepam (Dalmane®, which has been discontinued in the United States).

A.4.2 Handling of Missing Data for Prescription Drugs

The variables that were used to estimate any use and misuse in the past year for the overall categories of prescription pain relievers, tranquilizers, stimulants, and sedatives included statistical imputation to account for item nonresponse and therefore had no missing data. Past year initiation variables for prescription drug misuse and SUD variables for prescription drugs in 2015 also were imputed.[19] However, prescription drug variables for the following estimates in this report did not undergo statistical imputation and, therefore, had missing data:

- subtypes of prescription drugs that were used or misused in the past year,
- reasons for the last misuse of prescription drugs within a given psychotherapeutic category, and
- sources of pain relievers for the last misuse of pain relievers in the past year.

Respondents with missing data for the main reason for the last misuse and for the source of the last prescription pain reliever were excluded from the analyses. Bias may result when respondents with missing data are excluded from the analysis. For population totals (i.e., estimated numbers of individuals with a given characteristic), a negative bias will always occur if there are missing values in the domain variables, the outcome variable, or both. When population proportions are estimated for these two measures, there may or may not be bias, and the bias can be negative or positive. The direction and magnitude of the bias for proportions depend on how different the item respondents are from the item nonrespondents with respect to the outcome of interest.

In addition, respondents could have missing data for whether they used or misused specific subtypes of prescription drugs in the past year. For example, respondents were presented with a list of prescription pain relievers containing hydrocodone and were asked to report which, if any, of these they had used in the past 12 months. Except in special situations, respondents who answered "don't know" or "refused" when presented with this list would have missing data for the past year use of hydrocodone products. In turn, these respondents were not asked whether they misused specific hydrocodone products in the past year.[20]

During the 2015 processing, missing values in variables pertaining to subtypes of prescription drugs were coded as "no use" or "no misuse" in the past 12 months. Estimates for

subtypes of prescription drugs were then produced based on the data from respondents who did not have missing data and the respondents with missing data who were assumed not to have used or misused that subtype. However, some of these respondents with missing data could have used or misused a specific subtype of prescription drugs in the past 12 months, which will cause a negative bias in the estimates. The magnitude of this bias in estimated percentages of people who used or misused a given prescription drug subtype will depend on (a) the percentage of respondents with missing data and (b) the difference between the true percentage from the item respondents and the true percentage from the item nonrespondents. These true percentages are not known but can be estimated by the difference in estimates, depending on whether respondents with missing data are excluded from the analysis or are included (i.e., and are assumed to be equivalent to nonusers). However, low percentages of NSDUH respondents in 2015 had missing data for most prescription drug measures.[21]

A.4.3 Initiation of Misuse of Psychotherapeutics

Prior to 2015, NSDUH respondents who reported that they ever misused one or more specific prescription psychotherapeutic drugs in a given category in their lifetime were asked to report how old they were the first time when they misused any prescription drug in that category. This question sequence (i.e., first asking all respondents if they ever used or misused a drug or specific drugs in a given category and, if applicable, asking how old that respondents were when they first used or misused a drug in that category[22]) was consistent across all substance use sections of the questionnaire, including sections for cigarettes, alcohol, marijuana, hallucinogens, prescription drugs, and other substances.

As noted in **Section A.3**, the approach for identifying individuals who initiated the misuse of prescription drugs in the past 12 months changed for 2015. The questions for the initiation of misuse focused only on the specific prescription drugs that respondents misused within the past year; respondents were not asked about initiation for prescription drugs that they may have misused in their lifetime (but not in the past 12 months). Consequently, respondents in 2015 could not report initiation in the past year without also having reported misuse in that period. In contrast, respondents prior to 2015 could answer the questions for the first misuse of prescription drugs in a given category (e.g., tranquilizers) as though they initiated misuse in the past year (e.g., first misuse at the respondent's current age) and then report that they last misused any prescription drug in that category "more than 12 months ago." When the initiation questions focused on the specific prescription drugs that respondents misused in the past 12 months, cognitive testing of the redesigned questions also suggested that respondents were able to think about specific life events surrounding their first misuse of a prescription drug as a strategy for recalling their first misuse.

To establish that a respondent had initiated misuse of *all* prescription drugs in a given category in the past year, however, any initiation prior to the past 12 months must be ruled out. Even if respondents reported past year initiation for all of the specific prescription drugs in a given overall category that they misused in the past year, this information does not conclusively rule out the misuse of other prescription drugs that may have occurred more than 12 months ago. For example, suppose a respondent reported the misuse of one tranquilizer (e.g., Xanax®) in the past year and that he or she first misused that tranquilizer in the past year. This information established that the respondent initiated the misuse of Xanax® in the past year. However, this information is not sufficient for establishing that the respondent initiated the misuse of *all* tranquilizers in the past year. For example, the respondent may have misused other tranquilizers (e.g., Valium®) more than 12 months ago (but not in the past year). Therefore, respondents who reported that they initiated misuse in the past 12 months for all of the specific prescription drugs in a given category that they misused in that period were asked a follow-up question to establish whether they had *ever* misused prescription drugs in that category more than 12 months before being interviewed. If respondents answered this follow-up question as "no," meaning that they had never misused any prescription drug in that category more than 12 months prior to the interview date, then it could be concluded that the respondents initiated misuse of all prescription drugs in that category in the past 12 months. However, if respondents answered the follow-up as "yes," then they would *not* be considered recent initiates for the misuse of any prescription drug in that category (e.g., tranquilizers) because this response meant that the respondents initiated the misuse of some other drug in the category more than 12 months ago.

Because initiation data in the 2015 NSDUH were not collected for respondents who reported lifetime but not past year misuse, an additional issue for the redesigned prescription drug questions was that limited data were available for establishing the temporal sequence of initiation for misuse of prescription drugs relative to the initiation of use for other substances. For example, if a respondent initiated use of heroin prior to the past year and reported misuse of prescription pain relievers more than 12 months prior to being interviewed, it is not possible in 2015 to identify which one of these two substances was used first. However, the accuracy of this type of information would depend on how well lifetime (but not past year) misusers of prescription drugs could recall when they first misused any prescription drug in a given category. Except for prescription drugs, the temporal sequence of initiation can still be established for other substances in 2015.

In addition, field testing of the redesigned prescription drug questions suggested that the focus on the past 12 months could cause some respondents to underreport the use or misuse of prescription psychotherapeutic drugs that occurred in their lifetime but not in the past 12 months, compared with reports in prior years.[16,17] In particular, the redesigned questions provided fewer cues and questions to aid respondents in recalling whether they misused any prescription psychotherapeutic drug in a given category more than 12 months prior to the interview date. The redesigned questions also did not provide examples of prescription drugs that were no longer available by prescription in the United States but may have been historically important (e.g., sedatives containing methaqualone, such as those with the brand names Quaalude® or Sopor®).

The apparent underreporting of lifetime (but not past year) misuse compared with data prior to 2015 affected the estimation for past year initiation of the misuse of any prescription psychotherapeutic drug (i.e., pain relievers, sedatives, stimulants, or tranquilizers). For example, suppose a respondent who misused tranquilizers in the past year reported that he or she misused all prescription tranquilizers for the first time in the past year. That respondent logically could be classified as a past year initiate of the misuse of tranquilizers. If this past year initiate for prescription tranquilizer misuse had misused prescription pain relievers more than 12 months prior to the interview date, the respondent would not be a past year initiate for misuse of *any* prescription psychotherapeutic drug because he or she had already initiated the misuse of pain relievers. Thus, a past year initiate for tranquilizer misuse who failed to report lifetime (but not past year) misuse of prescription psychotherapeutic drugs in other categories would be misclassified as a past year initiate for the misuse of any psychotherapeutic drug.

Additionally, respondents who initiated the misuse of prescription drugs in a given category more than 12 months prior to being interviewed are no longer "at risk" for initiating misuse in the past year because they already misused prescription drugs in that category. Consequently, the underreporting of lifetime misuse compared with reports prior to 2015 affects the estimation of the size of the population that is defined as being at risk for initiation of misuse. Specifically, respondents in 2015 who underreported lifetime (but not past year) misuse of any prescription drug in a given category would be misclassified as still being at risk for initiation in the past year. In turn, the percentage for past year initiation among people who were at risk for initiation would be inaccurate because of the incorrect denominator.

Starting in 2015, therefore, estimates are no longer reported for past year initiation of the misuse of any prescription psychotherapeutic drug. As shown in this report, however, estimates are still reported for past year initiation for the individual prescription drug categories (i.e., pain relievers, tranquilizers, stimulants, and sedatives), including percentages of people in the total population and percentages of past year misusers who initiated misuse in the past year. For the reasons stated previously, however, percentages are not reported in 2015 for past year initiates of misuse among people who were at risk for initiation.

A.4.4 Subgroups of Past Year Misusers Based on Initiation and Substance Use Disorders

Prior studies have shown a relationship between the number of days that people misused prescription pain relievers in the past 12 months (i.e., frequency of misuse) and how people obtained the pain relievers that they misused. For example, past year misusers who bought their last pain relievers in the past year from a friend or relative or who bought them from a drug dealer or other stranger tended to be frequent misusers of pain relievers in the past year. People who obtained their last pain relievers from a friend or relative

for free or by taking pain relievers from a friend or relative without asking tended to report less frequent misuse.[23]

As noted in **Section A.3**, however, the questions for measuring the frequency of misuse of prescription drugs in the past 12 months were replaced with questions for the frequency of misuse in the past 30 days. Because it was not possible in 2015 to compare how people obtained prescription pain relievers (or other prescription drugs) with their frequency of misuse in the past year, an alternative measure was developed for the 2015 NSDUH to categorize past year misusers of pain relievers to represent increasing severity of misuse. The following three mutually exclusive categories of past year misusers of prescription pain relievers were developed for 2015:

- past year initiates without a pain reliever use disorder,
- past year misusers who initiated misuse more than 12 months ago and did not have a pain reliever use disorder, and
- past year misusers (including past year initiates) with a pain reliever use disorder.

Past year initiates were identified according to the measures that were described in **Section A.4.3**. Individuals who reported that they initiated misuse more than 12 months prior to the interview for some of the pain relievers that they misused in the past year were defined as not being past year initiates. Individuals who reported only past year initiation for the prescription drugs that they misused in that period but who reported on follow-up that they had misused prescription pain relievers more than 12 months prior to the interview also were classified as not being past year initiates.

Individuals who misused pain relievers in the past year were defined as having a pain reliever use disorder in the past year based on DSM-IV criteria.[14] Past year misusers with a pain reliever use disorder included past year initiates whose misuse progressed in the past 12 months from initiation to having a pain reliever use disorder. However, past year initiates made up a small percentage of the people aged 12 or older who had a pain reliever use disorder in the past year (about 8.0 percent).

A.5 Other Sources of Data on Prescription Drug Use and Misuse

Surveys and data systems other than NSDUH also produce estimates of prescription drug misuse. Reviewing information from NSDUH and other national data sources can provide more complete information about the misuse of prescription drugs among the U.S. population. This section focuses on prescription drug data from three of the relatively small number of other data sources that provide national estimates of prescription drug use and misuse in the general population. More details for these surveys are found in Section E in a separate methodological summary report for the 2015 NSDUH.[18]

Monitoring the Future (MTF)

The Monitoring the Future (MTF) study that is sponsored by the National Institute on Drug Abuse (NIDA) is an ongoing study of substance use trends and related attitudes among America's secondary school students, college students, and adults through age 50.[24] The MTF study provides information on the use of alcohol, illicit drugs, and tobacco. MTF and NSDUH are the federal government's largest and primary tools for tracking youth substance use. MTF is composed of three substudies: (a) an annual survey of high school seniors that was initiated in 1975, (b) ongoing panel studies of representative samples from each graduating class (i.e., 12th graders) that have been conducted by mail since 1976, and (c) annual surveys of 8th and 10th graders that were initiated in 1991. The survey of secondary school students is administered each spring to students in the 8th, 10th, and 12th grades during a regular class period.

NSDUH and MTF estimates for the misuse of prescription drugs in the past year were not compared for 2015 because only a single year of NSDUH data was available from the redesigned prescription drug questions. Comparison of estimates between NSDUH and MTF will be facilitated by the availability of 2 years of NSDUH prescription drug data from 2015 and 2016. Historically, however, comparisons between the MTF and NSDUH estimates generally have shown NSDUH substance use estimates to be lower than MTF estimates.[18] The lower estimates in NSDUH may be due to more underreporting in the household setting as compared with the MTF school setting and some overreporting in the school settings. However, NSDUH and MTF have generally shown parallel trends in the extent of substance use among youths.

National Epidemiologic Survey on Alcohol and Related Conditions (NESARC)

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) is sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Three waves of NESARC have been conducted since 2001 (in 2001 and 2002, 2004 and 2005, and in 2012 and 2013). NESARC-III is the most recent cross-sectional survey in the NESARC series and is based on a nationally representative sample of the civilian, noninstitutionalized population of the United States aged 18 years or older.[25]

NESARC-III contains assessments of alcohol and illegal drug use (including nonmedical use of prescription opioids), SUDs based on the DSM-5 criteria,[26] and certain mental disorders. NESARC-III defines nonmedical use of prescription opioids as use "without a prescription" or "in greater amounts, more often, or longer than prescribed, or for a reason other than a doctor said you should use them." This definition is similar to the definition of misuse in the 2015 NSDUH, such that the term "misuse" can be used when comparing NSDUH and NESARC-III estimates.

NSDUH and NESARC-III estimates for the misuse of prescription drugs in the past year were not compared for 2015 because only a single year of NSDUH data was available from the redesigned prescription drug questions. Comparison of estimates between NSDUH and NESARC-III will be facilitated by the availability of 2 years of NSDUH prescription drug data from 2015 and 2016.

National Health and Nutrition Examination Survey (NHANES)

The National Health and Nutrition Examination Survey (NHANES) has assessed the health and nutritional status of children and adults in the United States since the 1960s through the use of both survey and physical examination components. It is sponsored by the National Center for Health Statistics (NCHS).[27] Since 1999, it has been a continuous survey, with interview data collected each year for approximately 5,000 individuals of all ages. The target population for NHANES is the civilian, noninstitutionalized population from birth onward. In addition to interviews that are conducted in respondents' homes, NHANES collects physical health measurements and data on sensitive topics through audio computer-assisted self-interviewing (ACASI) in mobile examination centers that travel to locations throughout the United States.

Unlike surveys that include questions about the misuse of prescription drugs, NHANES includes questions in the interviewer-administered household interview for any use of prescription drugs in the past 30 days. Specifically, NHANES respondents are asked whether they used or took medication in the past 30 days "for which a prescription is needed."[28] Respondents are asked to show the NHANES interviewer all of the containers for the prescription medications that they took, and interviewers enter the names of the medications from the labels into the computer. If no container is available, the respondent reports the name of the drug to the interviewer.

A number of methodological differences affect the direct comparability of NSDUH and NHANES data. First, NHANES data pertain to prescription drug use in the past 30 days, and the 2015 NSDUH data pertain to the past 12 months. Second, NHANES data on prescription drug use are interviewer-administered through computer-assisted personal interviewing (CAPI), and NSDUH data are self-administered through ACASI. Third, NHANES data for sample members aged 12 to 15 are reported by proxy respondents,

whereas NSDUH respondents in this age range answer substance use questions directly. Despite these differences, comparing the *relative* order of estimates for the use of corresponding subtypes of prescription drugs in NHANES and NSDUH can be useful for gauging how well the NSDUH and NHANES estimates line up with each other for any use of certain subtypes of prescription drugs. Analysis of prescription drug data from the 2013-2014 NHANES is planned for a forthcoming publication on the effects of the 2015 NSDUH questionnaire redesign.[29]

Table A.1 – Pain Reliever Subtypes in the 2015 NSDUH

Subtype	CSA Schedule	Comments
Hydrocodone Products	II	Subtype includes Vicodin®, Lortab®, Norco®, Zohydro® ER, generic hydrocodone, and any other pain reliever containing hydrocodone that respondents specified for past year misuse.
Oxycodone Products	II	Subtype includes OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, generic oxycodone, and any other pain reliever containing oxycodone that respondents specified for past year misuse.
Tramadol Products	IV	Subtype includes Ultram®, Ultram® ER, Ultracet®, generic tramadol, generic extended-release tramadol, and any other pain reliever containing tramadol that respondents specified for past year misuse.
Morphine Products	II	Subtype includes Avinza®, Kadian®, MS Contin®, generic morphine, generic extended-release morphine, and any other pain reliever containing morphine that respondents specified for past year misuse.
Fentanyl Products	II	Subtype includes Actiq®, Duragesic®, Fentora®, generic fentanyl, and any other pain reliever containing morphine that respondents specified for past year misuse.
Buprenorphine Products	III	Subtype includes Suboxone®, generic buprenorphine, and any other pain reliever containing buprenorphine that respondents specified for past year misuse.
Oxymorphone Products	II	Subtype includes Opana®, Opana® ER, generic oxymorphone, generic extended-release oxymorphone, and any other pain reliever containing oxymorphone that respondents specified for past year misuse.
Demerol®	II	Includes Demerol® and any other pain reliever containing meperidine that respondents specified for past year misuse.
Hydromorphone Products	II	Subtype includes Dilaudid® or hydromorphone, Exalgo® or extended-release hydromorphone, and any other pain reliever containing hydromorphone that respondents specified for past year misuse.
Methadone	II	Includes methadone and any other pain reliever containing methadone that respondents specified for past year misuse.

CSA = Controlled Substances Act of 1970; NSDUH = National Survey on Drug Use and Health.
NOTE: The 2015 NSDUH questionnaire also included questions about codeine products. Estimates for codeine products are not shown in the report because of changes to the questions for codeine products in the 2016 questionnaire.
Source of drug schedule information: Drug Enforcement Administration. (2016). *Controlled substances. Alphabetical order*. Retrieved from http://www.deadiversion.usdoj.gov/

Table A.2 – Tranquilizer Subtypes in the 2015 NSDUH

Subtype	CSA Schedule	Comments
Alprazolam Products	IV	Subtype is for a benzodiazepine that is prescribed as a tranquilizer. Includes Xanax®, Xanax® XR, generic alprazolam, generic extended-release alprazolam, and any other tranquilizer containing alprazolam that respondents specified for past year misuse.
Lorazepam Products	IV	Subtype is for a benzodiazepine that is prescribed as a tranquilizer. Includes Ativan®, generic lorazepam, and any other tranquilizer containing lorazepam that respondents specified for past year misuse.
Clonazepam Products	IV	Subtype is for a benzodiazepine that is prescribed as a tranquilizer. Includes Klonopin®, generic clonazepam, and any other tranquilizer containing clonazepam that respondents specified for past year misuse.
Diazepam Products	IV	Subtype is for a benzodiazepine that is prescribed as a tranquilizer. Includes Valium®, generic diazepam, and any other tranquilizer containing diazepam that respondents specified for past year misuse.
Cyclobenzaprine	None	This is a muscle relaxant. It is not a controlled substance. The drug also is known as Flexeril®, which is no longer available in the United States.
Soma®	IV	This is a muscle relaxant. The active ingredient is carisoprodol.
Buspirone	None	This is not a controlled substance. The drug also is known as BuSpar®, which is no longer available in the United States.
Hydroxyzine	None	This is not a controlled substance. The drug also is known as Atarax® and Vistaril®, which are no longer available in the United States.
Meprobamate	IV	The drug is also known as Equanil® and Miltown®, which are no longer available in the United States.

CSA = Controlled Substances Act of 1970; NSDUH = National Survey on Drug Use and Health.
Source of drug schedule information: Drug Enforcement Administration. (2016). *Controlled substances. Alphabetical order*. Retrieved from http://www.deadiversion.usdoj.gov/

Table A.3 – Stimulant Subtypes in the 2015 NSDUH

Subtype	CSA Schedule	Comments
Amphetamine Products[1]	II	Subtype includes Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, generic dextroamphetamine, generic amphetamine-dextroamphetamine combinations, generic extended-release amphetamine-dextroamphetamine combinations, or similar products that respondents specified for past year misuse. Vyvanse® is included because its active ingredient (lisdexamfetamine) is metabolized to dextroamphetamine.
Methylphenidate Products[1]	II	Subtype includes Ritalin®, Ritalin® SR, Ritalin® LA, Concerta®, Daytrana®, Metadate® CD, Metadate® ER, Focalin®, Focalin® XR, generic methylphenidate, generic extended-release methylphenidate, generic dexmethylphenidate, generic extended-release dexmethylphenidate, and any other stimulant containing methylphenidate that respondents specified for past year misuse.
Anorectic (Weight-Loss) Stimulants	III or IV	Subtype includes Didrex®, benzphetamine, Tenuate®, diethylpropion, phendimetrazine, phentermine, or similar products that respondents specified for past year misuse. Didrex®, benzphetamine, and phendimetrazine are Schedule III controlled substances. Tenuate®, diethylpropion, and phentermine are Schedule IV controlled substances.
Provigil®	IV	The active ingredient is modafinil. The drug is prescribed to improve wakefulness in adult patients with excessive sleepiness associated with narcolepsy, obstructive sleep apnea, or shift work disorder.

CSA = Controlled Substances Act of 1970; NSDUH = National Survey on Drug Use and Health.
[1] The amphetamine and methylphenidate products include stimulants that are primarily prescribed for the treatment of attention-deficit/hyperactivity disorder (ADHD).
Source of drug schedule information: Drug Enforcement Administration. (2016). *Controlled substances. Alphabetical order*. Retrieved from http://www.deadiversion.usdoj.gov/

Table A.4 – Sedative Subtypes in the 2015 NSDUH

Subtype	CSA Schedule	Comments
Zolpidem Products	IV	Subtype includes Ambien®, Ambien® CR, generic zolpidem, extended-release generic zolpidem, and any other sedative containing zolpidem that respondents specified for past year misuse.
Eszopiclone Products	IV	Subtype includes Lunesta®, generic eszopiclone, and any other sedative containing eszopiclone that respondents specified for past year misuse.
Zaleplon Products	IV	Subtype includes Sonata®, generic zaleplon, and any other sedative containing zaleplon that respondents specified for past year misuse.
Flurazepam	IV	This is a benzodiazepine that is prescribed as a sedative. The drug also is known as Dalmane®, which is no longer available in the United States.
Temazepam Products	IV	Subtype is for a benzodiazepine that is prescribed as a sedative. Includes Restoril®, generic temazepam, and any other sedative containing temazepam that respondents specified for past year misuse.
Triazolam Products	IV	Subtype is for a benzodiazepine that is prescribed as a sedative. Includes Halcion®, generic triazolam, and any other sedative containing triazolam that respondents specified for past year misuse.
Barbiturates	II, III, or IV	Subtype includes Butisol®, Seconal®, phenobarbital, and any other barbiturates that respondents specified for past year misuse. Seconal® (secobarbital) is a Schedule II controlled substance. Butisol® (butabarbital) is a Schedule III controlled substance. Phenobarbital is a Schedule IV controlled substance.

CSA = Controlled Substances Act of 1970; NSDUH = National Survey on Drug Use and Health.
Source of drug schedule information: Drug Enforcement Administration. (2016). *Controlled substances. Alphabetical order*. Retrieved from http://www.deadiversion.usdoj.gov/

Endnotes

[1] Center for Behavioral Health Statistics and Quality. (2016). *2015 National Survey on Drug Use and Health. Prescription drug images for the 2015 questionnaire*. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/

[2] Controlled Substances Act, 21 U.S.C., §§ 801-971 (2012). Retrieved from http://www.deadiversion.usdoj.gov/

[3] U.S. Food and Drug Administration. (2013). *Drug Safety and Risk Management Advisory Committee (DSaRM)*. Washington, DC: Author. Retrieved from http://www.fda.gov/

[4] U.S. Drug Enforcement Administration. (2014, August 22). Schedules of controlled substances: Rescheduling of hydrocodone combination products from Schedule III to Schedule II. 21 CFR Part 1308. *Federal Register, 79*(163), *Rules and Regulations*, 49661-49682. Retrieved from https://www.gpo.gov/fdsys/pkg/FR-2014-08-22/pdf/2014-19922.pdf

[5] U.S. Drug Enforcement Administration. (2016). *Controlled substances. Alphabetical order.* Retrieved from http://www.deadiversion.usdoj.gov/

[6] Label information for Flexeril® is available on the FDA's Center for Drug Evaluation and Research website at http://www.fda.gov/Drugs/. The label for generic cyclobenzaprine is not available on the FDA website.

[7] For example, the label for Xanax®, which is prescribed as a tranquilizer, indicates that the drug has an average half-life of 11.2 hours (i.e., the length of time for half of the dosage of the drug to be metabolized), with a range of 6.3 to 26.9 hours in healthy adults. In comparison, the label for Halcion®, which is a benzodiazepine that is prescribed as a sedative, has a short half-life in the range of 1.5 to 5.5 hours. Label information for these drugs is available on the FDA's Center for Drug Evaluation and Research website at http://www.fda.gov/Drugs/.

[8] When a drug is metabolized, it is converted into *metabolites*, which are the substances that remain after the drug is broken down by the body. For more information, see the definition for "metabolite" by typing this word as a search term on the MedlinePlus web page at https://www.nlm.nih.gov/medlineplus/.

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[13] Butler, S. F., Budman, S. H., Fernandez, K. C., Fanciullo, G. J., & Jamison, R. N. (2009). Cross-validation of a screener to predict opioid misuse in chronic pain patients. *Journal of Addiction Medicine, 3*(2), 66-73. doi:10.1097/ADM.0b013e31818e41da

[14] American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC: Author.

[15] Except for the pain reliever OxyContin®, no details were available in the 2014 NSDUH or earlier years regarding the misuse of specific prescription drugs in the past year.

[16] Center for Behavioral Health Statistics and Quality. (2014). *National Survey on Drug Use and Health: 2012 Questionnaire field test final report*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[17] Center for Behavioral Health Statistics and Quality. (2014). *National Survey on Drug Use and Health: 2013 Dress Rehearsal final report*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[18] 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/

[19] Details about the imputation procedures for the 2015 NSDUH are provided in Section A.3.3 of CBHSQ (2016). See endnote 18 for the reference.

[20] The exception to this general principle applied to respondents who specified that they misused one or more prescription drugs for a given subtype as some "other" prescription drug that they misused in the past year. For example, suppose a respondent answered "don't know" when presented with the list of hydrocodone products for any use in the past year. If this respondent reported the misuse of "other" pain relievers in the past year and then specified that a hydrocodone product (e.g., Vicodin®) was one of the other prescription pain relievers that he or she misused in the past year, then this respondent logically misused hydrocodone products in the past year. This respondent also logically used hydrocodone products in the past year for any reason.

[21] Further information about biases because of missing data for the 2015 NSDUH are provided in Section B.3.2 of CBHSQ (2016). See endnote 18 for the reference.

[22] For substances such as cigarettes, alcohol, and marijuana, respondents were asked whether they ever used that substance, and if they answered affirmatively, they were asked to report their age when they first used it. For prescription psychotherapeutic drugs, respondents were asked whether they ever misused specific substances in that category. If respondents answered affirmatively for one or more of the specific prescription drugs, they were asked to report their age when they first misused any drug in that category (e.g., the age when a respondent first misused any prescription pain reliever).

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[27] Further details for NHANES can be found on the NHANES website at http://www.cdc.gov/nchs/nhanes.htm.

[28] NHANES participants who were aged 16 or older answer these questions for themselves; a proxy provided information for participants who were younger than 16 or who could not answer for themselves.

[29] In NHANES, 2 years of data are combined on public use files to protect respondent confidentiality. Prescription drug data from the 2013-2014 NHANES were not available at the time that this report was being prepared.

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Appendix B: Supplemental Tables of Estimates for Prescription Drug Use and Misuse in the United States

Table B.1 – Any Use and Misuse of Prescription Psychotherapeutics in the Past Year among Individuals Aged 12 or Older

Prescription Psychotherapeutic	Any Use	Misuse among Total Population	Misuse among Individuals Who Reported Any Use
PSYCHOTHERAPEUTICS	44.5 (0.33)	7.1 (0.14)	15.9 (0.31)
Pain Relievers	36.4 (0.32)	4.7 (0.11)	12.8 (0.31)
Tranquilizers	14.7 (0.23)	2.3 (0.08)	15.4 (0.50)
Stimulants	6.4 (0.13)	2.0 (0.07)	30.5 (0.86)
Sedatives	6.9 (0.16)	0.6 (0.04)	8.1 (0.59)

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, 2015.

Table B.2 – Any Use and Misuse of Prescription Psychotherapeutics in the Past Year among Individuals Aged 12 or Older, by Demographic Characteris

Demographic Characteristic	Psychotherapeutics, Any Use	Psychotherapeutics, Misuse	Pain Relievers, Any Use	Pain Relievers, Misuse	Tranquilizers, Any Use	Tranquilizers, Misuse	Stimulants, Any Use	Stimulants, Misuse	Se A
TOTAL	44.5 (0.33)	7.1 (0.14)	36.4 (0.32)	4.7 (0.11)	14.7 (0.23)	2.3 (0.08)	6.4 (0.13)	2.0 (0.07)	6.
AGE									
12-17	28.1 (0.43)	5.9 (0.23)	22.7 (0.41)	3.9 (0.19)	4.3 (0.20)	1.6 (0.13)	7.3 (0.25)	2.0 (0.14)	2.
18 or Older	46.1 (0.35)	7.2 (0.15)	37.8 (0.35)	4.7 (0.12)	15.8 (0.25)	2.3 (0.08)	6.3 (0.14)	2.0 (0.07)	7.
18-25	44.3 (0.51)	15.3 (0.36)	34.8 (0.47)	8.5 (0.26)	12.1 (0.33)	5.4 (0.22)	14.1 (0.37)	7.3 (0.27)	3.
26 or Older	46.4 (0.40)	5.8 (0.17)	38.3 (0.39)	4.1 (0.14)	16.4 (0.29)	1.8 (0.09)	5.0 (0.15)	1.1 (0.06)	8.
GENDER									
Male	40.9 (0.43)	7.8 (0.21)	33.9 (0.43)	5.3 (0.17)	11.3 (0.28)	2.4 (0.12)	6.5 (0.18)	2.3 (0.10)	5.
Female	47.8 (0.45)	6.4 (0.17)	38.8 (0.45)	4.0 (0.14)	17.9 (0.34)	2.1 (0.09)	6.3 (0.18)	1.6 (0.08)	8.
HISPANIC ORIGIN AND RACE									
Not Hispanic or Latino	46.1 (0.35)	7.1 (0.15)	37.6 (0.35)	4.6 (0.12)	15.5 (0.25)	2.3 (0.08)	6.7 (0.15)	2.1 (0.07)	7.
White	48.2 (0.39)	7.6 (0.18)	38.7 (0.40)	4.8 (0.14)	17.8 (0.31)	2.6 (0.10)	7.5 (0.17)	2.4 (0.09)	8.
Black or African American	42.7 (0.88)	5.8 (0.39)	38.3 (0.85)	4.4 (0.36)	9.1 (0.51)	1.5 (0.16)	3.9 (0.32)	0.7 (0.09)	4.
American Indian or Alaska Native	44.4 (3.24)	6.8 (1.36)	38.7 (3.25)	5.6 (1.31)	12.1 (1.88)	2.0 (0.56)	6.3 (1.50)	1.8 (1.02)	5.
Native Hawaiian or Other Pacific Islander	38.3 (4.70)	7.0 (2.71)	32.7 (4.62)	5.4 (2.58)	4.7 (1.41)	2.1 (0.85)	5.0 (1.69)	1.8 (0.85)	3.
Asian	26.7 (1.52)	3.1 (0.45)	22.0 (1.45)	1.8 (0.39)	4.6 (0.68)	0.7 (0.17)	2.9 (0.42)	1.0 (0.19)	3.
Two or More Races	52.9 (2.05)	11.7 (1.21)	44.8 (2.11)	8.4 (1.05)	16.4 (1.63)	3.6 (0.57)	10.2 (1.08)	4.1 (0.58)	7.
Hispanic or Latino	36.3 (0.75)	7.0 (0.35)	30.2 (0.71)	5.0 (0.28)	10.3 (0.45)	2.0 (0.21)	4.9 (0.29)	1.5 (0.13)	4.

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, 2015.

Table B.3 – Any Use and Misuse of Prescription Psychotherapeutics in the Past Year among Individuals Aged 12 or Older, by Geographic Characteristics

Geographic Characteristic	Psychotherapeutics, Any Use	Psychotherapeutics, Misuse	Pain Relievers, Any Use	Pain Relievers, Misuse	Tranquilizers, Any Use	Tranquilizers, Misuse	Stimulants, Any Use	Stimulants, Misuse	Sedatives, Any Use	Sedative Misus

TOTAL	44.5 (0.33)	7.1 (0.14)	36.4 (0.32)	4.7 (0.11)	14.7 (0.23)	2.3 (0.08)	6.4 (0.13)	2.0 (0.07)	6.9 (0.16)	0.6 (0.04
REGION										
Northeast	42.8 (0.69)	6.9 (0.34)	33.6 (0.68)	4.2 (0.26)	15.3 (0.54)	2.3 (0.18)	6.1 (0.31)	2.1 (0.15)	6.7 (0.35)	0.6 (0.11
Midwest	43.5 (0.59)	6.7 (0.28)	35.9 (0.58)	4.4 (0.22)	13.8 (0.40)	1.9 (0.15)	6.6 (0.27)	2.2 (0.14)	6.1 (0.32)	0.4 (0.06
South	46.1 (0.56)	7.1 (0.24)	37.8 (0.55)	4.6 (0.20)	16.1 (0.40)	2.6 (0.14)	7.1 (0.24)	2.0 (0.11)	7.6 (0.29)	0.6 (0.07
West	44.0 (0.75)	7.6 (0.30)	36.8 (0.71)	5.3 (0.26)	12.8 (0.50)	2.1 (0.15)	5.5 (0.28)	1.6 (0.12)	6.9 (0.33)	0.6 (0.10
COUNTY TYPE										
Large Metro	42.9 (0.44)	7.3 (0.21)	34.7 (0.42)	4.7 (0.17)	13.9 (0.32)	2.2 (0.11)	6.4 (0.19)	2.0 (0.09)	6.6 (0.22)	0.6 (0.06
Small Metro	46.5 (0.59)	6.9 (0.22)	38.6 (0.60)	4.6 (0.19)	15.7 (0.40)	2.4 (0.14)	6.8 (0.23)	2.0 (0.11)	7.4 (0.30)	0.6 (0.07
Nonmetro	46.2 (0.76)	6.4 (0.32)	38.5 (0.75)	4.6 (0.27)	15.7 (0.60)	2.2 (0.21)	5.8 (0.33)	1.7 (0.15)	7.3 (0.40)	0.5 (0.10

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, 2015.

Table B.4 – Any Use and Misuse of Pain Relievers in the Past Year among Individuals Aged 12 or Older, by Pain Reliever Subtype

Pain Reliever Subtype	Any Use, Estimated Number (in Thousands)[1]	Any Use, Percentage[2]	Misuse, Estimated Number (in Thousands)[1]	Misuse, Percentage[2]
ANY PRESCRIPTION PAIN RELIEVER[3]	97,499 (861)	36.4 (0.32)	12,462 (307)	4.7 (0.11)
Hydrocodone Products	58,261 (688)	21.8 (0.26)	7,193 (229)	2.7 (0.09)
Zohydro® ER	395 (54)	0.1 (0.02)	35 (15)	0.0 (0.01)
Oxycodone Products	27,873 (503)	10.4 (0.19)	4,258 (169)	1.6 (0.06)
OxyContin®	9,062 (294)	3.4 (0.11)	1,748 (108)	0.7 (0.04)
Tramadol Products	18,573 (440)	6.9 (0.16)	1,794 (124)	0.7 (0.05)
Morphine Products	7,205 (257)	2.7 (0.10)	697 (64)	0.3 (0.02)
Fentanyl Products	1,997 (138)	0.7 (0.05)	299 (42)	0.1 (0.02)
Buprenorphine Products	2,349 (140)	0.9 (0.05)	688 (60)	0.3 (0.02)
Oxymorphone Products	1,329 (114)	0.5 (0.04)	384 (49)	0.1 (0.02)
Demerol®	1,434 (125)	0.5 (0.05)	106 (23)	0.0 (0.01)
Hydromorphone Products	2,484 (161)	0.9 (0.06)	261 (39)	0.1 (0.01)
Methadone	1,568 (121)	0.6 (0.05)	502 (57)	0.2 (0.02)
Any Other Prescription Pain Reliever[4]	23,882 (480)	8.9 (0.18)	917 (88)	0.3 (0.03)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] Estimates shown are percentages with standard errors included in parentheses.
[3] Includes *hydrocodone products* (Vicodin®, Lortab®, Norco®, Zohydro® ER, generic hydrocodone, or other similar products); *oxycodone products* (OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, generic oxycodone, or other similar products); *tramadol products* (Ultram®, Ultram® ER, Ultracet®, generic tramadol, generic extended-release tramadol, or other similar products); *codeine products* (Tylenol® with codeine 3 or 4, generic codeine pills, or other similar products); *morphine products* (Avinza®, Kadian®, MS Contin®, generic morphine, generic extended-release morphine, or other similar products); *fentanyl products* (Actiq®, Duragesic®, Fentora®, generic fentanyl, or other similar products); *buprenorphine products* (Suboxone®, generic buprenorphine, or other similar products); *oxymorphone products* (Opana®, Opana® ER, generic oxymorphone, generic extended-release oxymorphone, or other similar products); *meperidine products* (Demerol® or other similar products); *hydromorphone products* (Dilaudid® or generic hydromorphone, Exalgo® or generic extended-release hydromorphone, or other similar products); *methadone products* (methadone or other similar products); or any other prescription pain reliever. Over-the-counter drugs are not included.
[4] Includes use or misuse of pain relievers containing other types of medications. Reports of misuse of "any other prescription pain reliever" that correspond only to the specific pain reliever categories shown in the table were excluded from estimates for Any Other Prescription Pain Reliever and are included instead in the relevant pain reliever category.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.5 – Any Use or Misuse of Tranquilizers in the Past Year among Individuals Aged 12 or Older, by Tranquilizer Subtype

Tranquilizer Subtype	Any Use, Estimated Number (in Thousands)[1]	Any Use, Percentage[2]	Misuse, Estimated Number (in Thousands)[1]	Misuse, Percentage[2]
ANY PRESCRIPTION TRANQUILIZER[3]	39,317 (623)	14.7 (0.23)	6,050 (209)	2.3 (0.08)
Benzodiazepine Tranquilizers[4]	29,735 (528)	11.1 (0.20)	5,394 (195)	2.0 (0.07)
Alprazolam Products	17,568 (395)	6.6 (0.15)	4,098 (158)	1.5 (0.06)
Lorazepam Products	7,563 (266)	2.8 (0.10)	893 (92)	0.3 (0.03)
Clonazepam Products	6,752 (264)	2.5 (0.10)	1,212 (89)	0.5 (0.03)
Diazepam Products	7,411 (269)	2.8 (0.10)	1,332 (106)	0.5 (0.04)
Muscle Relaxants[5]	6,933 (259)	2.6 (0.10)	819 (74)	0.3 (0.03)
Cyclobenzaprine (Also Known as Flexeril®)	4,837 (212)	1.8 (0.08)	255 (40)	0.1 (0.01)
Soma®	2,429 (150)	0.9 (0.06)	596 (66)	0.2 (0.02)
Buspirone (Also Known as BuSpar®)	1,676 (114)	0.6 (0.04)	120 (27)	0.0 (0.01)
Hydroxyzine (Also Known as Atarax® or Vistaril®)	1,813 (135)	0.7 (0.05)	166 (36)	0.1 (0.01)
Meprobamate (Also Known as Equanil® or Miltown®)	159 (31)	0.1 (0.01)	33 (13)	0.0 (0.00)
Any Other Prescription Tranquilizer[6]	6,645 (298)	2.5 (0.11)	202 (45)	0.1 (0.02)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] Estimates shown are percentages with standard errors included in parentheses.
[3] Includes *benzodiazepine tranquilizers* (see footnote 4); *muscle relaxants* (see footnote 5); *buspirone products* (also known as BuSpar® or other similar products); *hydroxyzine products* (also known as Atarax® or Vistaril® or similar

products); *meprobamate products* (also known as Equanil® or Miltown® or similar products); or any other prescription tranquilizer.
[4] Includes *alprazolam products* (Xanax®, Xanax® XR, generic alprazolam, generic extended-release alprazolam, or other similar products); *lorazepam products* (Ativan®, generic lorazepam, or other similar products); *clonazepam products* (Klonopin®, generic clonazepam, or other similar products); *diazepam products* (Valium®, generic diazepam, or other similar products); or other benzodiazepine tranquilizers that were specified for misuse of "any other prescription tranquilizer."
[5] Includes *cyclobenzaprine products* (Flexeril®, generic cyclobenzaprine, or other similar products); *carisoprodol products* (Soma® or other similar products); or other muscle relaxants that were specified for misuse of "any other prescription tranquilizer."
[6] Includes use or misuse of tranquilizers containing other active ingredients. Reports of misuse of "any other prescription tranquilizer" that correspond only to the specific tranquilizer categories shown in the table were excluded from estimates for Any Other Prescription Tranquilizer and are included instead in the relevant tranquilizer category.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.6 – Any Use and Misuse of Stimulants in the Past Year among Individuals Aged 12 or Older, by Stimulant Subtype

Stimulant Subtype	Any Use, Estimated Number (in Thousands)[1]	Any Use, Percentage[2]	Misuse, Estimated Number (in Thousands)[1]	Misuse, Percentage[2]
ANY PRESCRIPTION STIMULANT[3]	17,212 (356)	6.4 (0.13)	5,251 (174)	2.0 (0.07)
Amphetamine Products[4]	11,315 (288)	4.2 (0.11)	4,778 (165)	1.8 (0.06)
Methylphenidate Products[4]	3,457 (137)	1.3 (0.05)	979 (70)	0.4 (0.03)
Anorectic (Weight-Loss) Stimulants	2,315 (142)	0.9 (0.05)	121 (22)	0.0 (0.01)
Provigil®	574 (71)	0.2 (0.03)	103 (30)	0.0 (0.01)
Any Other Prescription Stimulant[5]	2,701 (147)	1.0 (0.05)	96 (28)	0.0 (0.01)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] Estimates shown are percentages with standard errors included in parentheses.
[3] Includes *amphetamine products* (Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, generic dextroamphetamine, generic amphetamine-dextroamphetamine combinations, generic extended-release amphetamine-dextroamphetamine combinations, or similar products); *methylphenidate products* (Ritalin®, Ritalin® SR, Ritalin® LA, Concerta®, Daytrana®, Metadate® CD, Metadate® ER, Focalin®, Focalin® XR, generic methylphenidate, generic extended-release methylphenidate, generic dexmethylphenidate, generic extended-release dexmethylphenidate, or similar products); *anorectic (weight-loss) stimulants* (Didrex®, benzphetamine, Tenuate®, diethylpropion, phendimetrazine, phentermine, or similar products); *modafinil products* (Provigil® or other similar products); or any other prescription stimulant.
[4] Includes amphetamine and methylphenidate products that are primarily prescribed for the treatment of attention-deficit/hyperactivity disorder (ADHD). Vyvanse® is included with amphetamine products because its active ingredient (lisdexamfetamine) is metabolized to dextroamphetamine.
[5] Includes use or misuse of stimulants containing other active ingredients. Reports of misuse of "any other prescription stimulant" that correspond only to the specific stimulant categories shown in the table were excluded from estimates for Any Other Prescription Stimulant and are included instead in the relevant stimulant category.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.7 – Any Use and Misuse of Sedatives in the Past Year among Individuals Aged 12 or Older, by Sedative Subtype

Sedative Subtype	Any Use, Estimated Number (in Thousands)[1]	Any Use, Percentage[2]	Misuse, Estimated Number (in Thousands)[1]	Misuse, Percentage[2]
ANY PRESCRIPTION SEDATIVE[3]	18,564 (437)	6.9 (0.16)	1,511 (113)	0.6 (0.04)
Zolpidem Products	11,501 (359)	4.3 (0.13)	1,108 (93)	0.4 (0.03)
Eszopiclone Products	1,271 (122)	0.5 (0.05)	94 (26)	0.0 (0.01)
Zaleplon Products	353 (73)	0.1 (0.03)	34 (24)	0.0 (0.01)
Benzodiazepine Sedatives[4]	2,523 (176)	0.9 (0.07)	205 (46)	0.1 (0.02)
Flurazepam (Also Known as Dalmane®)	156 (39)	0.1 (0.01)	** (**)	** (**)
Temazepam Products	1,790 (158)	0.7 (0.06)	100 (35)	0.0 (0.01)
Triazolam Products	636 (75)	0.2 (0.03)	101 (30)	0.0 (0.01)
Barbiturates	452 (69)	0.2 (0.03)	46 (22)	0.0 (0.01)
Any Other Prescription Sedative[5]	5,399 (230)	2.0 (0.09)	191 (31)	0.1 (0.01)

**Low precision; no estimate reported.
[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] Estimates shown are percentages with standard errors included in parentheses.
[3] Includes *zolpidem products* (Ambien®, Ambien® CR, generic zolpidem, extended-release generic zolpidem, or similar products); *eszopiclone products* (Lunesta® or generic eszopiclone, or similar products); *zaleplon products* (Sonata®, generic zaleplon, or similar products); *benzodiazepine sedatives* (see footnote 4); *barbiturates* (Butisol®, Seconal®, phenobarbital, or similar products); or any other prescription sedative.
[4] Includes *flurazepam products* (flurazepam [also known as Dalmane®] or other similar products); *temazepam products* (Restoril®, generic temazepam, or other similar products); *triazolam products* (Halcion®, generic triazolam, or other similar products); or other benzodiazepine sedatives that were specified for misuse of "any other prescription sedative."
[5] Includes use or misuse of sedatives containing other active ingredients. Reports of misuse of "any other prescription sedative" that correspond only to the specific sedative categories shown in the table were excluded from estimates for Any Other Prescription Sedative and are included instead in the relevant sedative category.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.8 – Any Use and Misuse of Prescription Psychotherapeutics in the Past Year among Individuals Aged 12 or Older, by Use of Other Substances in the Past Year

Substance	Psycho-therapeutics, Any Use	Psycho-therapeutics, Misuse	Pain Relievers, Any Use	Pain Relievers, Misuse	Tranquilizers, Any Use	Tranquilizers, Misuse	Stimulants, Any Use	Stimulants, Misuse	Sedatives, Any Use	Sedatives, Misuse
MARIJUANA	62.4 (0.69)	25.8 (0.60)	49.0 (0.72)	16.2 (0.47)	25.6 (0.62)	9.8 (0.39)	18.5 (0.50)	10.5 (0.39)	9.4 (0.44)	1.7 (0.17)
COCAINE	82.0 (1.46)	54.8 (1.88)	62.8 (1.86)	34.9 (1.72)	42.6 (1.95)	26.2 (1.56)	38.3 (1.81)	27.1 (1.65)	13.3 (1.33)	3.9 (0.70)
Crack	82.8 (4.26)	52.3 (5.87)	73.1 (4.99)	46.0 (5.65)	43.5 (5.73)	24.9 (4.30)	24.1 (4.05)	19.9 (3.73)	15.6 (3.63)	2.7 (1.09)
HEROIN	92.9 (2.14)	77.9 (3.49)	89.0 (2.68)	72.1 (3.76)	57.3 (4.89)	35.9 (4.16)	37.6 (4.01)	22.1 (3.30)	28.4 (4.07)	9.2 (2.31)
HALLUCINOGENS	73.6 (1.45)	51.8 (1.59)	53.6 (1.62)	30.4 (1.48)	36.3 (1.62)	25.0 (1.37)	41.5 (1.64)	29.7 (1.50)	10.2 (0.92)	3.4 (0.50)
LSD	78.4 (2.20)	59.1 (2.56)	55.3 (2.63)	35.5 (2.55)	44.3 (2.57)	31.4 (2.30)	51.4 (2.53)	39.3 (2.47)	10.2 (1.37)	5.5 (1.15)

PCP	** (**)	** (**)	** (**)	** (**)	** (**)	** (**)	** (**)	** (**)	** (**)	** (**)
Ecstasy	75.8 (2.07)	58.0 (2.24)	53.9 (2.34)	33.0 (2.13)	41.7 (2.22)	29.0 (1.95)	46.4 (2.24)	33.8 (2.13)	10.0 (1.24)	3.5 (0.65)
INHALANTS	60.4 (2.69)	32.1 (2.48)	47.3 (2.61)	22.0 (2.06)	26.9 (2.22)	16.7 (1.73)	25.4 (2.22)	16.2 (1.84)	11.9 (1.69)	3.5 (0.74)
METHAMPHETAMINE	78.6 (2.97)	53.6 (3.52)	66.3 (3.30)	42.5 (3.42)	45.2 (3.22)	28.9 (2.79)	33.6 (3.08)	23.1 (2.51)	20.6 (2.79)	4.5 (1.33)
ALCOHOL	48.1 (0.38)	9.2 (0.19)	39.0 (0.37)	5.9 (0.15)	16.2 (0.28)	3.0 (0.11)	7.8 (0.18)	2.8 (0.09)	7.7 (0.20)	0.7 (0.06)
TOBACCO PRODUCTS	54.5 (0.50)	14.5 (0.33)	45.1 (0.52)	9.5 (0.27)	19.8 (0.44)	5.3 (0.21)	11.2 (0.30)	5.1 (0.19)	8.6 (0.30)	1.1 (0.10)
Cigarettes	57.1 (0.58)	16.1 (0.40)	47.2 (0.60)	10.7 (0.33)	22.2 (0.52)	6.2 (0.25)	12.2 (0.34)	5.6 (0.22)	9.1 (0.34)	1.2 (0.12)

**Low precision; no estimate reported.
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, 2015.

Table B.9 – Any Use and Misuse of Prescription Psychotherapeutics in the Past Year among Youths Aged 12 to 17 and Adults 18 or older, by Past Year Mental Health Measures

Age Group/Mental Health Measure	Psycho-therapeutics, Any Use	Psycho-therapeutics, Misuse	Pain Relievers, Any Use	Pain Relievers, Misuse	Tranquilizers, Any Use	Tranquilizers, Misuse	Stimulants, Any Use	Stimulants, Misuse	Sedatives, Any Use	Sedatives, Misuse
AGED 12 TO 17	28.1 (0.43)	5.9 (0.23)	22.7 (0.41)	3.9 (0.19)	4.3 (0.20)	1.6 (0.13)	7.3 (0.25)	2.0 (0.14)	2.4 (0.15)	0.4 (0.06)
MDE	41.5 (1.41)	12.2 (0.91)	31.7 (1.34)	7.8 (0.75)	9.7 (0.79)	3.4 (0.45)	13.9 (0.96)	5.5 (0.67)	5.9 (0.62)	0.8 (0.24)
No MDE	26.1 (0.45)	4.9 (0.23)	21.3 (0.42)	3.3 (0.19)	3.5 (0.21)	1.3 (0.14)	6.3 (0.25)	1.4 (0.13)	1.9 (0.15)	0.3 (0.06)
AGED 18 or Older	46.1 (0.35)	7.2 (0.15)	37.8 (0.35)	4.7 (0.12)	15.8 (0.25)	2.3 (0.08)	6.3 (0.14)	2.0 (0.07)	7.4 (0.18)	0.6 (0.05)
SMI	77.1 (1.18)	21.5 (1.16)	60.6 (1.42)	15.2 (1.03)	48.1 (1.51)	9.8 (0.83)	17.3 (1.04)	6.0 (0.60)	24.0 (1.33)	2.9 (0.45)
AMI	66.5 (0.68)	15.8 (0.48)	53.1 (0.76)	11.1 (0.43)	34.3 (0.72)	6.1 (0.31)	13.7 (0.47)	4.3 (0.24)	16.1 (0.55)	1.5 (0.16)
AMI no SMI	63.5 (0.79)	14.2 (0.52)	50.9 (0.85)	9.9 (0.46)	30.3 (0.78)	5.1 (0.32)	12.6 (0.52)	3.7 (0.25)	13.8 (0.59)	1.1 (0.17)
No Mental Illness	41.7 (0.39)	5.3 (0.14)	34.5 (0.37)	3.3 (0.11)	11.7 (0.24)	1.5 (0.08)	4.7 (0.14)	1.5 (0.07)	5.5 (0.18)	0.4 (0.04)
MDE	71.6 (1.00)	17.9 (0.80)	56.7 (1.15)	12.0 (0.69)	40.6 (1.14)	7.9 (0.56)	15.8 (0.79)	5.2 (0.41)	19.9 (0.99)	2.0 (0.29)
No MDE	44.2 (0.37)	6.4 (0.15)	36.4 (0.36)	4.2 (0.12)	13.9 (0.25)	1.9 (0.08)	5.6 (0.14)	1.7 (0.07)	6.5 (0.18)	0.5 (0.05)
Serious Thoughts of Suicide	69.2 (1.29)	22.9 (1.08)	54.1 (1.43)	16.4 (0.98)	38.3 (1.42)	10.0 (0.76)	16.4 (1.03)	7.0 (0.59)	18.7 (1.17)	2.3 (0.35)
No Serious Thoughts of Suicide	45.1 (0.36)	6.5 (0.15)	37.1 (0.35)	4.2 (0.12)	14.8 (0.25)	2.0 (0.08)	5.9 (0.14)	1.8 (0.07)	6.9 (0.18)	0.5 (0.05)

AMI = any mental illness; MDE = major depressive episode; SMI = serious mental illness.
NOTE: Estimates shown are percentages with standard errors included in parentheses.
NOTE: Respondents with unknown past year MDE or suicide information were excluded.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.10 – Number of Days Misused Prescription Psychotherapeutics in the Past Month among Past Month Misusers Aged 12 or Older, by Age Group

Prescription Drug/Number of Days Misused	12 or Older	12 to 17	18 or Older	18 to 25	26 or Older
ANY PAST MONTH MISUSE OF PAIN RELIEVERS	1.4 (0.06)	1.1 (0.11)	1.4 (0.06)	2.4 (0.13)	1.3 (0.07)
NUMBER OF DAYS MISUSED IN PAST MONTH AMONG PAST MONTH MISUSERS					
1-2 Days	41.1 (2.11)	51.6 (4.57)	40.2 (2.26)	43.7 (3.15)	39.2 (2.87)
3-5 Days	26.9 (1.91)	27.9 (4.22)	26.8 (2.04)	31.7 (2.83)	25.3 (2.57)
6-19 Days	20.6 (1.73)	17.8 (3.26)	20.8 (1.84)	16.5 (2.29)	22.2 (2.32)
20 or More Days	11.4 (1.34)	2.7 (1.16)	12.1 (1.44)	8.1 (1.66)	13.3 (1.84)
Average Number of Days Misused in the Past Month	7.0 (0.35)	4.5 (0.48)	7.1 (0.38)	5.7 (0.42)	7.6 (0.48)
ANY PAST MONTH MISUSE OF TRANQUILIZERS	0.7 (0.04)	0.7 (0.09)	0.7 (0.04)	1.7 (0.13)	0.5 (0.05)
NUMBER OF DAYS MISUSED IN PAST MONTH AMONG PAST MONTH MISUSERS					
1-2 Days	49.1 (2.86)	** (**)	47.8 (3.03)	53.5 (3.67)	44.9 (4.19)
3-5 Days	26.3 (2.62)	** (**)	27.1 (2.81)	25.8 (3.32)	27.7 (3.89)
6-19 Days	18.6 (2.17)	** (**)	19.2 (2.34)	15.5 (2.69)	21.1 (3.23)
20 or More Days	6.1 (1.31)	** (**)	6.0 (1.38)	5.2 (1.63)	6.3 (1.86)
Average Number of Days Misused in the Past Month	5.2 (0.35)	4.2 (0.78)	5.3 (0.37)	4.7 (0.42)	5.6 (0.51)
ANY PAST MONTH MISUSE OF STIMULANTS	0.6 (0.04)	0.5 (0.07)	0.6 (0.04)	2.2 (0.15)	0.4 (0.04)
NUMBER OF DAYS MISUSED IN PAST MONTH AMONG PAST MONTH MISUSERS					
1-2 Days	54.2 (2.80)	** (**)	53.4 (2.97)	52.3 (3.16)	54.4 (4.82)
3-5 Days	23.3 (2.43)	** (**)	24.2 (2.59)	27.0 (2.88)	21.4 (4.07)
6-19 Days	17.1 (1.95)	** (**)	17.0 (2.05)	17.7 (2.29)	16.3 (3.29)
20 or More Days	5.4 (1.54)	** (**)	5.5 (1.63)	3.0 (1.01)	7.9 (3.02)
Average Number of Days Misused in the Past Month	4.7 (0.40)	3.9 (0.91)	4.8 (0.42)	4.3 (0.33)	5.3 (0.75)
ANY PAST MONTH MISUSE OF SEDATIVES	0.2 (0.02)	0.1 (0.03)	0.2 (0.02)	0.2 (0.05)	0.2 (0.03)
NUMBER OF DAYS MISUSED IN PAST MONTH AMONG PAST MONTH MISUSERS					
1-2 Days	** (**)	** (**)	** (**)	** (**)	** (**)

3-5 Days	23.0 (4.86)	** (**)	22.5 (5.01)	** (**)	** (**)
6-19 Days	20.4 (4.58)	** (**)	20.4 (4.77)	** (**)	** (**)
20 or More Days	** (**)	** (**)	** (**)	** (**)	** (**)
Average Number of Days Misused in the Past Month	5.7 (0.93)	3.5 (0.88)	5.8 (0.97)	4.3 (0.97)	6.2 (1.18)

**Low precision; no estimate reported.
NOTE: Standard errors for the average number of days are included in parentheses. Other 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, 2015.

Table B.11 – Main Reasons for Prescription Drug Misuse for the Last Episode of Misuse among Individuals Aged 12 or Older Who Misused Prescription Drugs in the Past Year

Main Reason for Misuse	Pain Reliever	Tranquilizer	Stimulant	Sedative
Relieve Physical Pain	62.6 (1.17)	-- (--)	-- (--)	-- (--)
Relax or Relieve Tension	10.8 (0.77)	44.9 (1.73)	-- (--)	12.0 (2.34)
Help with Sleep	4.4 (0.50)	20.4 (1.45)	-- (--)	71.7 (3.29)
Help with Feelings or Emotion	3.3 (0.38)	10.7 (1.05)	-- (--)	3.7 (1.35)
Experiment or See What It's Like	2.5 (0.25)	6.4 (0.78)	5.7 (0.73)	3.7 (0.87)
Feel Good or Get High	12.1 (0.71)	12.3 (1.02)	10.5 (0.91)	5.9 (1.66)
Increase or Decrease Effect of Other Drug	0.9 (0.22)	1.5 (0.36)	1.5 (0.37)	1.2 (0.72)
Because I Am Hooked or Have to Have It	2.3 (0.30)	0.3 (0.15)	0.1 (0.06)	** (**)
Help Lose Weight	-- (--)	-- (--)	4.2 (0.61)	-- (--)
Help Concentrate	-- (--)	-- (--)	26.5 (1.32)	-- (--)
Help Be Alert or Stay Awake	-- (--)	-- (--)	26.8 (1.53)	-- (--)
Help Study	-- (--)	-- (--)	22.5 (1.25)	-- (--)
Some Other Reason	1.2 (0.23)	3.4 (0.65)	2.2 (0.58)	1.8 (0.77)

-- = Not listed as a reason for this specific prescription drug type.
**Low precision; no estimate reported.
NOTE: Estimates shown are percentages with standard errors included in parentheses.
NOTE: Responses to the Some Other Reason category for one drug type may fall into a response category that is only asked for another drug type. For example, some other reason given for tranquilizer misuse by respondents includes to relieve physical pain.
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.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.12 – Source Where Pain Relievers Were Obtained for Most Recent Misuse among Individuals Aged 12 or Older Who Misused Pain Relievers in the Past Year, by Age Group

Source for Most Recent Misuse among Past Year Misusers of Pain Relievers	12 or Older	12 to 17	18 or Older	18 to 25	26 or Older
GOT THROUGH PRESCRIPTION(S) OR STOLE FROM A HEALTH CARE PROVIDER	36.4 (1.27)	27.3 (2.42)	37.1 (1.36)	26.5 (1.46)	40.8 (1.74)
Prescription from One Doctor	34.0 (1.27)	23.1 (2.34)	34.9 (1.35)	24.9 (1.43)	38.3 (1.72)
Prescriptions from More Than One Doctor	1.7 (0.39)	1.7 (0.58)	1.7 (0.42)	0.9 (0.28)	2.0 (0.55)
Stole from Doctor's Office, Clinic, Hospital, or Pharmacy	0.7 (0.17)	2.5 (0.81)	0.5 (0.17)	0.7 (0.26)	0.5 (0.21)
GIVEN BY, BOUGHT FROM, OR TOOK FROM A FRIEND OR RELATIVE	53.7 (1.23)	56.2 (2.67)	53.6 (1.32)	59.5 (1.56)	51.5 (1.70)
From Friend or Relative for Free	40.5 (1.18)	37.4 (2.76)	40.8 (1.26)	42.5 (1.61)	40.2 (1.62)
Bought from Friend or Relative	9.4 (0.66)	9.7 (1.54)	9.4 (0.70)	13.6 (1.16)	8.0 (0.88)
Took from Friend or Relative without Asking	3.8 (0.45)	9.2 (1.50)	3.4 (0.47)	3.5 (0.61)	3.3 (0.60)
BOUGHT FROM DRUG DEALER OR OTHER STRANGER	4.9 (0.43)	5.1 (1.19)	4.9 (0.46)	8.3 (0.96)	3.7 (0.50)
SOME OTHER WAY[1]	4.9 (0.53)	11.5 (1.82)	4.4 (0.56)	5.6 (0.83)	4.0 (0.70)

NOTE: Estimates shown are percentages with standard errors included in parentheses.
NOTE: Respondents were asked to choose one of eight sources, and those with more than one source were asked to choose 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.
[1] 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.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.13 – Source Where Pain Relievers Were Obtained for Most Recent Misuse, by Past Year Initiation Status and Pain Reliever Disorder Status for Individuals Aged 12 or Older

Source for Most Recent Misuse among Past Year Misusers of Pain Relievers	Past Year Initiate without Disorder[1]	Past Year Misuser without Disorder and Not Past Year Initiate[2]	Past Year Misuser (Including Initiates) with Disorder[3]
GOT THROUGH PRESCRIPTION(S) OR STOLE FROM A HEALTH CARE PROVIDER	41.4 (2.92)	33.6 (1.57)	43.7 (3.19)
Prescription from One Doctor	38.7 (2.91)	31.8 (1.53)	39.0 (3.07)
Prescriptions from More Than One Doctor	1.4 (0.68)	1.3 (0.38)	3.7 (1.62)
Stole from Doctor's Office, Clinic, Hospital, or Pharmacy	1.3 (0.50)	0.5 (0.17)	1.0 (0.57)
GIVEN BY, BOUGHT FROM, OR TOOK			

FROM A FRIEND OR RELATIVE	53.5 (2.92)	57.4 (1.58)	39.0 (2.67)
From Friend or Relative for Free	45.5 (2.87)	43.9 (1.53)	22.1 (2.40)
Bought from Friend or Relative	5.4 (1.04)	9.3 (0.85)	13.8 (1.73)
Took from Friend or Relative without Asking	2.5 (0.59)	4.2 (0.60)	3.1 (1.07)
BOUGHT FROM DRUG DEALER OR OTHER STRANGER	1.9 (0.56)	3.5 (0.44)	13.4 (1.71)
SOME OTHER WAY[4]	3.2 (0.84)	5.5 (0.74)	3.9 (1.01)

NOTE: Estimates shown are percentages with standard errors included in parentheses.
NOTE: Respondents were asked to choose one of eight sources, and those with more than one source were asked to choose 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.
[1] Past Year Initiate without Disorder is defined as individuals who initiated pain reliever misuse in the past year but who did not have a past year pain reliever use disorder.
[2] Past Year Misuser without Disorder and Not Past Year Initiate is defined as individuals who misused pain relievers in the past year, were not past year initiates for pain reliever misuse, and did not have a past year pain reliever use disorder.
[3] Past Year Misuser (Including Initiates) with Disorder is defined as individuals who misused pain relievers in the past year (including initiates and non-initiates) and had a past year pain reliever use disorder.
[4] 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.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.14 – Past Year Initiation of Prescription Psychotherapeutic Misuse among Individuals Aged 12 or Older, by Age Group and Gender

Age Group/ Gender	Pain Relievers, Number (1,000s)[1]	Pain Relievers, Percentage[2]	Tranquilizers, Number (1,000s)[1]	Tranquilizers, Percentage[2]	Stimulants, Number (1,000s)[1]	Stimulants, Percentage[2]	Sedatives, Number (1,000s)[1]	Sedatives, Percentage[2]
TOTAL	2,126 (115)	0.8 (0.04)	1,437 (94)	0.5 (0.04)	1,260 (80)	0.5 (0.03)	425 (63)	0.2 (0.02)
AGE								
12-17	415 (32)	1.7 (0.13)	210 (23)	0.8 (0.09)	276 (27)	1.1 (0.11)	46 (11)	0.2 (0.04)
18 or Older	1,710 (112)	0.7 (0.05)	1,227 (91)	0.5 (0.04)	984 (76)	0.4 (0.03)	379 (62)	0.2 (0.03)
18-25	596 (43)	1.7 (0.12)	489 (40)	1.4 (0.11)	600 (48)	1.7 (0.14)	86 (16)	0.2 (0.04)
26 or Older	1,114 (101)	0.5 (0.05)	738 (82)	0.4 (0.04)	384 (57)	0.2 (0.03)	293 (61)	0.1 (0.03)
GENDER								
Male	916 (68)	0.7 (0.05)	633 (63)	0.5 (0.05)	631 (54)	0.5 (0.04)	155 (39)	0.1 (0.03)
Female	1,210 (85)	0.9 (0.06)	803 (70)	0.6 (0.05)	629 (54)	0.5 (0.04)	270 (51)	0.2 (0.04)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] 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, 2015.

Table B.15 – Mean Age at First Prescription Psychotherapeutic Misuse among Past Year Initiates Aged 12 to 49

Prescription Psychotherapeutic	Mean Age at First Misuse
Pain Relievers	25.8 (0.58)
Tranquilizers	25.9 (0.63)
Stimulants	22.3 (0.52)
Sedatives	28.3 (1.50)

NOTE: Estimates shown are means with standard errors included in parentheses.
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015.

Table B.16 – Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among Individuals Aged 12 or Older, by Age Group

Substance Use Disorder/Age Group	Estimated Number (in Thousands)[1]	Percentage[2]
PSYCHOTHERAPEUTICS	2,742 (136)	1.0 (0.05)
12-17	216 (24)	0.9 (0.09)
18 or Older	2,526 (134)	1.0 (0.06)
18-25	687 (47)	2.0 (0.14)
26 or Older	1,840 (126)	0.9 (0.06)
Pain Relievers	2,038 (120)	0.8 (0.04)
12-17	122 (18)	0.5 (0.07)
18 or Older	1,916 (119)	0.8 (0.05)
18-25	427 (37)	1.2 (0.11)
26 or Older	1,489 (114)	0.7 (0.05)
Tranquilizers	688 (66)	0.3 (0.02)
12-17	77 (15)	0.3 (0.06)
18 or Older	610 (63)	0.3 (0.03)
18-25	234 (29)	0.7 (0.08)
26 or Older	376 (56)	0.2 (0.03)
Stimulants	426 (46)	0.2 (0.02)
12-17	38 (9)	0.2 (0.04)
18 or Older	388 (46)	0.2 (0.02)
18-25	159 (20)	0.5 (0.06)
26 or Older	229 (41)	0.1 (0.02)

Sedatives	154 (30)	0.1 (0.01)
12-17	26 (8)	0.1 (0.03)
18 or Older	128 (29)	0.1 (0.01)
18-25	22 (8)	0.1 (0.02)
26 or Older	106 (27)	0.1 (0.01)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] 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, 2015.

Table B.17 – Prescription Psychotherapeutics for Which Last or Current Treatment Was Received among Individuals Who Received Substance Use Treatment in the Past Year, by Age Group

Prescription Psychotherapeutic/ Age Group	Estimated Number (in Thousands)[1]	Percentage[2]
PAIN RELIEVERS	822 (78)	22.4 (1.87)
12-17	25 (8)	12.8 (3.69)
18 or Older	797 (78)	22.9 (1.97)
18-25	165 (24)	24.6 (3.18)
26 or Older	632 (75)	22.5 (2.34)
TRANQUILIZERS	293 (44)	8.0 (1.17)
12-17	19 (6)	9.7 (2.98)
18 or Older	274 (44)	7.9 (1.23)
18-25	89 (20)	13.3 (2.74)
26 or Older	185 (41)	6.6 (1.44)
STIMULANTS	139 (26)	3.8 (0.71)
12-17	16 (6)	8.3 (2.72)
18 or Older	122 (26)	3.5 (0.73)
18-25	46 (13)	6.9 (1.81)
26 or Older	76 (22)	2.7 (0.78)
SEDATIVES	116 (29)	3.2 (0.80)
12-17	7 (4)	3.8 (1.82)
18 or Older	109 (29)	3.1 (0.84)
18-25	28 (8)	4.1 (1.23)
26 or Older	81 (28)	2.9 (0.99)

[1] Estimates shown are numbers in thousands with standard errors included in parentheses.
[2] 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, 2015.

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Long Descriptions – Figures

Long description, Figure 1: Figure 1 is titled "Numbers of Past Year Prescription Psychotherapeutic Users among People Aged 12 or Older: 2015." It is a pie chart with an accompanying bar graph, where the pie chart shows the percentage and number of people with no past year psychotherapeutic use and the percentage and number of people with past year psychotherapeutic use. The bar graph breaks down the people with past year psychotherapeutic use by showing the number of people in millions on the horizontal axis and four types of prescription psychotherapeutics on the vertical axis. The four types of prescription psychotherapeutics are pain relievers, tranquilizers, stimulants, and sedatives. Two notes are below the figure, the first of which says, "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." The second note says, "The estimated numbers of past year users of different psychotherapeutics are not mutually exclusive because people could have used more than one type of psychotherapeutic in the past year."

For the pie chart, the number and percentage of people aged 12 or older with no past year psychotherapeutic use in 2015 were 148.7 million people and 55.5 percent, respectively. The number and percentage of people with past year psychotherapeutic use were 119.0 million people and 44.5 percent, respectively.

For the bar graph in descending order, of the 119.0 million people with past year psychotherapeutic use in 2015:

The number of past year users for pain relievers was 97.5 million people.

The number of past year users for tranquilizers was 39.3 million people.

The number of past year users for stimulants was 17.2 million people.

The number of past year sedatives for stimulants was 18.6 million people.

Long description end. Return to Figure 1.

Long description, Figure 2: Figure 2 is titled "Subtypes of Prescription Pain Relievers in the 2015 NSDUH Questionnaire." It is an organization chart that outlines the specific prescription pain relievers asked about in the NSDUH questionnaire and categorizes them into 11 subtypes. A red box in the top left corner says, "Prescription Pain Relievers" and has a blue line coming straight down from the box. Each of the 11 subtypes, shown in blue boxes, branch off to the right of the blue line. When applicable, the blue subtype box has a brown box branching off to the right listing the specific individual named prescription pain relievers that are included in the subtypes.

Three notes are below the figure, the first of which says, "Prescription pain reliever categories shown in the red and blue boxes represent estimates for subtypes that are shown in **Table B.4** in **Appendix B**. Estimates for the specific pain relievers Zohydro® ER and OxyContin® also are shown in **Table B.4**." The second note says, "Codeine products (e.g., Tylenol® with codeine 3 or 4 and codeine pills) are included in estimates for the past year use and misuse of any prescription pain reliever. However, separate estimates were not created for codeine products because of concerns that respondents in 2015 might overreport the use and misuse of

codeine products if they confused Tylenol® with codeine 3 or 4 with over-the-counter Tylenol®, which does not require a prescription; changes were made to the 2016 NSDUH questionnaire to emphasize that Tylenol® with codeine 3 or 4 is not the same as over-the-counter Tylenol®." The third note says, "The following drugs in this figure are generic drugs: Hydrocodone, Oxycodone, Tramadol, Extended-Release Tramadol, Morphine, Extended-Release Morphine, Fentanyl, Buprenorphine, Oxymorphone, Extended-Release Oxymorphone, Hydromorphone, Extended-Release Hydromorphone, and Methadone."

The 11 subtypes include (1) Hydrocodone Products, (2) Oxycodone Products, (3) Tramadol Products, (4) Morphine Products, (5) Fentanyl Products, (6) Buprenorphine Products, (7) Oxymorphone Products, (8) Demerol®, (9) Hydromorphone products, (10) Methadone, and (11) Other Prescription Pain Relievers. The subtype for Hydrocodone Products includes the prescription pain relievers Vicodin®, Lortab®, Norco®, Zohydro® ER, and Hydrocodone. The subtype for Oxycodone Products includes the prescription pain relievers OxyContin®, Percocet®, Percodan®, Roxicet®, Roxicodone®, and Oxycodone. The subtype for Tramadol Products includes the prescription pain relievers Ultram®, Ultram® ER, Ultracet®, Tramadol, and Extended-Release Tramadol. The subtype for Morphine Products includes the prescription pain relievers Avinza®, Kadian®, MS Contin®, Morphine, and Extended-Release Morphine. The subtype for Fentanyl Products includes the prescription pain relievers Actiq®, Duragesic®, Fentora®, and Fentanyl. The subtype for Buprenorphine Products includes the prescription pain relievers Suboxone® and Buprenorphine. The subtype for Oxymorphone Products includes the prescription pain relievers Opana®, Opana® ER, Oxymorphone, and Extended-Release Oxymorphone. The subtype for Hydromorphone Products includes two sets of prescription pain relievers: (1) Dilaudid® or Hydromorphone and (2) Exalgo® or Extended-Release Hydromorphone. The blue subtype boxes for Demerol®, Methadone, and Other Prescription Pain Relievers do not have further categorizations.

Long description end. Return to Figure 2.

Long description, Figure 3: Figure 3 is titled "Subtypes of Prescription Tranquilizers in the 2015 NSDUH Questionnaire." It is an organization chart that outlines the specific prescription tranquilizers asked about in the NSDUH questionnaire and categorizes them into six subtypes. A red box in the top left corner says, "Prescription Tranquilizers" and has a blue line coming straight down from the box. Each of the six subtypes, shown in blue boxes, branch off to the right of the blue line. When applicable, the blue subtype box has a gray box branching off to the right listing either further subcategories of the subtype or the individually named prescription tranquilizers. As applicable, the gray subtype box has a brown box branching off to the right listing the specific individually named tranquilizers that are included in the subtypes.

Two notes are below the figure, the first of which says, "Prescription tranquilizer categories shown in the red, blue, and gray boxes represent estimates for subtypes that are shown in **Table B.5** in **Appendix B**." The second note says, "The following drugs in this figure are generic drugs: Alprazolam, Extended-Release Alprazolam, Lorazepam, Clonazepam, Diazepam, Cyclobenzaprine, Buspirone, Hydroxyzine, and Meprobamate."

The six subtypes include (1) Benzodiazepine Tranquilizers, (2) Muscle Relaxants, (3) Buspirone (Also Known as BuSpar®), (4) Hydroxyzine (Also Known as Atarax® or Vistaril®), (5) Meprobamate (Also Known as Equanil® or Miltown®), and (6) Other Prescription Tranquilizers. The subtype for Benzodiazepine Tranquilizers is further subcategorized into four additional groups of benzodiazepine tranquilizers, including (1) Alprazolam Products, (2) Lorazepam Products, (3) Clonazepam Products, and (4) Diazepam Products. The subcategory for Alprazolam Products includes the benzodiazepine tranquilizers Xanax®, Xanax® XR, Alprazolam, and Extended-Release Alprazolam. The subcategory for Lorazepam Products includes the benzodiazepine tranquilizers Ativan® and Lorazepam. The subcategory for Clonazepam Products includes the benzodiazepine tranquilizers Klonopin® and Clonazepam. The subcategory for Diazepam Products includes the benzodiazepine tranquilizers Valium® and Diazepam. The subtype for muscle relaxants includes Cyclobenzaprine (Also Known as Flexeril®) and Soma®. The blue subtype boxes for Buspirone (Also Known as BuSpar®), Hydroxyzine (Also Known as Atarax® or Vistaril®), Meprobamate (Also Known as Equanil® or Miltown®), and Other Prescription Tranquilizers do not have further categorizations.

Long description end. Return to Figure 3.

Long description, Figure 4: Figure 4 is titled "Subtypes of Prescription Stimulants in the 2015 NSDUH Questionnaire." It is an organization chart that outlines the specific prescription stimulants asked about in the NSDUH questionnaire and categorizes them into five subtypes. A red box in the top left corner says, "Prescription Stimulants" and has a blue line coming straight down from the box. Each of five subtypes, shown in blue boxes, branch off to the right of the blue line. When applicable, the blue subtype box has a brown box branching off to the right listing the specific individually named prescription stimulants that are included in the subtypes.

Three notes are below the figure, the first of which says, "Prescription stimulant categories shown in the red and blue boxes represent estimates for subtypes that are shown in **Table B.6** in **Appendix B**." The second note says, "Vyvanse® is included with Amphetamine Products because its active ingredient (lisdexamfetamine) is metabolized to dextroamphetamine." The third note says, "The following drugs in this figure are generic drugs: Dextroamphetamine, Amphetamine-Dextroamphetamine Combinations, Extended-Release Amphetamine-Dextroamphetamine Combinations, Methylphenidate, Extended-Release Methylphenidate, Dexmethylphenidate, Extended-Release Dexmethylphenidate, Benzphetamine, Diethylpropion, Phendimetrazine, and Phentermine."

The five subtypes include (1) Amphetamine Products, (2) Methylphenidate Products, (3) Anorectic (Weight Loss) Stimulants, (4) Provigil®, and (5) Other Prescription Stimulants. The subtype for Amphetamine Products includes the prescription stimulants Adderall®, Adderall® XR, Dexedrine®, Vyvanse®, Dextroamphetamine, Amphetamine-Dextroamphetamine Combinations, and Extended-release Amphetamine-Dextroamphetamine Combinations. The subtype for Methylphenidate Products includes the prescription stimulants Ritalin®, Ritalin® SR or LA, Concerta®, Daytrana®, Metadate® CD, Metadate® ER, Focalin®, Focalin® XR, Methylphenidate, Extended-Release Methylphenidate, Dexmethylphenidate, and Extended-Release Dexmethylphenidate. The subtype for Anorectic (Weight Loss) Stimulants includes the prescription stimulants Didrex®, Benzphetamine, Tenuate®, Diethylpropion, Phendimetrazine, and Phentermine. The blue subtype boxes for Provigil® and Other Prescription Stimulants do not have further categorizations.

Long description end. Return to Figure 4.

Long description, Figure 5: Figure 5 is titled "Subtypes of Prescription Sedatives in the 2015 NSDUH Questionnaire." It is an organization chart that outlines the specific prescription sedatives asked about in the NSDUH questionnaire and categorizes them into six subtypes. A red box in the top left corner says, "Prescription Sedatives" and has a blue line coming straight down from the box. Each of the six subtypes, shown in blue boxes, branch off to the right of the blue line. When applicable, the blue subtype box has gray box or a brown box branching off to the right that lists either further subcategories within the subtype or the individually named prescription sedatives. As applicable, the gray subtype box has a brown box branching off to the right listing the specific individually named sedatives that are included in the subtype.

Two notes are below the figure, the first of which says, "Prescription sedative categories shown in the red, blue, and gray boxes represent estimates for subtypes that are shown in **Table B.7** in **Appendix B**." The second note says, "The following drugs in this figure are generic drugs: Zolpidem, Extended-Release Zolpidem, Eszopiclone, Zaleplon, Flurazepam, Temazepam, Triazolam, and Phenobarbital."

The six subtypes include (1) Zolpidem Products, (2) Eszopiclone Products, (3) Zaleplon Products, (4) Benzodiazepine Sedatives, (5) Barbiturates, and (6) Other Prescription Sedatives. The subtype for Zolpidem Products includes the prescription sedatives Ambien®, Ambien® CR, Zolpidem, and Extended-Release Zolpidem. The subtype for Eszopiclone products includes the prescription sedatives Lunesta® and Eszopiclone. The subtype for Zaleplon Products includes the prescription sedatives Sonata® and Zaleplon. The subtype for Benzodiazepine Sedatives is further subcategorized into three additional groups of Benzodiazepine Sedatives: (1) Flurazepam (Also Known as Dalmane®), (2) Temazepam Products, and (3) Triazolam Products. The subcategory for Temazepam Products includes the benzodiazepine sedatives Restoril® and Temazepam. The subcategory for Triazolam Products includes the benzodiazepine sedatives Halcion® and triazolam. The subtype for Barbiturates includes Butisol®, Seconal®, and Phenobarbital. One blue subtype box, Other Prescription Sedatives, does not have further categorizations.

Long description end. Return to Figure 5.

Long description, Figure 6: Figure 6 is titled "Numbers of Past Year Prescription Psychotherapeutic Misusers among People Aged 12 or Older: 2015." It is a pie chart with an accompanying bar graph, where the pie chart shows the percentage and number of people with no past year psychotherapeutic misuse and the percentage and number of people with past year psychotherapeutic misuse. The bar graph breaks down the people with past year psychotherapeutic misuse by showing the number of people in millions on the horizontal axis and the four types of prescription psychotherapeutics on the vertical axis. The four types of prescription psychotherapeutics are pain relievers, tranquilizers, stimulants, and sedatives. Two notes are below the figure, the first of which says, "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." The second note says, "The estimated number of past year misusers of different psychotherapeutics are not mutually exclusive because people could have misused more than one type of psychotherapeutic in the past year."

For the pie chart, the number and percentage of people aged 12 or older with no past year psychotherapeutic misuse were 248.8 million people and 92.9 percent, respectively. The number and percentage of people with past year psychotherapeutic misuse were 18.9 million people and 7.1 percent, respectively.

For the bar graph in descending order, of the 18.9 million people with past year psychotherapeutic misuse in 2015:

The number of past year misusers for pain relievers was 12.5 million people.

The number of past year misusers for tranquilizers was 6.1 million people.

The number of past year misusers for stimulants was 5.3 million people.

The number of past year misusers for sedatives was 1.5 million people.

Long description end. Return to Figure 6.

Long description, Figure 7: Figure 7 is titled "Past Year Misuse of Prescription Psychotherapeutics among People Aged 12 or Older, by Drug Type and Age Group: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of people aged 12 or older misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives. For each type of psychotherapeutic, the figure shows three bars. The first bar shows the percentage among youths aged 12 to 17. The second bar shows the percentage among adults aged 18 to 25. The third bar shows the percentage among adults aged 26 or older. Tests of statistical significance at the .05 level were performed between adults aged 18 to 25 and each of the other age groups; significant results are indicated where appropriate.

Percentages of people aged 12 or older who misused any psychotherapeutics in the past year were 5.9 percent for youths aged 12 to 17, 15.3 percent for adults aged 18 to 25, and 5.8 percent for adults aged 26 or older. The estimate for adults aged 18 to 25 is significantly different from the estimates for youths aged 12 to 17 and for adults aged 26 or older.

Percentages of people aged 12 or older who misused pain relievers in the past year were 3.9 percent for youths aged 12 to 17, 8.5 percent for adults aged 18 to 25, and 4.1 percent for adults aged 26 or older. The estimate for adults aged 18 to 25 is significantly different from the estimates for youths aged 12 to 17 and for adults aged 26 or older.

Percentages of people aged 12 or older who misused tranquilizers in the past year were 1.6 percent for youths aged 12 to 17, 5.4 percent for adults aged 18 to 25, and 1.8 percent for adults aged 26 or older. The estimate for adults aged 18 to 25 is significantly different from the estimates for youths aged 12 to 17 and for adults aged 26 or older.

Percentages of people aged 12 or older who misused stimulants in the past year were 2.0 percent for youths aged 12 to 17, 7.3 percent for adults aged 18 to 25, and 1.1 percent for adults aged 26 or older. The estimate for adults aged 18 to 25 is significantly different from the estimates for youths aged 12 to 17 and for adults aged 26 or older.

Percentages of people aged 12 or older who misused sedatives in the past year were 0.4 percent for youths aged 12 to 17, 0.8 percent for adults aged 18 to 25, and 0.5 percent for adults aged 26 or older. The estimate for adults aged 18 to 25 is significantly different from the estimates for youths aged 12 to 17 and for adults aged 26 or older.

Long description end. Return to Figure 7.

Long description, Figure 8: Figure 8 is titled "Past Year Misuse of Prescription Psychotherapeutics among People Aged 12 or Older, by Drug Type and Gender: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of people aged 12 or older misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives. For each type of psychotherapeutic, the figure shows two bars. The first bar shows the percentage among males. The second bar shows the percentage among females. Tests of statistical significance at the .05 level were performed between males and females; significant results are indicated where appropriate.

Percentages of people aged 12 or older who misused any psychotherapeutics in the past year were 7.8 percent for males and 6.4 percent for females. The difference between the estimates for males and females was statistically significant.

Percentages of people aged 12 or older who misused pain relievers in the past year were 5.3 percent for males and 4.0 percent for females. The difference between the estimates for males and females was statistically significant.

Percentages of people aged 12 or older who misused tranquilizers in the past year were 2.4 percent for males and 2.1 percent for females. The difference between the estimates for males and females was statistically significant.

Percentages of people aged 12 or older who misused stimulants in the past year were 2.3 percent for males and 1.6 percent for females. The difference between the estimates for males and females was statistically significant.

Percentages of people aged 12 or older who misused sedatives in the past year were 0.5 percent for males and 0.7 percent for females. The difference between the estimates for males and females was statistically significant.

Long description end. Return to Figure 8.

Long description, Figure 9: Figure 9 is titled "Misuse and No Misuse of Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older Who Used Prescription Psychotherapeutics: Percentages, 2015." It is a pie chart with the following written below the chart: "119.0 Million Past Year Users of Any Psychotherapeutic." The pie chart shows the percentage of people aged 12 or older with no past year misuse of any psychotherapeutic and the percentage of people with past year misuse of any psychotherapeutic.

Of the 119.0 million past year users of any psychotherapeutic in 2015, 84.1 percent did not misuse any psychotherapeutic in the past year, and 15.9 percent misused any psychotherapeutic in the past year.

Long description end. Return to Figure 9.

Long description, Figure 10: Figure 10 is titled "Misuse and No Misuse of Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older Who Used Prescription Psychotherapeutics, by Drug Type: Percentages, 2015." It shows four pie charts. The top left pie chart is labeled "10a. Pain Relievers" and has the following note written below it: "97.5 Million Past Year Users of Pain Relievers." The top right pie chart is labeled "10b. Tranquilizers" and has the following note written below it: "39.3 Million Past Year Users of Tranquilizers." The bottom left pie chart is labeled "10c. Stimulants" and has the following note written below it: "17.2 Million Past Year Users of Stimulants." The bottom right pie chart is labeled "10d. Sedatives" and has the following note written below it: "18.6 Million Past Year Users of Sedatives." Each pie chart shows the percentage of people with no past year misuse and the percentage of people with past year misuse for the relevant prescription psychotherapeutic categories.

The top left pie chart shows the following: of the 97.5 million past year users of pain relievers, 87.2 percent did not misuse pain relievers in the past year, and 12.8 percent misused pain relievers in the past year.

The top right pie chart shows the following: of the 39.3 million past year users of tranquilizers, 84.6 percent did not misuse tranquilizers in the past year, and 15.4 percent misused tranquilizers in the past year.

The bottom left pie chart shows the following: of the 17.2 million past year uses of stimulants, 69.5 percent did not misuse stimulants in the past year, and 30.5 percent misused stimulants in the past year.

The bottom right pie chart shows the following: of the 18.6 million past year users of sedatives, 91.9 percent did not misuse sedatives in the past year, and 8.1 percent misused sedatives in the past year.

Long description end. Return to Figure 10.

Long description, Figure 11: Figure 11 is titled "Past Year Misuse of Any Prescription Psychotherapeutic among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015." It is a bar graph with the percentage of people who misused any psychotherapeutic in the past year on the horizontal axis. An overall category for all people aged 12 or older along with nine categories of substance use are shown on the vertical axis. The nine categories are (1) cigarettes, (2) alcohol, (3) marijuana, (4) cocaine, (5) heroin, (6) LSD, (7) Ecstasy, (8) inhalants, and (9) methamphetamine. A note below the graph says, "LSD = lysergic acid diethylamide."

Among all people aged 12 or older, 7.1 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of cigarettes, 16.1 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of alcohol, 9.2 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of marijuana, 25.8 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of cocaine, 54.8 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of heroin, 77.9 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of LSD, 59.1 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of Ecstasy, 58.0 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of inhalants, 32.1 percent misused any prescription psychotherapeutic in the past year.

Among people aged 12 or older who were past year users of methamphetamine, 53.6 percent misused any prescription psychotherapeutic in the past year.

Long description end. Return to Figure 11.

Long description, Figure 12: Figure 12 is titled "Past Year Misuse of Prescription Pain Relievers among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015." It is a bar graph with the percentage of people who misused prescription pain relievers in the past year on the horizontal axis. An overall category for all people aged 12 or older along with nine categories of substance use are shown on the vertical axis. The nine categories are (1) cigarettes, (2) alcohol, (3) marijuana, (4) cocaine, (5) heroin, (6) LSD, (7) Ecstasy, (8) inhalants, and (9) methamphetamine. A note below the graph says, "LSD = lysergic acid diethylamide."

Among all people aged 12 or older, 4.7 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of cigarettes, 10.7 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of alcohol, 5.9 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of marijuana, 16.2 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of cocaine, 34.9 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of heroin, 72.1 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of LSD, 35.5 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of Ecstasy, 33.0 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of inhalants, 22.0 percent misused prescription pain relievers in the past year.

Among people aged 12 or older who were past year users of methamphetamine, 42.5 percent misused prescription pain relievers in the past year.

Long description end. Return to Figure 12.

Long description, Figure 13: Figure 13 is titled "Past Year Misuse of Prescription Tranquilizers among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015." It is a bar graph with the percentage of people who misused prescription tranquilizers in the past year on the horizontal axis. An overall category for all people aged 12 or older along with nine categories of substance use are shown on the vertical axis. The nine categories are (1) cigarettes, (2) alcohol, (3) marijuana, (4) cocaine, (5) heroin, (6) LSD, (7) Ecstasy, (8) inhalants, and (9) methamphetamine. A note below the graph says, "LSD = lysergic acid diethylamide."

Among all people aged 12 or older, 2.3 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of cigarettes, 6.2 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of alcohol, 3.0 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of marijuana, 9.8 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of cocaine, 26.2 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of heroin, 35.9 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of LSD, 31.4 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of Ecstasy, 29.0 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of inhalants, 16.7 percent misused prescription tranquilizers in the past year.

Among people aged 12 or older who were past year users of methamphetamine, 28.9 percent misused prescription tranquilizers in the past year.

Long description end. Return to Figure 13.

Long description, Figure 14: Figure 14 is titled "Past Year Misuse of Prescription Stimulants among People Aged 12 or Older Who Were Past Year Users of Other Substances, by Substance: Percentages, 2015." It is a bar graph with the percentage of people who misused prescription stimulants in the past year on the horizontal axis. An overall category for all people aged 12 or older along with nine categories of substance use are shown on the vertical axis. The nine categories are (1) cigarettes, (2) alcohol, (3) marijuana, (4) cocaine, (5) heroin, (6) LSD, (7) Ecstasy, (8) inhalants, and (9) methamphetamine. A note below the graph says, "LSD = lysergic acid diethylamide."

Among all people aged 12 or older, 2.0 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of cigarettes, 5.6 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of alcohol, 2.8 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of marijuana, 10.5 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of cocaine, 27.1 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of heroin, 22.1 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of LSD, 39.3 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of Ecstasy, 33.8 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of inhalants, 16.2 percent misused prescription stimulants in the past year.

Among people aged 12 or older who were past year users of methamphetamine, 23.1 percent misused prescription stimulants in the past year.

Long description end. Return to Figure 14.

Long description, Figure 15: Figure 15 is titled "Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Mental Illness Status: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of people aged 18 or older misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (3) stimulants, and (4) sedatives. A note below the graph says, "AMI = any mental illness; SMI = serious mental illness." For each type of psychotherapeutic, the figure shows three bars. The first bar shows the percentage among adults with AMI in the past year. The second bar shows the percentage among adults with SMI in the past year. The third bar shows the percentage among adults with no mental illness in the past year. Tests of statistical significance at the .05 level were performed between adults with no past year mental illness and each of the other mental illness categories; significant results are indicated where appropriate.

Among all adults aged 18 or older in 2015, 15.8 percent of those who had AMI misused any psychotherapeutic in the past year, 21.5 percent of those who had SMI misused any psychotherapeutic in the past year, and 5.3 percent of those who had no mental illness misused any psychotherapeutic in the past year. The estimate for adults who had no mental illness is significantly different from the estimates for adults who had AMI and for adults who had SMI.

Among all adults aged 18 or older in 2015, 11.1 percent of those who had AMI misused pain relievers in the past year, 15.2 percent of those who had SMI misused pain relievers in the past year, and 3.3 percent of those who had no mental illness misused pain relievers in the past year. The estimate for adults who had no mental illness is significantly different from the estimates for adults who had AMI and for adults who had SMI.

Among all adults aged 18 or older in 2015, 6.1 percent of those who had AMI misused tranquilizers in the past year, 9.8 percent of those who had SMI misused tranquilizers in the past year, and 1.5 percent of those who had no mental illness misused tranquilizers in the past year. The estimate for adults who had no mental illness is significantly different from the estimates for adults who had AMI and for adults who had SMI.

Among all adults aged 18 or older in 2015, 4.3 percent of those who had AMI misused stimulants in the past year, 6.0 percent of those who had SMI misused stimulants in the past year, and 1.5 percent of those who had no mental illness misused stimulants in the past year. The estimate for adults who had no mental illness is significantly different from the estimates for adults who had AMI and for adults who had SMI.

Among all adults aged 18 or older in 2015, 1.5 percent of those who had AMI misused sedatives in the past year, 2.9 percent of those who had SMI misused sedatives in the past year, and 0.4 percent of those who had no mental illness misused sedatives in the past year. The estimate for adults who had no mental illness is significantly different from the estimates for adults who had AMI and for adults who had SMI.

Long description end. Return to Figure 15.

Long description, Figure 16: Figure 16 is titled "Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Major Depressive Episode (MDE) Status: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of people aged 18 or older misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives. For each type of psychotherapeutic, the figure shows two bars. The first bar shows the percentage among adults with an MDE. The second bar shows the percentage among adults with no MDE. A note below the graphs says, "Adult respondents with unknown past year MDE data were excluded." Tests of statistical significance at the .05 level were performed between adults with an MDE and no MDE; significant results are indicated where appropriate.

Among adults aged 18 or older in 2015, 17.9 percent of those who had an MDE misused any psychotherapeutic in the past year, and 6.4 percent of those who had no MDE misused any psychotherapeutic in the past year. The difference between the estimates for adults with an MDE and those with no MDE was statistically significant.

Among adults aged 18 or older in 2015, 12.0 percent of those who had an MDE misused pain relievers in the past year, and 4.2 percent of those who had no MDE misused pain relievers in the past year. The difference between the estimates for adults with an MDE and those with no MDE was statistically significant.

Among adults aged 18 or older in 2015, 7.9 percent of those who had an MDE misused tranquilizers in the past year, and 1.9 percent of those who had no MDE misused tranquilizers in the past year. The difference between the estimates for adults with an MDE and those with no MDE was statistically significant.

Among adults aged 18 or older in 2015, 5.2 percent of those who had an MDE misused stimulants in the past year, and 1.7 percent of those who had no MDE misused stimulants in the past year. The difference between the estimates for adults with an MDE and those with no MDE was statistically significant.

Among adults aged 18 or older in 2015, 2.0 percent of those who had an MDE misused sedatives in the past year, and 0.5 percent of those who had no MDE misused sedatives in the past year. The difference between the estimates for adults with an MDE and those with no MDE was statistically significant.

Long description end. Return to Figure 16.

Long description, Figure 17: Figure 17 is titled "Past Year Misuse of Prescription Psychotherapeutics among Youths Aged 12 to 17, by Drug Type and Past Year Major Depressive Episode (MDE) Status: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of youths aged 12 to 17 misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives. For each type of psychotherapeutic, the figure shows two bars. The first bar shows the percentage among youths with an MDE. The second bar shows the percentage among youths with no MDE. A note below the graphs says, "Youth respondents with unknown past year MDE data were excluded." Tests of statistical significance at the .05 level were performed between youths with an MDE and those with no MDE; significant results are indicated where appropriate.

Among youths aged 12 to 17 in 2015, 12.2 percent of those who had an MDE misused any psychotherapeutic in the past year, and 4.9 percent of those who had no MDE misused any psychotherapeutic in the past year. The difference between the estimates for youths with an MDE and those with no MDE was statistically significant.

Among youths aged 12 to 17 in 2015, 7.8 percent of those who had an MDE misused pain relievers in the past year, and 3.3 percent of those who had no MDE misused pain relievers in the past year. The difference between the estimates for youths with an MDE and those with no MDE was statistically significant.

Among youths aged 12 to 17 in 2015, 3.4 percent of those who had an MDE misused tranquilizers in the past year, and 1.3 percent of those who had no MDE misused tranquilizers in the past year. The difference between the estimates for youths with an MDE and those with no MDE was statistically significant.

Among youths aged 12 to 17 in 2015, 5.5 percent of those who had an MDE misused stimulants in the past year, and 1.4 percent of those who had no MDE misused stimulants in the past year. The difference between the estimates for youths with an MDE and those with no MDE was statistically significant.

Among youths aged 12 to 17 in 2015, 0.8 percent of those who had an MDE misused sedatives in the past year, and 0.3 percent of those who had no MDE misused sedatives in the past year. The difference between the estimates for youths with an MDE and those with no MDE was statistically significant.

Long description end. Return to Figure 17.

Long description, Figure 18: Figure 18 is titled "Past Year Misuse of Prescription Psychotherapeutics among Adults Aged 18 or Older, by Drug Type and Past Year Suicidal Thoughts: Percentages, 2015." It is a bar graph, where five categories of psychotherapeutic misuse in the past year are shown on the horizontal axis, and the percentages of adults aged 18 or older misusing these psychotherapeutics are shown on the vertical axis. The five categories are (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives. For each type of psychotherapeutic, the figure shows two bars. The first bar shows the percentage among adults who had suicidal thoughts in the past year. The second bar shows the percentage among adults who had no suicidal thoughts in the past year. A note below the graphs says, "Adult respondents with unknown suicide information were excluded." Tests of statistical significance at the .05 level were performed between adults who had suicidal thoughts in the past year and adults who had no suicidal thoughts in the past year; significant results are indicated where appropriate.

Among adults aged 18 or older in 2015, 22.9 percent of those who had suicidal thoughts misused any psychotherapeutic in the past year, and 6.5 percent of those who had no suicidal thoughts misused any psychotherapeutic in the past year. The difference between the estimates for adults with past year suicidal thoughts and those with no past year suicidal thoughts was statistically significant.

Among adults aged 18 or older in 2015, 16.4 percent of those who had suicidal thoughts misused pain relievers in the past year, and 4.2 percent of those who had no suicidal thoughts misused pain relievers in the past year. The difference between the estimates for adults with past year suicidal thoughts and those with no past year suicidal thoughts was statistically significant.

Among adults aged 18 or older in 2015, 10.0 percent of those who had suicidal thoughts misused tranquilizers in the past year, and 2.0 percent of those who had no suicidal thoughts misused tranquilizers in the past year. The difference between the estimates for adults with past year suicidal thoughts and those with no past year suicidal thoughts was statistically significant.

Among adults aged 18 or older in 2015, 7.0 percent of those who had suicidal thoughts misused stimulants in the past year, and 1.8 percent of those who had no suicidal thoughts misused stimulants in the past year. The difference between the estimates for adults with past year suicidal thoughts and those with no past year suicidal thoughts was statistically significant.

Among adults aged 18 or older in 2015, 2.3 percent of those who had suicidal thoughts misused sedatives in the past year, and 0.5 percent of those who had no suicidal thoughts misused sedatives in the past year. The difference between the estimates for adults with past year suicidal thoughts and those with no past year suicidal thoughts was statistically significant.

Long description end. Return to Figure 18.

Long description, Figure 19: Figure 19 is titled "Numbers of People Aged 12 or Older (in Thousands) Who Initiated Prescription Drug Misuse in the Past Year, by Age Group: 2015." It is a stacked bar graph, where four categories of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives) are shown on the horizontal axis, and the numbers in thousands of people who initiated prescription drug misuse in the past year are shown on the vertical axis. The total number of people who initiated each prescription drug in the past year is shown above the bar for each prescription drug.

In addition, each bar is divided into three sections. The top section is for youths aged 12 to 17, the middle section is for adults aged 18 to 25, and the bottom section is for adults aged 26 or older. An accessible table of the estimates in the bar graph is located below this figure.

Long description end. Return to Figure 19.

Long description, Figure 20: Figure 20 is titled "Mean Age at First Misuse of Prescription Psychotherapeutics among People Aged 12 to 49 Who Initiated Misuse in the Past Year, by Drug Type: 2015." It is a bar graph where four types of psychotherapeutics (pain relievers, tranquilizers, stimulants, and sedatives) are shown on the horizontal axis, and the mean age at first misuse among past year initiates aged 12 to 49 is shown on the vertical axis.

Among people aged 12 to 49 who initiated the misuse of pain relievers in the past year, the mean age at first misuse was 25.8 years.

Among people aged 12 to 49 who initiated the misuse of tranquilizers in the past year, the mean age at first misuse was 25.9 years.

Among people aged 12 to 49 who initiated the misuse of stimulants in the past year, the mean age at first misuse was 22.3 years.

Among people aged 12 to 49 who initiated the misuse of sedatives in the past year, the mean age at first misuse was 28.3 years.

Long description end. Return to Figure 20.

Long description, Figure 21: Figure 21 is titled "Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among people Aged 12 or Older: Numbers (in Thousands) and Percentages, 2015." It consists of two bar graphs with two horizontal axes and one shared vertical axis. The horizontal axis on the left shows the number of people in thousands. The horizontal axis on the right shows the percentages that correspond to the number of people. The shared vertical axis shows five types of psychotherapeutics in descending order: (1) any psychotherapeutic, (2) pain relievers, (3) tranquilizers, (4) stimulants, and (5) sedatives.

There were 2,742,000 people aged 12 or older in 2015 with a psychotherapeutic use disorder, or 1.0 percent of people aged 12 or older.

There were 2,038,000 people aged 12 or older in 2015 with a pain reliever use disorder, or 0.8 percent of people aged 12 or older.

There were 688,000 people aged 12 or older in 2015 with a tranquilizer use disorder, or 0.3 percent of people aged 12 or older.

There were 426,000 people aged 12 or older in 2015 with a stimulant use disorder, or 0.2 percent of people aged 12 or older.

There were 154,000 people aged 12 or older in 2015 with a sedative use disorder, or 0.1 percent of people aged 12 or older.

Long description end. Return to Figure 21.

Long description, Figure 22: Figure 22 is titled "Substance Use Disorder for Prescription Psychotherapeutics in the Past Year among People Aged 12 or Older, by Age Group: Numbers (in Thousands), 2015." It is a stacked bar graph, where five categories of prescription drugs (any psychotherapeutic, pain relievers, tranquilizers, stimulants, and sedatives) are shown on the horizontal axis, and the numbers in thousands of people with a substance use disorder are shown on the vertical axis. The total number of people with each use disorder is shown above the bar for each prescription drug. A note below the graph says, "In the figure, visibility of the numbers of youths aged 12 to 17 and young adults aged 18 to 25 who had a sedative use disorder is affected by the small numbers of youths and young adults with that particular disorder."

In addition, each bar is divided into three sections. The top section is for youths aged 12 to 17, the middle section is for adults aged 18 to 25, and the bottom section is for adults aged 26 or older. An accessible table of the estimates in the bar graph is located below this figure.

Long description end. Return to Figure 22.

Long description, Figure 23: Figure 23 is titled "Prescription Psychotherapeutic for Most Recent Treatment Received among People Aged 12 or Older Who Received Substance Use Treatment in the Past Year: Numbers (in Thousands) and Percentages, 2015." It consists of two bar graphs with two horizontal axes and one shared vertical axis. The horizontal axis on the left shows the number of people in thousands. The horizontal axis on the right shows the percentages that correspond to the number of people. The shared vertical axis shows four types of psychotherapeutics in descending order: (1) pain relievers, (2) tranquilizers, (3) stimulants, and (4) sedatives.

Among people aged 12 or older who received substance use treatment in the past year, 822,000 people received treatment for the misuse of pain relievers during their most recent treatment, or 22.4 percent.

Among people aged 12 or older who received substance use treatment in the past year, 293,000 people received treatment for the misuse of tranquilizers during their most recent treatment, or 8.0 percent.

Among people aged 12 or older who received substance use treatment in the past year, 139,000 people received treatment for the misuse of stimulants during their most recent treatment, or 3.8 percent.

Among people aged 12 or older who received substance use treatment in the past year, 116,000 people received treatment for the misuse of sedatives during their most recent treatment, or 3.2 percent.

Long description end. Return to Figure 23.

Long description, Figure 24: Figure 24 is titled "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, 2015." It is a pie chart with the following written below the chart: "12.5 Million People Aged 12 or Older Who Misused Pain Relievers in the Past Year." Also, two notes are below the figure, the first of which says, "The percentages do not add to 100 percent due to rounding." The second note says, "Respondents with unknown data for the Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded."

The pie chart shows in bold type the sources for obtaining the last prescription pain relievers that were misused, which include (1) got through prescription(s) or stole from a health care provider; (2) given by, bought from, or took from a friend or relative; (3) bought from drug dealer or other stranger; and (4) some other way. The "Got through Prescriptions(s) or Stole from a Health Care Provider" group is broken out further to show the following specific sources: (1) prescription from one doctor; (2) prescriptions from more than one doctor; and (3) stole from doctor's office, clinic, hospital, or pharmacy. The "Given by, Bought from, or Took from a Friend or Relative" group is broken out further to show the following specific sources: (1) from friend or relative for free, (2) bought from friend or relative, and (3) took from a friend or relative without asking.

For the pie chart, 53.7 percent of people aged 12 or older who misused pain relievers in the past year reported that they obtained the pain relievers last time from a friend or relative, including 40.5 percent who got them from friend or relative for free, 9.4 percent who bought them from a friend or relative, and 3.8 percent who took them from a friend or relative without asking. Another 36.4 percent of past year misusers reported obtaining the pain relievers through prescriptions(s) or stealing them from a health care provider, including 34.0 percent who got them through a prescription from one doctor, 1.7 percent who got them through prescriptions from more than one doctor, and 0.7 percent who stole the pain relievers from a doctor's office, clinic, hospital, or pharmacy. In addition, 4.9 percent of past year misusers reported they bought the pain relievers they last misused from a drug dealer or other stranger, and 4.9 percent reported that they got the pain relievers some other way.

Long description end. Return to Figure 24.

Long description, Figure 25: Figure 25 is titled "Source Where Pain Relievers Were Obtained for Most Recent Misuse for People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year, by Past Year Initiation Status and Pain Reliever Disorder Status: Percentages, 2015." It is a bar graph with four sources where pain relievers were obtain on the horizontal axis, and the percentage of past year misusers is shown on the vertical axis. The four sources are (1) got through prescription(s) or stole from a health care provider; (2) given by, bought from, or took from a friend or relative; (3) bought from drug dealer or other stranger; and (4) some other way. For each source, the figure shows three bars according to whether people initiated the misuse of pain relievers in the past year or had a pain reliever use disorder in that period. The first bar is for past year initiates without a pain reliever use disorder. The second bar is for past year misusers without a pain reliever use disorder and who are not past year initiates (i.e., initiated misuse more than 12 month ago). The third bar is for past year misusers who had a pain reliever use disorder, which includes past year initiates who had a pain reliever use disorder. There is one note below the figure that says, "Respondents with unknown data for the Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded." Additionally, there are three footnotes below the figure. The first footnote applies to the past year initiate without disorder category and says, "Past Year Initiate without Disorder is defined as individuals who initiated pain reliever misuse in the past year but who did not have a past year pain reliever use disorder." The second footnote applies to the past year misuser without disorder and not past year initiate category and says, "Past Year Misuser without Disorder and Not Past Year Initiate is defined as individuals who misused pain relievers in the past year, were not past year initiates for pain reliever misuse, and did not have a past year pain reliever use disorder." The third footnote applies to the past year misuser (including initiates) with disorder category and says, "Past Year Misuser (Including Initiates) with Disorder is defined as individuals who misused pain relievers in the past year (including initiates and noninitiates) and had a past year pain reliever use disorder."

The following percentages of people aged 12 or older in 2015 who misused prescription pain relievers in the past year reported that they obtained their last pain relievers through prescriptions or by stealing from a health care provider: 41.4 percent of those who initiated pain reliever misuse in the past year and did not have a past year pain reliever use disorder, 33.6 percent of those who did not have a pain reliever use disorder and were not past year initiates, and 43.7 percent of those who had a pain reliever use disorder (including initiates).

The following percentages of people aged 12 or older in 2015 who misused prescription pain relievers in the past year reported that the last pain relievers they misused were given by, bought from, or taken from a friend or relative: 53.5 percent of those who initiated pain reliever misuse in the past year and did not have a past year pain reliever use disorder, 57.4 percent of those who did not have a pain reliever use disorder and were not past year initiates, and 39.0 percent of those who had a pain reliever substance use disorder (including initiates).

The following percentages of people aged 12 or older in 2015 who misused prescription pain relievers in the past year reported that they bought the last pain relievers they misused from a drug dealer or other stranger: 1.9 percent of those who initiated pain reliever misuse in the past year and did not have a past year pain reliever use disorder, 3.5 percent of those who did not have a pain reliever use disorder and were not past year initiates, and 13.4 percent of those who had a pain reliever use disorder (including initiates).

The following percentages of people aged 12 or older in 2015 who misused prescription pain relievers in the past year reported that they obtained the last pain relievers they misused in some other way: 3.2 percent of those who initiated pain reliever misuse in the past year and did not have a past year pain reliever use disorder, 5.5 percent of those who did not have a pain reliever use disorder and were not past year initiates, and 3.9 percent of those who had a pain reliever use disorder (including initiates).

Long description end. Return to Figure 25.

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